

## Constants in Future Cities and Regions

Liliana Bazzanella, Luca Caneparo, Giuseppe Roccasalva<sup>a</sup>, *Politecnico di Torino High Quality Lab-Territorial Integrated Project*

Franco Corsico<sup>a</sup>, *SiTI Higher Institute on Territorial System for Innovation*

### 1. Introduction

The paper resumes some of the conversations the authors had in three years of research, preparing their coming book “Future Cities and Regions”, based on the review of best participatory planning practices worldwide. The case projects are selected and discussed with the protagonists across four leading issues: Simulation, Scenario and Visioning, Government and Governance, and Scale. The case-oriented discussion is a peculiarity of the book, contributing to give shape to future cities or regions. The aim is to build a critical thinking on how urban planning, policy and design issues are faced differently or similarly throughout every cases studied. The book include the description of computer models and media, socio-political experiments and professional practices which help communicating the future effects of different design, policy and planning strategies and schemes with a wide range of aims: from information, through consultation, towards active participation. The cases have confirmed that simulation tools can impact on local government and can drive new forms of “glocal” governance, shaping and implementing future plans and projects at different scale and time span. The following paragraphs will point at some of the constant thoughts the authors had around the selection and editing of the book’s case studied and related issues.

### 2. Simulation

Can a model be useful to simulate the likely effects of different design, policy and planning strategies, allowing the exploration of consequences? At what extent the promises of simulation for developing policies and plans meet the capability to define evolving strategies that decision-makers can apply when dealing with present rapidly evolving cities? Simulation concerns the tools that each cases studied have experimented to evaluate and engage a possible future. The authors aims was to highlighting not only technically but procedurally the approach used, e.g. to collect data or indicators or draw options or procedures. The interdependence of the land use, transportation, and environmental systems is extensively described in relation to quality of life and economic growth, but there is still lacking of social behavioural theories which turn static plans and policies to a dynamic one.

---

<sup>a</sup> Assignments: Giuseppe Roccasalva: main contribution- editing ; Liliana Bazzanella and Franco Corsico: advisors and final revision; Luca Caneparo: initial draft.

It is often pointed out that socio-economic systems would not be predictable, because the reaction of people to information about forthcoming states of the system would invalidate the forecast. Moreover, present evolving society is no longer partially predictable or typified. New citizen may not recognize themselves in any traditional political party. The era of a simple, widely acknowledged, main political issue has passed.

The selected cases studied are simulation based but they all make easy to implement new forms of dialogue . In general terms, it is possible to distinguish two interpretations of simulation activities which are performed and described in the book cases studied: simulations which are “process oriented” or simulations which are “results oriented”.

The first category (process oriented) it is mostly dedicated to use tools which are dedicated to simplify complex indicators and explain invisible future implications to broadly large groups of stakeholders. The second (result oriented) it has got a consistent engagement and structure of power and responsibility, moreover it has tools which are defined for specific aims, looking to design from detailed urban areas to physical piece of architecture.

It is evident that Canadian case projects, using Metroquest activities or the American case using Environmental Simulation Center expertises are the most complete cause they have both a deep focus on building consensus process and deliver a physical results for shaping the future growth of cities.

However, it is interesting to see that the variety of tools presented in the book are not always specifically driven to deliver results or empower citizen knowledge. Most of simulation tools are amplifying human logic and awareness, assisting any possible interpretation of the complex variables of urban issues. Today, it the authors conviction that most successful and common use of simulation tools are dedicated to this role.

In more general but rather technical terms, the simulation tools have not developed as friendly as it seems and consequently are not widely spread out. ICT make easy to share information but the devices will ever be able to pose questions, perhaps some answers. Often, tools are a collection of different applications under the same interface while other cases (very few) have designed a specific software which encompass different selected issues and solutions.

Simulation tools embody mathematical models to generate a vision for a future city or region. Often, the generated future have been placed within a specific context, e.g. economic, social, geographical, morphological etc. It has to be clear that none of the mathematical models can ever be as predictive as the real world mechanism but they can be a nearly and fair picture of the future.

### **3. Scenarios and Visioning**

What are the approaches to help managing the deep uncertainties that metropolitan areas are facing?

