

'La prospective agonise alors que nos moyens de prévoir se sont affinés. Elle peut se tromper, mais qui la pratique est mieux armé pour aborder ce qui advient'.

(Edgard Pisani, Vive la révolte!)

THE EXPERIENCE OF FRENCH FUTUROLOGY – SOME LESSONS

Futurology, in French, is identical with *prospective* (noun) with or without scenario building. Prospective (adjective), in English, is defined as 'Looking forward in time; acting with foresight; - opposed to retrospective'(Webster). Before drawing any conclusions from the French experience, we are going to sketch the evolution of the *prospective* in France.

1. A short history

The history of French futurology takes off in the years 1965-1975. It is closely related to the role of Datar, the national planning agency [1] and its founding fathers Jérôme Monod and Olivier Guichard. The so-called golden age of the prospective administration is still remembered because of the 'scenario of the unacceptable', Datar's first attempt at scenario building (the approach, by the way, has not been invented by the French, but has been introduced by a Canadian team). The *scenario de l'inacceptable* gives a picture of France in the year 2000, torn between two types of zones: the rich and dynamic zones (the agglomeration of Lyon, The South, Ile-de-France, the East, and the North) and the desert of the West and of the Center of the country. This image of an undesirable future was considered as shocking in France. It was meant to provoke a political counter reaction in order to turn it into a self-destroying prophecy.

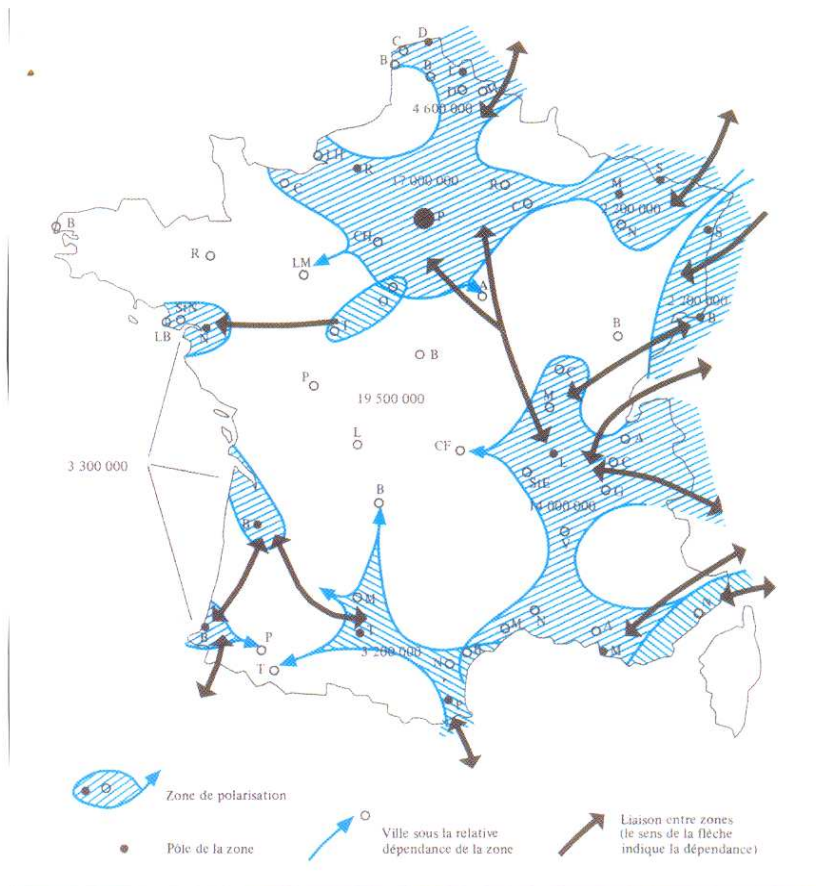


Illustration 1: The scenario of the unacceptable (Source: Bailly, Glatron & Musso, 2001: 14)

After 1975, the importance of futurology radically declines. Spatial planning and short-term political actions prevail.

