The Territorial Futures of Europe: Introduction to the Special Issue

Simin Davoudi\textsuperscript{a1}, Ed Dammers\textsuperscript{b}

\textsuperscript{a} Newcastle University, School of Architecture, Planning and Landscape, Newcastle upon Tyne NE1 7RU, United Kingdom
\textsuperscript{b} Planbureau voor de Leefomgeving, Location Den Haag, P.O.Box 30314, 2500 GH The Hague, Netherlands

1. Introduction

The desire to peer into the future is a human trait as old as the Biblical prophets and the oracle at Delphi. And the desire to project urban futures is at least as old as Plato’s description of the ideal city-state in The Republic [1].

However, both the frequency of futurist predictions and the conceptions of futures change over time. It seems that when great social and historical shifts are taking place, futurist predictions gather pace. Such was the case during the industrial revolution, and such is the case today when technological and environmental changes are demanding new forms of territorial development. Similarly, the conceptions of futures change over time. It is argued that for the pre-industrial society future was conceived as entirely unknown; for the industrial society it was considered as an extension of the present. “Today, the future is seen as largely open and radically different from the present, with uncertainties about how to manage change being rife” [2]

This Special Issue presents some of the findings of a European research project funded by the European Spatial Observation Network (ESPON) 2006 Programme. The project was a major attempt in scenario building as a way of peering into the largely unknown and uncertain futures of Europe. The project: Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy [3] has produced a considerable amount of knowledge and data on scenario methodologies as well as on future territorial developments and territorial impacts of EU sectoral policies. As such, it complements the previous Special Issue of Futures which was primarily focused on the future of the European legal framework [4]. From the outset, the emphasis was on integrating empirical and systematic knowledge with experiential and tacit knowledge, and involving both the research and policy communities. The latter was crucial because, as Alvin Toffler [5] suggests, the challenge of managing change and influencing its direction calls not only for the science of determining the probable and the art of delineating the possible, but also the politics of defining the preferable future. Hence, public policy making, whether at national or European scale, requires not only a sound understanding of possible territorial futures, but also a vision of how to change them in the pursuit of collectively agreed preferable futures. Territorial policies are therefore as much about the politics of place making as they are about the science and art of futurisms. This means that maintaining a close link between policy and research is particularly important in building capacity and mobilising resources to achieve what is considered as preferred future directions for territorial development [6]. The aim of the Scenario Project was firstly, to enrich the
European policy debate by bringing to the fore the challenges of alternative territorial futures for Europe, and secondly, to engage with policy makers (i.e. members of the ESPON Monitoring Committee) in the process of identifying potential policy priorities. Workshops, seminars and informal discussions were held to facilitate such interactions. Before introducing the individual contributions to this Special Issue, the following account will provide a brief overview of key developments in the area of European territorial governance since the publication of the European Spatial Development Perspective (ESDP) and one of its key spin off, the ESPON.

2. Territorial development of Europe

Europe is facing major social, economic and environmental challenges which will have significant impacts on its future territorial development. The current and emerging trends in key areas such as climate change, energy supply, demography, globalisation, economic development, and agglomeration forces will continue to have differentiated impacts on the EU territory. A major territorial policy concern is the growing disparities between what is known as the core of Europe and its periphery. Although the EU is one of the largest and economically strongest regions in the world, it still suffers from major regional disparities. 50% of the EU’s Growth Domestic Product (GDP) is produced in 20% of its area accommodating 40% of its population. This area, in the centre of Europe, is known as the ‘pentagon’ defined by the metropolises of London, Paris, Milan, Munich and Hamburg. It is considered as the only ‘zone of global economic integration’ in Europe. The lack of other such zones is seen as a disadvantage for the future economic competitiveness of Europe when compared with other major trading blocks such as the United States [7]. Creating new areas of economic strength capable of competing globally is therefore seen as a necessity for the future growth of the European economy. This is despite the increasing environmental and social problems that the core region of Europe is presently facing. In addition to this underpinning economic agenda is the EU’s growing concern for territorial cohesion. In the Southern border of the EU as well as in the new Länder in Germany, the GDP per capita stood at about 50-65% of the EU average, in the 1990s. The northern periphery of the EU in places such as the Northern Finland and north of the UK show a similar situation [7]. Although the gap between the economic power of prosperous and poor regions of Europe is declining slightly, the regional disparities have remained persistently high. Measured in GDP per capita, the disparities among the EU-15 were already twice as high as in the United States (US), and measured in employment rate, they were three times higher than the US [8]. Since the 2004 and the subsequent 2007 enlargement of the EU the gap has widened even more. The accession of ten new members to the EU increased its area by 34%, its population by 20% but, its GDP by only 5%. In fact, the enlargement led to the fall of the average GDP per capita by almost one fifth.

