

## 4. SPATIAL IMAGES

### 4.1 Visualising European Spatial Policy

In recent years, numerous analyses and symbolic representations of the European territory have been created, using very different methods and techniques. Very often, they have served as powerful tools for both visualising policy aims and shaping attitudes. Some of these images were powerful enough to provide a symbolic representation of the fundamental theoretical paradigms behind spatial development policies (e.g. Keeble's "Centre and periphery", Reclus' "Blue Banana", highlighting new axes of development, the CEDRE "Road traffic", showing the networked structure of Europe, etc.).

Within SPESP, a collection of possible visualisations was therefore produced, with the aim of developing alternative graphic images based on ESDP policy aims.

#### Visions of cores, axes and networks

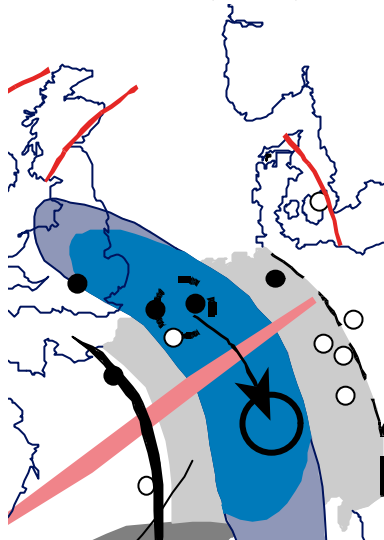
The first, and probably the best known, was the image produced by Keeble in late seventies, visualising the so-called "Centre and periphery" development paradigm. Keeble's maps represented the level of economic integration of each country, calculated simply in terms of geographic distance from other countries and relative trade. Once an image provides the visualisation needed to depict a dominant paradigm, it becomes kind of policy icon. Before and after Keeble's famous map, other attempts were made to develop indicators of the "Centre and periphery" paradigm, and produce images to visualise them. Many of these studies identified the so called "European centre and peripheries" and produced taxonomies of regions in relation to their development conditions. This particular area is in fact a field with a long history of spatial policy illustration and was one of the major topics during the period 1970-1980.

A closer look at spatial patterns led to deeper understanding during the period 1980-1990. It highlighted the fact that areas with the same geographical position and equivalent social ca-

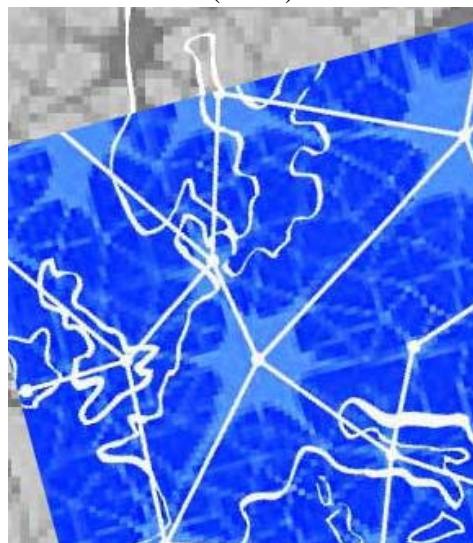
*The Core-periphery vision (1980s)*  
(Keeble)



*Axes of development vision (early 1990s)*  
(Reclus)

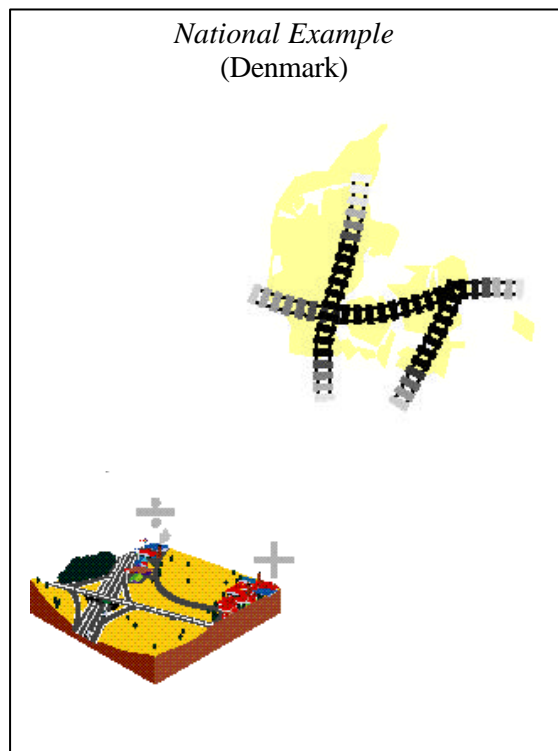


*Network vision (early 1990s)*  
(Turro)