But in the early nineties one witnesses a renaissance of futurology, thanks to Datar and Jean-Louis Guigou. Several steps can be distinguished:

- 1991-1994, a first generation of ten groups of *prospective*, exploring the future of France in 2015 (the work of this group has never been used for planning or political purposes). At the same time, Jacques Chérequé, the Minister of spatial planning and reconversion, launched seven *grands chantiers territoriaux*: from the Northern Arc down to the Mediterranean façade.
- 1992, the White Book of the Paris Basin, a trigger of public debate organized around three scenarios: the concentrated metropolis (*la métropole concentrée*), the multipolar, concentrated metropolis (*la métropole multipolaire concentrée*), the networked metropolis (*le réseau métropolitain maillé*). The last scenario is seen as a desirable future. Note that the exercise prepared the ground for an interregional plan, the *Contrat de plan interrégional 1994-1998*.
- 1993, launching the big debate, engaging regions, *departments*, communes, economic and cultural forces and associations, focusing on a desirable image of France, refusing the scenario of the unacceptable.

- 1995-2002, two new series of groups of prospective studies. The first series comprises only one exercise of futurology, namely on agriculture. The second series (of ten groups), however, is rich of futurology. It represents the work of experts, academics and actors from the civil society during the years 2000-2003. One of these groups, that is group 3 on networks, services and uses, will be dealt with later as there are general lessons to be learned for futurology. It is also interesting to take a closer look at group 1, 'Europe and spatial planning').
- 'France 2020'. This is a synthesis of the preceding studies. This time, Datar presents four scenarios which are explorative and contrasting (see Datar, 2000):
 - *archipel éclaté* or broken up archipelago, a neoliberal scenario
 - *le centralisme renové* (the renovated centralism), a scenario *néo-jacobin*
 - *le local différencié* (the differentiated local level), a scenario *néo-communautaire*
 - *le polycentrisme maillé* or networked polycentrism, an equity scenario.