In addition to economic disparities between different parts of the EU, there are also major territorial differentiations with regard to the impact of other major social and environmental trends. For example, the ageing of the European population is spatially

---

2 While these figures refer to the situation in 1990s when the EU had 15 member states, similar pattern of concentration in the core exists in the EU of 27 member states.
3 In 1986 the GDP per capita of the 25 richest regions was 2.7 times larger than that of 25 poorest ones. 10 years later, this figure reduced only by 0.3 making the GDP per capita of the former regions 2.4 times larger than the latter ones ([7] paragraph 11).
uneven with the southern and eastern European bearing the brunt of the ongoing demographic restructuring. Similarly, the climate change-induced environmental hazards are effecting different parts of Europe in different ways with for example more frequent droughts happening in southern Europe while the central and northern Europe suffer from more frequent river floods. Similar differentiated territorial impact can be observed with regard to the escalating energy prices. While in some regions it is leading to an increased viability and development of renewable energy sources, in others it is negatively affecting economic competitiveness. While there are various EU sectoral policies (such as Competition Policy, Research and Development Policy, Common Transport Policy, Regional Policy, Common Agricultural Policy and Common Environmental Policy) that are developed and implemented to meet these challenges, these policies themselves have differentiated territorial impacts. The Common Agricultural Policy (CAP), for instance, not only directly affects agricultural land uses but also determines to a large degree the socio-economic viability of rural areas. Similarly, the European Transport Policy not only affects the accessibility of regions, but also shapes the urbanisation processes in and around these regions. A lack of coordination between these sectoral policies, therefore, may lead to contradictory policy objectives with one policy measure jeopardising the effects of another. For example, while the EU Cohesion Policy aims to reduce disparities by targeting its resources (such as Structural Funds) to the less accessible and less affluent regions, higher levels of CAP support has been allocated to the larger farms and the most accessible regions in the relatively affluent rural areas in Europe [...]. This also shows the often perverse impact of a policy which aims to decrease peripherality and increase accessibility.

3. The European Union and territorial governance

The lack of policy coordination has not gone unnoticed. In fact, it has been acknowledged as an important theme in the 2001 White Paper on European Governance [9]. One area which is recognised as a particularly suitable for policy coordination is territorial governance. The concept itself has replaced its predecessor, spatial development or spatial planning. However, the EU has no competence in spatial planning and no formal authority to establish territorial governance to deal with the impacts of the social, economic and environmental trends; neither is there any binding requirements to coordinate the territorial impacts of the EU sectoral policies. Faced with a lack of formal competencies in the area of territorial governance, a number of informal initiatives have been developed by the European Commission and the member states to fill the gap. For instance, the Commission published two important documents: Europe 2000 [10] and Europe 2000+ [11] to provide a territorial perspective for the EU sectoral policies. These were followed by the publication of the European Spatial Development Perspective (ESDP) in 1999 [7]. It was the outcome of ten years of intensive inter-governmental discussions amongst members of the informal council of ministers responsible for spatial planning, supported and encouraged by the Commission.

The ESDP marked a new chapter in the attempts to provide an integrated territorial development perspective for the EU. The document identified “three spheres of activity” which together make up the European territorial agenda: (1) polycentrism and urban-rural partnership, (2) parity of access to infrastructure and knowledge and (3) sustainable development and protection of natural and cultural heritage. A major
concern of the ESDP is “to reconcile the social and economic claims for spatial
development with the area’s ecological and cultural functions and hence contribute to
a sustainable, and balanced territorial development” ([7], p. 10). While the ESDP is
not a binding document, its influence on spatial planning thoughts and practices has
been remarkable. Indeed the footprints of the ESDP’s principles can be traced in the
subsequent national and regional spatial strategies in many European countries, even
non-EU members [12].