Cities are facing a number of long- and mid-term decisions, it is the authors conviction that the ultimate success of Future Cities relies on how tomorrow's choices can be forecasted. Given the complexity of metropolitan issues, the number of variables that had to be considered, and a mid-term timeframe, it becomes evident that the final prediction is challenging. The book cases studied confirm the complexity since from the definition of terms as Scenario and Visioning.

The authors of this paper, which have common but rather different background experience, finally agree that Scenario building is meant to be both in terms of vision and foresight methods and as designing-planning tools to support decision-making processes. In fact, both the European and American cases studied described that Scenarios have been experimented to organise and communicate information, to facilitate the discussion of planning options across

stakeholder groups, professional disciplines, and levels of decision-makers. However, most cases nominated Visioning what is meant to be Scenarios for others and vice versa. As the “Metroquest” case study shows, Scenarios and Visions has to do with the quest of public understanding of issues, the collective identification of the principles in order to make educated choices. In this regards, Scenarios and Visions play a “communicative action”. To some extent, it is possible to generalize that in all cases, Visioning is relaying on an intuitive approach with a robust and consistent “picture” of the future while Scenarios are often focusing on the pathway leading to a possible “picture”. In both cases, authors have found that leading protagonist of each cases studied, consciously or not, have a clear understanding of strategic role of Scenarios and Visioning in planning practices; this is crucial ingredients for the success of any process.

#### **4. Government and Governance**

As long as Governance is considered a process of integrated urban management:: what lessons can city leadership drawn from the comparison of different approaches to urban policies, metropolitan government, municipal finance, community development and local democracy?

First of all, the role played by facilitators, public officials, private sectors and the feedbacks in terms of governance is similarly different all over the case studied; however, whatever the urban legislation in force, in Europe or the USA, government’s responsibility tends to express itself at the local level, by defining which areas should be developed for housing, commerce, services or industry while local administrations claim development in terms of welfare capital, better taxes or reinvestment in infrastructure, public transport or services which cannot be entirely manageable at the local level.

Secondly, the public management focus on main issues in similar different ways cause of the actors and scale of transformations. Mobility issues are a similar target all over the cases studied but its measurements for sustainable development depends, for instance, on the oil vulnerability factors (Australian case study) or it time consuming travel routes (some of the American case study).

It is evident that no matter the case study, the large scale projects have explicitly or implicitly government intervention at the intersection between public sector and private markets. This is often an hidden approach which become evident in the book selected best practices. However it is possible to define some promising conditions for turning government into what it might be called “glocal” governance.

When local administrations decide to expose themselves in designing or managing urban issues, it is likely to expect at least some aware process. A “responsive” public actors is a pre-condition for governance. Most of local authorities of the book cases studied were conscious of community planning and sustainable choices. In order to encourage all levels of government to work together and in partnership with actors form economic and civil society, it is important to focus the aims and areas in a relatively clear time span. In fact, all the cases have named projects with the local focus or issues and the ultimate date where transformation will take place. Most of the experiences reported in the book stress the temporal and spatial values of planning. These “strategic spatial plans” (as Stockholm RUFs 2050 and CHIGAGO 2020) have provided an emphasis on place qualities and the spatial impacts of investments. They also carry a potential for re-defining main issue and agendas down from the national or state level and up from the municipal level.

The authors of this paper consider the case projects discussed in the book cutting-edge within an emerging stream: new power leaderships. All projects are differently driven and funded, by local government or agencies, by the Information Society and some Software companies, National Science bodies etc... However all these actors are sensitised towards effective policies, plans or projects. As Jessob wrote, the simple fulfilment of social actors demands is not governance but rather polarizing forces towards an overarching objective give chances to the role of governance. In most of the book cases studied, the project management made things happening differently because it encompass demands of various social groups but also boost alliances and common thinking through communication. The deal of technology resources required by simulation and by media for communication make governance not accessible to all social actors in an equal manner, in this regards, in many cases, tools for governance are thought for specific actors, classes, or programmes regardless the amplitude of participation. Citizens are reducing confidence in government because it is often perceived as detached from the local issues. Public engagement process may build relationships of trust with the government and within the communities with different and even conflicting interest. Often, conflict are not redeemed but doubts are insinuated and the antagonist position understood. Subsequently, a number of methodologies, as “argumentative”, “collaborative”, “deliberative”, or “participative” (Healey, 2003) has been experimented to actively involve the stakeholders. Information, collaboration, participation or consensus building are methodologies that have innovated governance processes.