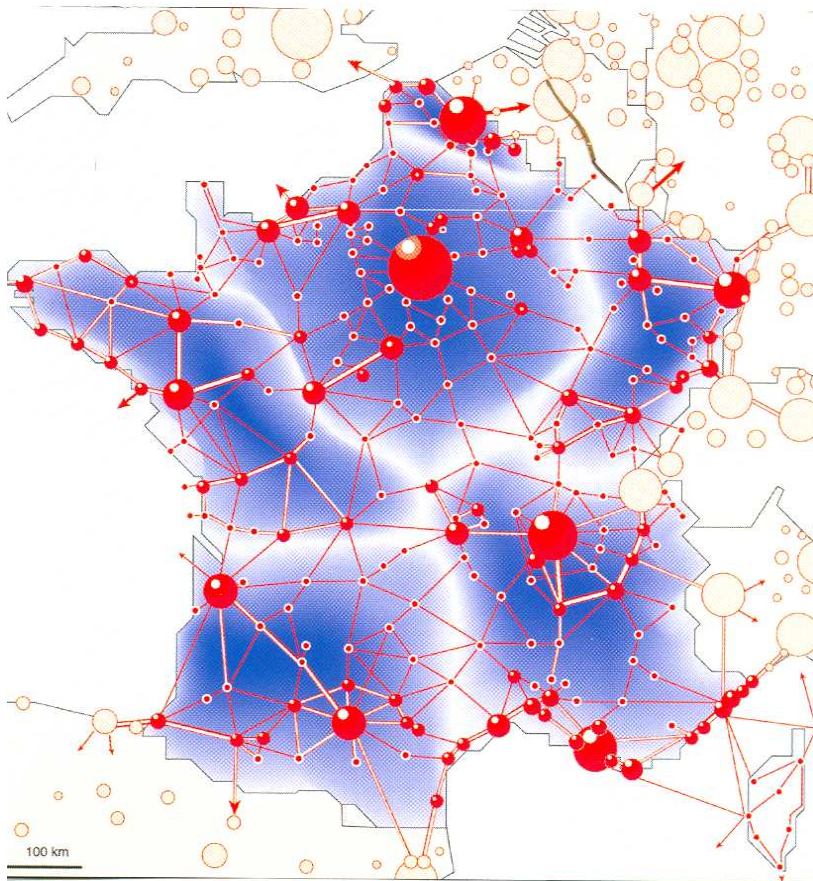


Illustration 2: Le polycentrisme maillé (Source: Bailly, Glatron & Musso, 2001: 23)

The government opts for a networked polycentrism. It claims that this scenario is in line with the European Spatial Development Perspective, that it respects solidarity

and cohesion, economic performance, and the conservation of a balanced environment (see European Commission, 1999).

1. **Europe and spatial planning**
2. **Leisure and spatial dynamics**
3. **Networks, services and uses**
4. **Health and space**
5. **Nature, rural space and the urbanized society**
6. **Time and space**
7. **Spatial representations and complexity**
8. **Local risks and collective action**
9. **Spatial prospective and public action**
10. **Economic activities and space**

Illustration 3: 'France 2020' – ten groups of prospective studies

Ever since the scenario of the unacceptable, images have played an important part in French futurology (Bailly, Glatron & Musso, 2001).

In concluding this short history (for further details see Musso, 2006), it should be mentioned that French futurology is also documented by two journals: the *Revue 2000* which has existed from 1966 to 1978 (see Lacour, 2000) and *Futuribles* which is still in business.

2. No royal path

Prospective studies in France cover a wide range of applications: Europe, France, (city) regions, sectors, public and private enterprises. The approaches are diverse. There is no royal path leading to possible futures.

To demonstrate the diversity, we have chosen three examples referred to hereafter as 'Group 3' (Crozet & Musso, 2003), 'Europe' (Baudelle, 2002; Baudelle & Castagnède, 2002) and – to cover the regional dimension, too – 'Basque Country' (Mousli, 2004).

'**Group 3**' has been dealing with sectors (energy, transport and ICT) at the national scale with, as a starting point, global scenarios.

The approach includes the following steps:

- identification of major uncertainties and key questions per theme (the themes are networks & territories; applications, uses & temporalities; services, regulations & systems of actors)
- extreme answers to the key questions (these answers are treated as hypothetical situations)
- scenarios per theme (contrasting combinations of hypotheses)
- combination of thematical scenarios: five contrasting global scenarios (see also Drewe, 2006 for details)

- translation of global scenarios into sectoral scenarios for energy, transport and ICT.

1. GLOBAL (*Global marchand co-régulé*)
2. GLOCAL (*Glocal coopétitif*)
3. SUBSIDIARY EUROPE (*Multi-subsidiarités réticulaires*)
4. CENTRALIZED EUROPE (*L'issue européenne*)
5. NATIONAL PREFERENCE (*Redéfinition du projet national*)

Illustration 4: 'Group 3' – five global scenarios

The approach adopted by group 3 employs the method of morphological analysis based on Zwicky (1948). For further methodological information see Arcade (2000).

'Europe' starts from:

- four subsystems that influence European space:
 - size of the EU: from small (less than 15 member states) to extra-large (27 to 36 members)
 - level of community integration: from a weak intergovernmental model to the United States of Europe
 - competences: from European *laisser-faire* to European centralism
 - spatial organization (from concentration or center-periphery to polycentrism)

- possible relations between the four subsystems lead to nine theoretical scenarios (the available publications do not reveal how this is achieved)[2]
- discarding the least probable one, five scenarios remain (this step, too, remains in the dark)
- the five scenarios are:
 - fragmented Europe (*l'Europe fragmentée*)
 - projected Europe (*l'Europe projetée*), a trend scenario
 - Europe of unequal cooperations (*l'Europe des coopérations inégalitaires*)
 - 'iceberg' Europe (*l'Europe pré carré*)
 - polycentric Europe (*l'Europe polycentrique*)

The last of the five scenarios is considered as optimal. This choice coincides with the earlier preference for *le polycentrisme maillé* in France.