4. The ESPON research programme

In addition to its influence on spatial planning thoughts, the ESDP also provided the
raison d’être for the emergence of a European spatial planning research agenda and in
particular the ESPON. After a series of negotiations [13] ESPON was set up by the
Commission, the member states, and Norway and Switzerland in 2002 with an
ambitious four year programme of research. It was to provide the evidence base for
the ESDP and its further development [14]. Given the informal status of territorial
governance agenda, the EU is particularly dependent on the cooperation of the
ministers responsible for spatial planning and on the consensus reached by them on
territorial challenges and strategies. The implementation of these strategies relies
heavily on persuasive arguments based on robust evidence. ESPON was created to
contribute to the development of convincing arguments. Like the ESDP, ESPON
should also been seen as both a process of networking and a programme of research.
Since its formation, it has brought together a wide range of researchers from different
disciplinary backgrounds and from across Europe [14]. It has played an important part
in maintaining the momentum of the debate on the future of European spatial
development. The Programme consisted of four main thematic priorities [15] [19] as
follows:

Priority 1: the Thematic Studies examine the impacts of key structural forces on:
producing territorial differentiations, the changing position of main urban centres, and
the growing interdependencies between urban and rural areas. Here, a major research
focus was on the role of the city regions in polycentric development of the European
territory [16] and the attempt to identify potential Metropolitan European Growth
Areas (MEGA) which could increase the economic competitiveness of Europe and
enhance its territorial cohesion

Priority 2 projects focused on examining the Territorial Impact of major EU sectoral
policies. A common finding from these projects is that, the extent to which lagging
regions can benefit from the EU funding regimes largely depends on the national
policies of the member states. Notwithstanding this, the ESPON research has
highlighted a number of politically uncomfortable results with regard to the perverse
impact of EU policies. A potent example is the seemingly adverse impact of the CAP
on achieving territorial cohesion.

Priority 3 on Cross-thematic projects focused on evaluating and synthesising the
results of other studies with an emphasis on producing: indicators for spatial analysis,
integrated data bases, typologies of the European regions, and spatial development
scenarios. The findings from the latter project have provided the basis for the papers
presented in this Special Issue.
Priority 4 on Scientific Briefing and Networking focused on exploring synergies between national and EU resources for research.

ESPON 2006 Programme, with a budget of 17 million Euros, funded 35 research projects undertaken by several transnational consortia selected through an open competitive process. More than 130 European research institutes participated in the programme. It has resulted in large volume of reports, detailed spatial analysis presented in a variety of cartographical techniques and maps (see the programme website: www.espon.eu). ESPON researchers have been able to pull together existing data to produce new spatial analyses. They have generated a better insight into the EU spatial trends and widened the scale of spatial analysis to cover for the first time what is now known as the ESPON Study Area. This consists of 29 European countries including: 27 EU member states and two non-members: Norway and Switzerland. Finding reliable, comparable and longitudinal data at the appropriate spatial scale and from across Europe has been notoriously difficult and in some cases impossible. However, such shortcomings have been, where possible, compensated by using proxy indicators and harmonising nationally collected data. Where quantitative analyses have proved inadequate, case studies have been conducted to triangulate the results.

A subsequent initiative in maintaining the momentum on territorial governance agenda was the publication of the Territorial Agenda of the European Union [17], ratified by the member states’ ministers for spatial planning at their informal meeting in May 2007. The territorial agenda is a strategic document with concrete proposals for contributing to the EU Lisbon Strategy and its agenda of promoting jobs and growth; currently the overriding concern of the Union. The document insists, however, that in doing so account needs to be taken of particular needs and characteristics of regions and the challenges and opportunities they face. The informal conference of the ministers in September 2007 saw the launch of an action programme to implement the Territorial Agenda. This will take place voluntarily via informal cooperation. The member states are invited to integrate the priorities set out in the territorial agenda as well as the territorial aspects of community guidelines in their national, regional and local development policies [18].