## 5. Scale

In an extensive meaning, the scale includes geographical as well as further dimensions, i.e. the number and heterogeneity of stakeholders involved in the practice, the roles of Power, the different tools and media needed and so on. In fact, Firms, agencies, institutions and governments address differently the relationships between local and regional policies and planning. Most of the projects started from regional issues and withdraw local implications while other focused on an intermediate scale of urban development. Often, the starting point is a regular grid placed on the a vast piece of land. The larger is the grid the general are the issues and vice versa. Grid are feaseable for mateatical simulations tools but they hardly follow the boundaries of economic, environmental or social problems.

Furthermore, the scale of complex systems makes public administrations chose different strategies. Peripheries and the “intermediate city” demonstrate that planning socio-economic systems is rarely possible, since it is not-working the expected way. Helbing says that *“Socio-economic systems “often self-organize, and that their behaviour is robust to not-too-large perturbations. While forcing complex systems tends to be expensive (in case of strong systemic resistance) or dangerous (in case of unexpected systemic shift), it makes much more sense to support the self-organisation of the system instead. Such a self-organising approach encourages the intrinsic dynamics in the system, and is demonstrated to be resource-efficient. Therefore, a reasonable way to manage complexity is to guide self-organization and facilitate coordination”* (Helbing, 2010).

In our individualistic societies, many questions are related to the different scale of organizational bodies. To what extent people are merely passive users of changes or an actors who are able to modify or even create transformations? The common belief says the sum of the parts produces a comprehensive result; it is feasible that the future map of

stakeholders is non geographical but rather a net, often virtual (as social network), which informs the planning process and make average choices.

## 6. Conclusion

Following up the implementation of each cases studied, the authors considered them successful because they manage to set up partnerships with local and regional governmental agencies and-or Metropolitan Planning Organizations, they produce operational urban model more advanced than others and set up a highly interdisciplinary collaboration with educational bodies. However the efficiency of these experimental and forerunning cases studied will be judged in a long time perspective which is even longer than the time span each cases is trying to forecast in their plan.

In outline form, here are some reasons that the authors believe the book has been successful so far:

- Most importantly, it is highlighted the main demands dealing with urban issues and how simulation models criticize present land use planning systems.
- It will be a good referential book for public administrations aiming at starting a communicative action.
- As long as it is a case oriented discussion, projects advice on probable common mistakes regarding the leadership, the management and the processes.

## References

- FORESTER J., *The Deliberative Practitioner: Encouraging Participatory Planning Processes*, MIT Press, Cambridge 1999.
- JESSOP B., *A neo-Gramscian approach to the Regulation of Urban Regimes: accumulation strategies, hegemonic projects, and governance*, (1996a) in M. Lauria ed., *Reconstructing Urban Regime Theory*, New York: SAGE (in press).
- JESSOP B., NIELSEN, K., AND PEDERSEN, OVE K., *Structural Competitiveness and Strategic Capacities: the cases of Britain, Denmark, and Sweden*, in S.E. Sjöstrand ed., *Institutional Change: Theory and Empirical Findings*, New York, M.E. Sharpe 1993, 227-262.
- HEALEY P., *Città e istituzioni – Piani collaborativi in società frammentate*, Dedalo, Bari 2003.
- HABERMAS J., *Teoria dell'agire comunicativo*, (Vol. 1 e 2), Il Mulino, Bologna 1997.
- HELBING D., S. BALIETTI, *From Social Simulation to Integrative System Design*, White Paper of the EU Support Action \Visioneer.
- HELBING D., *Managing Complexity: Insights, Concepts, Applications*, 1st ed. Springer, 2007.
- HELBING D., et al., *Evolutionary Establishment of Moral and Double Moral Standards through Spatial Interactions*, in PLoS Comput Biol 6.4 (Apr. 2010).
- BAZZANELLA L., CORSICO F., CANEPARO L., ROCCASALVA G., *Future Cities and Regions : Simulation, Scenario and Visioning, Governance and Scale*, Springer, New York 2011.