The exercise deals directly with the European scale. But one has also looked into the meaning of the scenarios for France (*enjeux pour la France*).

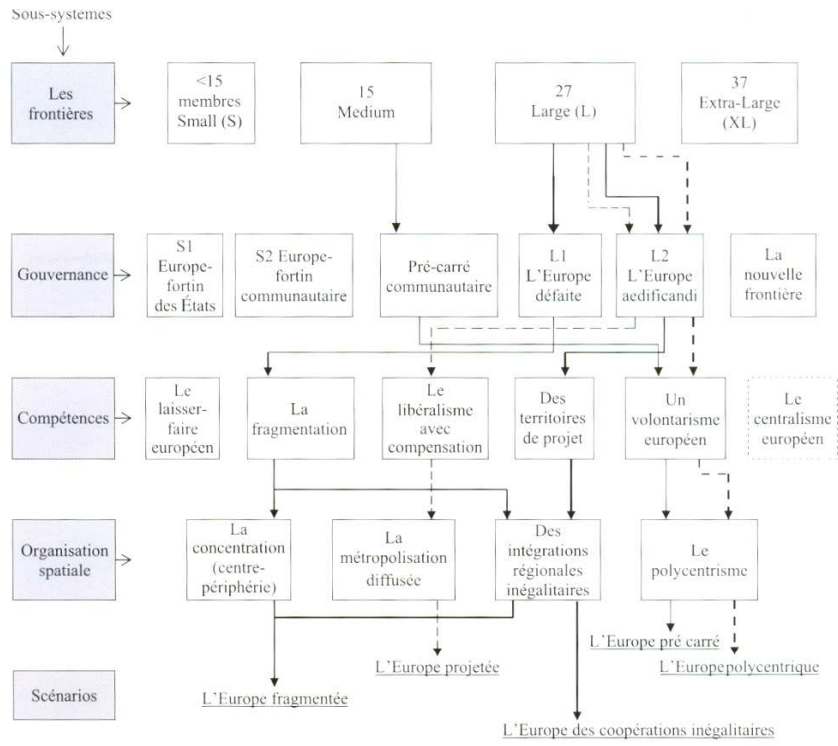


Illustration 5: Five scenarios for Europe (Source: Baudelle, 2002: 42)

The regional dimension is illustrated by **Basque Country** (*Pays Basque 2010*).

In a nutshell, these are the important methodological steps:

- identification of 55 'determinants' of the border region, classified in eight groups: environment; spatial planning and dynamics; population and civil society; institutions and regulations; culture and values; productive system; education; quality of life
- structural analysis [3], examining the relations between the determinants:
 - actual relations
 - potential future relations
 - potential future relations taking into account actors' decisions
- the key variables revealed by the structural analysis are:
 - attractiveness of the Bayonne agglomeration
 - unequal development of different zones in the Northern Basque country
 - cultural factors: the sense of belonging and language
 - cross-border exchangesrelated to the potential 'decisional' future, one has added:
 - higher education
 - institutional issues
- finally, six scenarios have been built:
 - a trend scenario pertaining to the year 2000
 - three trend scenarios pertaining to the year 2010; three possible paths toward the future: shrinking; urban expansion; rural redevelopment
- two voluntaristic scenarios: integrated development and 'Euro-Region'
- special attention is paid to tools and actions
- the authors view the exercise as a success ('Euro-Region' includes the creation of the *Eurocité Bayonne-San Sebastian*. In 2007, however, not much progress has been made.)
- one has decided to update *Pays Basque 2010* for the year 2020 (Mousli, 2006).