However, since these initiatives have no official status and are not legally binding, the EU seeks authority in this area through informal channels. Such authority has been further enhanced by the appearance of ‘territorial cohesion’ in the new Lisbon Treaty as an objective of the EU and as a competency shared between the EU and the member states. While the exact meaning of the term continues to be the subject of academic and policy debates (see [13] for a review), it is widely recognised that territorial cohesion refers to the strengthening of the competitiveness of regions and reducing the disparities between them. It also refers to putting the emphasis on places rather than sectors as the focus of policy, and measuring success by examining the ways in which the ensemble of sectoral policies affect places and life chances of people who live and work there. This is clearly reflected in the Third Cohesion Report which states that,

The concept of territorial cohesion extends beyond the notion of economic and social cohesion by both adding to this and reinforcing it. In policy terms, the objective is to help achieve a more balanced development by reducing existing disparities, preventing territorial imbalances and by making both sectoral policies which have a
spatial impact and regional policy more coherent. The concern is also to improve territorial integration and encourage cooperation between regions ([20] emphasis added).

These concerns were given further prominence following the Commission’s publication of the Green Paper on Territorial Cohesion in 2008 [ ]. However, despite such recognitions, EU sectoral policies had continued to be spatially-blind and developed with little attention paid to their territorial impacts. It was in this context and the need for deeper understanding of the differentiated impact of not only global economic, social and environmental trends, but also the EU sector policies on European territory that the ESPON research programme was established in 2002. Its research priorities, outlined above, were indeed driven by the ESDP’s central goal of achieving a more ‘balanced European territory’; an objective which in turn reflects the EU territorial cohesion agenda.

These overarching themes have continued in the second round of the ESPON Programme (ESPON 2013) which began in 2008. However, the new Programme, which has an increased budget of 47 million Euros, is more focused on in-depth analysis of the impacts of EU sectoral policies on territorial cohesion and on the production of operational indicators. Its priorities include [15]:

- Applied research on territorial development, competitiveness and cohesion: evidence on territorial trends, perspectives and policy impacts,
- Targeted analysis based on user demand: a European perspective to develop different types of territories,
- Scientific platform and tools: territorial indicators and data, analytical tools and scientific support,
- Capitalisation, ownership and participation: capacity-building, dialogue and networking,
- Technical assistance, analytical support and communication.

5. The Scenario Project (ESPON 3.2)

The Scenario Project, which is the basis of all the contributions in this Special Issue, was one of the largest projects in the first round of the ESPON Programme. It was carried out between February 2004 and March 2006. This means that the resulting scenarios were developed during the economic boom, without taking into account the current economic recession. However, it should be noticed that scenarios focus on long term horizons, in the case of this project 2030, while economic boom and bust cycles often take place in short to medium terms. Hence, their impacts on the long term futures are not considered to be profound. Being one of the ESPON’s cross-thematic studies, the scenario project aimed to integrate knowledge and information from other ESPON studies. It has produced a number of thematic and integrated scenarios for Europe 2015 and 2030. The consortium consisted of 15 research institutes from different EU member states and neighbouring countries.4 Qualitative

4 The lead partner of the transnational project group was Institut de Gestion de l’Environnement et d’Aménagement du Territoire, Université Libre de Bruxelles (Belgium) and the co-leader was Agence Européenne «Territoires et Synergies » (France). The partners were: Bundesamt für Bauwesen und Raumordnung (Germany), Centre for Regional Studies of the Hungarian Academy of Sciences (Hungary), Centre for Urban Development and Environmental Management at Leeds Metropolitan University (United Kingdom), Department of Management, Economics and Industrial Engineering.
techniques, such as literature reviews, analytical and creative thinking, and workshops, were combined with quantitative techniques such as modelling and forecasting. Data were used from the ESPON database and Eurostat. By using multiple methodologies, the study drew on both experiential and scientific knowledge [22]. A set of final reports were published in 2007 under the title *Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy* [23].