| N° | variable | SCENARIO 1 TENDANCIEL | SCENARIO 2 CRISPATION | SCENARIO 3 EXTENSION URBAINE | SCENARIO 4 REDEPLOIEMENT RURAL | SCENARIO 5 DEVELOPPEMENT INTÉGRÉ | SCENARIO 6 EURO-REGION |
|----|--------------------------|-------------------------------------------|----------------------------------|------------------------------------|--------------------------------------|----------------------------------------|-------------------------------------|
| 1 | CONTEXTE ÉCONOMIQUE | Incertitude économique | Crise économique durable | Situation plus favorable | Changement social | Croissance économique | Fort croissance économique |
| 2 | AGGLOMERATION BAB | Densification de l'habitat | Extension en tache d'huile | Fonctionnalisation de l'espace | Influence décroissante | Maîtrise planifiée | Extension jusqu'à San Sebastian |
| 3 | PRESSION FONCIÈRE | Labourd et Sud des Landes | Forêt sur la côte | Agglomération | Répartie sur l'intérieur | Sur le périurbain | Sur la côte |
| 4 | CÔTE BASQUE | Forêt immigration | Concentre toute la population | Sous l'emprise urbaine | Rééquilibrage / intérieur | PLH ⁰⁸ / Logements sociaux | Conurbation Bayonne - San Sebastian |
| 5 | ARRIERE PAYS CÔTIER | Développement pavillonnaire lâche | Mitage pavillonnaire | Zone d'ortoir | Réseau de bourgs-centres | Plus de logements sociaux | Implantation industrielle |
| 6 | COTE AUX ET MONTAGNE | Désertification | Abandonnés | Fort regain d'intérêt | Aide/préservation active | Développement des infrastructures | Statu quo |
| 7 | ENVIRONNEMENT | Non maîtrisé | Actions ponctuelles | Maîtrisé | Maîtrise/ subventions | Budgets renforcés | Gestion partagée |
| 8 | DÉMOGRAPHIE | Vieillesse et immigration | 90% de la population sur la côte | Immigration vers urbain | Immigration vers rural | Équilibrée | Fort immigration ^o |
| 9 | ÉCONOMIE | Fragilisée / Industrie | Dans l'impasse | Tertiairisation croissante | Retour vers agroalimentaire | Politique / Tourisme | Industrielle |
| 10 | AGRICULTURE | Opposition entre traditions et industries | Abandon du caractère familial' | Dynamique | Relancée / Aides directes | Pluriactivité | Modernisation |
| 11 | TOURISME | Baisse de la fréquentation | Crise majeure | Activités sans cohérence | « Tout vert » prépondérant | Regroupement /acteurs | Espagnol et Européen |
| 12 | INDUSTRIE | Concentrée /côte | Peu ou pas | 85% tertiaire | Plutôt Artisanat | Statu quo | Internationalisation |
| 13 | ENSEIGNEMENT SUPÉRIEUR | Peu reconnu (sauf IDLS ⁰⁶) | Statu quo | Inadéquation emploi formation | Sans grande cohérence | Apprentissage orienté vers le tourisme | Université, Institut Polytechnique |
| 14 | SENTIMENT D'APPARTENANCE | Indifférence /motivation | Disparaissant | Disparaissant | Restauré | Renforcé et élargi | Élargi au Pays basque Sud |
| 15 | TERRITOIRES DE PROXIMITÉ | Difficultés culturelles | Repli | Sud Landes/ Béarn | Béarn | Béarn/Sud Landes | Espagne |

Illustration 6: Basque Country – six scenarios (Source: Mousli, 2004: 62)

3. Lessons

Can scenario builders elsewhere learn from the French experience?

A first lesson relates to the previous section: there is no royal path leading to futurology. Different approaches are possible.

Looking back at the short history of French futurology one must conclude that the exercises of Datar have never been evaluated critically, except for 'France 2020'. The ten groups of prospective studies (listed in Illustration 3) have provided five types of changes to be taken into account by the next generation of prospective reflections:

- proximity remains important even with the dissemination of ICT
- the economy of education, health, culture, leisure, tourism, housing and related services has an important impact on spatial development
- new forms of social exclusion and of risks evolve dependent on unequal access to mobility, leisure and networks
- space tends to become mobile, illegible and fuzzy: socio-economic realities become dissociated from institutional territories
- the governance of territories and spatial planning depend on the mastery of networks , one of the main conclusions from the work of 'Group 3' (Musso , Crozet & Joignaux, 2002).

Evaluating the work of 'Group 3' today, an update seems to be in place introducing phenomena such as the rise of China and other countries as world powers, climate change, and the energy crisis.

Uncertainties asks for scenarios as we have written elsewhere (Drewe, 2006) and, indeed, they are the cornerstone of futurology. This has been clearly established by 'Group 3' (Crozet, 2003), but has not been taken up by 'Europe' nor by 'Basque Country' methodologically speaking. The scenarios built by 'Group 3' spell out the consequences of combinations of uncertainties existing at the beginning of the 21st century.

'The 20th century was a century of arrogant predictions, mostly proven wrong. The 21st century will be one of uncertainty, hence of prospective study' (Bindé, 2002).

Uncertainties have been introduced in spatial planning by Friend & Jessop (1971) as part of the strategic choice approach: uncertainties with regard to knowledge of the environment (asking for more research); uncertainties as to appropriate value judgments (with, as remedy, more policy guidance); and uncertainties concerning intentions in related field of choice (more co-ordination). If a SWOT analysis is applied in planmaking, the internal strengths and weaknesses of a city or region can be combined with external opportunities and threats, derived from scenarios born from uncertainties in knowledge of the external planning environment. The latter include all uncertainties relating to the structure of the world external to the decisionmaking system.

Musso (2006) in his retrospective of Datar's futurology notes that the agency has moved from the 'humanistic' approach of the 1970s and the 'utopian' approach of 'France 2020' to a 'pragmatic' approach today.

This is another way of saying that the emphasis has somewhat shifted to the *use of scenarios*.

'Group 3' has made clear that the five contrasting images of the future (Illustration 4) are not meant to be chosen from nor to predict future developments. They represent neither desirable nor probable futures, only possible futures. However, the treatment of the underlying uncertainties and the key concept of *maîtrise* (controllability) introduce an element of probability (although not in the strict statistical sense) or rather an element of feasibility.