The project produced two types of scenarios: thematic and integrated. Thematic scenarios focused on themes with significant territorial implications including: demography, transport, energy, economy, governance, enlargement, rural development, climate change, and socio-cultural evolution and integration. The integrated scenarios focused on four types of policy directions: continuation of current policies, competition oriented policies, cohesion oriented policies, and an optimal policy-mix. This Special Issue of *Futures* aims to provide a synthesis of some of the thematic scenarios as well as the integrated ones, as outlined below.

Dammers describes the ways in which the scenarios have been made, combining three traditions: the model approach, the design approach, and the strategic conversation approach. In theory, these traditions can be integrated by organising a scenario project in a cyclical way and by combining qualitative with quantitative techniques [24] [25]. Emphasis will be placed on two models that have been developed for the project: the MASST model (MAcro Economic Sectoral, Social and Territorial) for calculating future regional economic growth, and the KTEN model (Know Trans-European Networks) for calculating future transport flows between regions. In practice, this approach succeeded in combining important strengths of the three scenario traditions including: a broad perspective, a high explanation power of the scenarios, and a relatively open process. This, however, is not to suggest that further improvements could not be made.

Evers explores the economic futures of Europe in four scenarios. In ‘Best Foot Forward’, it is assumed that the EU will pursue a policy strongly in favour of economic competitiveness. This results in higher growth rates but also in increasing territorial disparities between the core area of Europe and its periphery. In ‘EuroTigers’ the EU intensifies investments in fast-growing regions. Here, new competitive centres emerge both in the core area and the periphery. In ‘Blühende Landschaften’ the EU pursues a strong policy in favour of cohesion by supporting the most lagging regions. Regional development is most balanced in this scenario, but the net growth is more modest. In the ‘National Revival’ scenario, support for European cooperation wanes as nation states reassert their authority. Economic growth is lowest in this scenario and peripheral areas fall further behind. One of the issues resulting from the scenarios is that the trade-offs made in terms of economic policy have

---

5 Note that the scenario was developed prior to the economic recession which started in 2008
impacts not only on the geographical distribution of wealth, but also on urban development, traffic generation and environmental quality.

Davoudi, Wishardt and Strange explore the demographic futures of Europe by presenting two scenarios. The ‘Silver Century’ scenario is based on the continuation of current demographic trends and policies. In this scenario the European population will continue to age and immigration will be very limited. As a result younger people will concentrate in urban areas while the retirees will settle in favourable suburban and rural spaces. In the ‘Open Border’ scenario the EU and most of the member states will introduce an open and actively promoted immigration policy. Most immigrants will concentrate in large metropolitan areas. At the same time there will also be some countries and regions with very limited immigration from abroad. At the local scale immigration will contribute to social and spatial segregation. One of the implications for the EU policies is that without regulation of types and destinations of immigration, demographic imbalances will not be addressed.

Robert and Lennert present two scenarios on the development of energy supply. In ‘Europe confronted with high energy prices’ scenario, increasing demand for oil and progressive depletion of global oil-reserves will cause a substantial rise in energy prices. Supply of renewable energy will be strongly pursued and coal and nuclear energy production will be accelerated. Urban regions with traditional industry and rural areas in peripheral locations will be seriously affected by higher production and transportation costs. But coastal and hilly regions and fertile rural areas will benefit from the rising demand for renewable energy. In ‘Europe after oil peaking’ the oil peak will push Europe to reorganize its economy on a more self-sufficient basis. Regions exploiting their coal and brown-coal resources will be confronted with serious environmental problems. In the fertile rural areas serious conflicts will emerge between the production of bio-fuels and food-production. Coastal and hilly regions will benefit more than in the first scenario. The scenarios indicate that Europe will face very important challenges to ensure its energy supply. They stress the immediate need for investment in major research and development programmes in order to develop substitution fuels and promote alternative transport, heating and production systems.