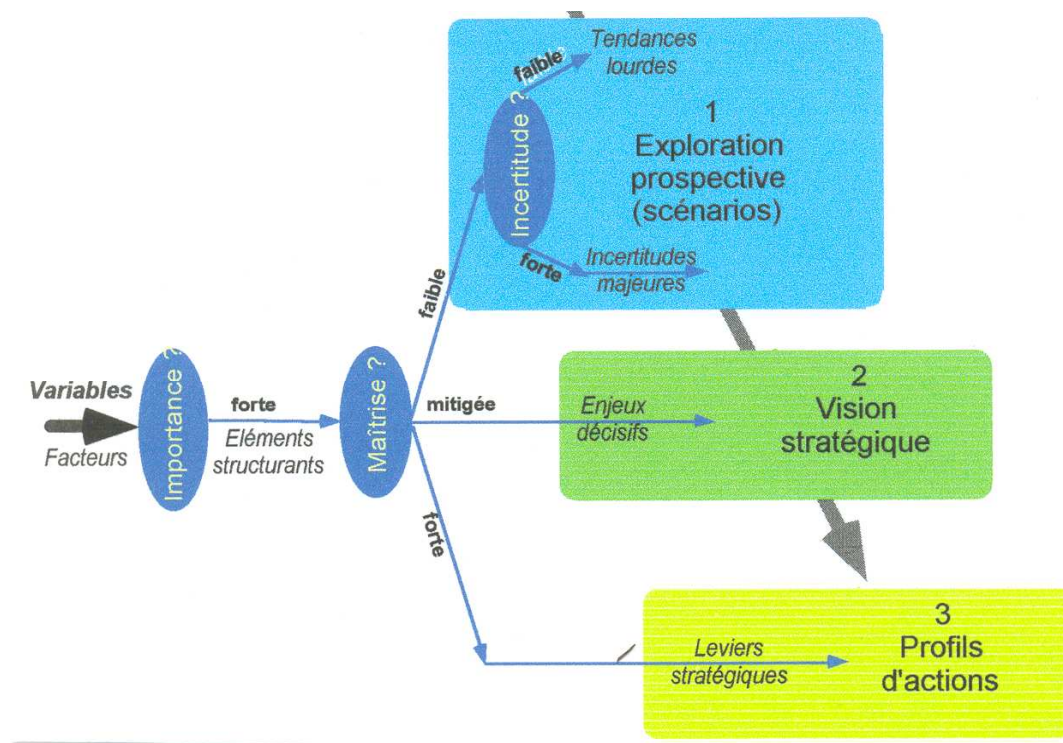


Illustration 7: The role of controllability (*maîtrise*) in scenario building (Source: Jacques Arcade)

As shown in Illustration 7, controllability may be weak (*faible*), medium (*mitigée*) or strong (*forte*). If controllability is weak, caused by dominant trends or strong, major uncertainties, then scenarios can only be used for explorative purposes. Medium controllability allows at least for developing strategic visions based on what is at stake. Action profiles can only be constructed in the case of strong controllability, provided strategic levers of intervention can be identified.

'Group 3' has in no way suggested a desirable future. But, of course, users are free to choose. Some may, for example, prefer a Centralized Europe. But where are the strategic

levers of intervention for it, facing the veto power of 27 nation states when it comes to reach unanimous decisions in areas for which the EU does not have exclusive competences.

The short history of French futurology has shown that the French have not always refrained from expressing their preference for or against certain scenarios. Take the scenario of the unacceptable, the networked metropolis, the networked polycentrism or a polycentric Europe ('Europe'). The authors of the latter have also used probability as an argument to reduce a large number of logical possibilities (without explaining however the exact working of this filter). 'Basque Country', too, incorporates feasibility considerations(mixed with elements of desirability) notably in potential future relations which take into account voluntaristic actions (*actions volontaristes*).

If alternative futures and their probability cannot be produced, then the task of futurologists is limited to deal with imponderable environments (between extremes) or a range of futures (Arcade, 2002; Courtney, Kirkland & Viguerie, 2001). Sometimes the environment may even be indiscernible, with new paradigms emerging. Barker (1995) has demonstrated that paradigms, old and new ones, also matter for business firms [4].

While it is true that there is no royal path to futurology and, in particular, to scenario building, our methodological preference should be determined by the attention paid to uncertainties and the 'good' use of scenarios, based on the concept of controllability. The latter can reduce policy distance. It can bridge the gap between political decisionmaking and attempts to look forward in time.

At the end of the day, 'strengthening the anticipatory and prospective capacities is a priority for governments, international organizations, scientific institutions, the private sector, actors of the civil society and for all of us' (Bindé, 2002: 29).

Notes

[1] Datar stands for *Délégation à l'aménagement du territoire et à l'action régionale*. Nowadays it is called Diact, *Délégation interministérielle à l'aménagement et à la compétitivité des territoires*.

[2] The four subsystems allow for 4 times 6 times 6 times 4 = 576 logical combinations.

[3] Using the so-called MICMAC method which stands for *Matrice d'Impacts Croisés Multiplication Appliqués à un Classement*. See Godet (2001) for details.

[4] For the effects of different paradigms of thinking cities or city regions see Drewe (2007).

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