De Vries presents two scenarios exploring alternative policies to deal with the expected territorial impacts of climate change. In ‘Repairing instead of preventing’ scenario the EU and the member states will only take remediation measures and only after the events have happened. As a result, large stretches of hilly and mountainous areas in southern Europe will become arid and desert land. At the same time, flooding will cause damage to settlements, infrastructure and landscape in central and northern Europe. Some rural areas in this part of the continent will, however, benefit from increased tourism. In the ‘Anticipation of climate change’ scenario there will be a sense of urgency for implementing adaptation measures to manage the impacts of climate change in the long term. Natural hazards related to climate change will increase but their impacts will be contained. The European territory will become more resilient to floods, droughts, heat waves, and other environmental hazards. Regardless of the implementation of the Kyoto Agreement, climate change is expected to cause serious damage to the European territory. However, a number of adaptation and mitigation measures may contain these negative impacts and may help to exploit some opportunities caused by climate change.
These thematic scenarios have been combined into three integrated scenarios, described by Lennert and Robert. These scenarios explore some possible directions in which the EU sectoral policies might be coordinated and their territorial impacts might be identified. In the ‘Baseline Scenario’, renewed efforts are made for the Lisbon Strategy, demanding extra investments in R&D and education. Regional Policy will also be continued with vigour. In the ‘Competition Scenario’, bold decisions are made regarding Europe’s continued prosperity. The Lisbon Strategy takes precedence over institutional reform and other sectoral policies. In the ‘Cohesion Scenario’ Europe is confronted with the challenge of fully integrating the various regions in Europe. The budgets for Regional Policy and Rural Development Policy are enhanced and targeted to the neediest regions. The scenarios explore the possibilities for combining competitiveness, cohesion, and sustainability [26]. Independent of the policy options explored in the scenarios the European territory will be confronted with major challenges such as: rapidly declining fossil fuel resources and increasing impacts of climate change. Hence, the effectiveness of almost all EU sectoral policies depends on taking the territorial dimension into consideration much more deliberately than has been the case so far.

The robustness of the integrated scenarios has been tested by introducing four ‘wild cards’ and exploring their territorial impacts throughout Europe. This was undertaken to better deal with prognostic uncertainty [26]. Smith and Dubois describe the use of four wild cards or events with low-probability but high-impact. These are: ‘an era of energy scarcity’, ‘the demise of Europe’s social security system’, ‘the sinking of the gulf stream’, and ‘the dollar going down the drain’. These wild cards were introduced to test the individual scenarios’ ability to deal with the likely impacts of these events, including some reflections on themes that were not included in the integrated scenarios, and raising awareness that, policy choices of today have to be evaluated not only in the light of today’s policy goals but also in the light of possible, sometimes dramatic, events in the future.

6. The use of the scenarios

“Scenarios are neither predictions nor forecasts, nor comprehensive critiques. They are informed narratives, developed to support a systematic explanation of possible futures with the aim of helping to make current policies robust and resilient to future change”. [27]

The aim of the ESPON scenarios has been to achieve just that. Firstly, by gathering a considerable amount of knowledge and data, especially for developing the baseline scenarios, they have added to the evidence-base of territorial governance. Secondly, they have raised awareness among policy makers, particularly within the DG Regional Policy, about the probable future consequences of today’s decisions. For the scenarios to be effective, it is crucial that decision-makers are involved in the process of developing them and hence recognising their strengths and limitations. This to a large extent has been the case with regard to the development of ESPON scenarios. Throughout the life of the project, key issues have been discussed in several joint workshops between the researchers and members of the ESPON Monitoring Committee which consists of national civil servants. This has led to the scenarios being drawn upon in the debates about Europe’s future. They have been referred to a
number of high level EU documents such as the Territorial Agenda. They have also inspired the development of a number of similar scenarios at the national level in countries such as Austria. Their development has certainly proved to be an invaluable social learning process for all those involve, directly or indirectly!

Acknowledgement

The writing of this paper has been made possible by the ESPON programme.

References

[16] S. Davoudi, Polycentricity in European Spatial Planning: From an Analytical Tool to a Normative Agenda, European Planning Studies, 2003, Nr. 8, 979-999.
[17] Informal Ministerial Meeting on Urban Development and Territorial Cohesion, Territorial Agenda for the European Union, Leipzig, 24-25