pital endowment can have different development levels.

Studies in line with *Europe 2000* and *Europe 2000+* have increased and broadened understanding of development patterns and emphasised both more prospective and policy-orientated aims. Several of these studies came



up with mind-catching illustrations.

Another richly illustrated spatial policy area opened up along with further developments towards a networked geography for Europe, featuring concepts such as polycentrism and rurbanisation. Here, the emphasis lies with the distance to networks and the utility they provide. Policy-orientated spatial illustrations of networking, including forms of polycentricity, have been elaborated both at national and European level, but the topic of urban-rural partnership is still a scantily illustrated policy field.

All these European and national experiences can be drawn on in elaborating the ESDP. However, the progress of the ESDP document from its first official draft to the final document has also revealed that we lack sufficient knowledge and experience in illustrating European spatial policy. Innumerable discussions, and finally the evolution from maps and from

cartographics to infographics in the ESDP document (compare the Noordwijk and Potsdam documents), have shown that further efforts for illustrating European spatial policy as presented in the ESDP are needed.

### The Power of spatial images

Visual representations, because of their communication efficacy/communicative power, have often drawn controversial reactions from readers. Controversy, however, is an understandable and even intrinsic reaction to the complexity of European spatial development policies. Far from being the result of a natural generative process, the current European spatial development pattern has been strongly guided by national territorial policies, often modifying local natural conditions and usually plagued by internal contradictions (as shown by the analysis of the so-called "natural frontiers" policy, which has resulted in the construction of transport infrastructures giving "structure" to each own national territory, and in the hierarchical organisation of administrative capitals covering national territories). Any successful attempt to visualise European spatial policies has to understand the territorial dimension of conflicting issues and then address them (and in so doing run the risk of being rejected) or somehow avoid them (and, in such case, take the risk of superficially treating or oversimplifying questions).

### 4.2 Cartography and Infography – Two alternative visualisation approaches

Because of high national sensitivity towards how "territorial policies" are communicated at European level, images, and more specifically precise, cartographic representation of policies, demand special care and caution. For this reason, work on "Infography" was carried out as a special part of the Study Programme on European Spatial Planning, and aimed at exploring alternative new methods of visualising spatial policies which could make progress towards a better understanding of the overall communication problem.

The specific work mandate was to produce a "Collection of visualisations of European spatial policy using new alternative methods to represent the policy aims of ESDP". Experts

from nine European countries each developed her or his own original method and presented a proposal. A working process based on “learning by doing” (presentation and joint discussion of evolutionary prototypes) fostered cross-fertilisation and induced spontaneous harmonisation. The goal was not to produce one single proposal, but to compile a number of good alternatives. The focus was not simply on exploring innovative communication technologies, but proposing specific graphic images based on ESDP policy aims. The cartographic images should illustrate the corresponding political text in the ESDP document, based on a conceptual understanding of the ESDP spatial and policy framework. The images to be developed were to contribute to explaining ESDP policy in a user-friendly manner. Ideally, the illustrations should be self-explanatory.

The Collection contains an extremely rich variety of methods and images, as well as a better understanding of the overall problem: how policies can be communicated effectively, and honestly, to people.

To avoid confusion in relation to both cartographic rationality and infographic creativity, it can be helpful to clarify the difference between them. Briefly, cartography aims at providing an objective representation of reality (in the form of maps based on data), while infography aims and giving a meaningful representation of aims as interpreted by human imagination (in the form of images). Infographics is thus a wider concept, since this may involve cartographic inputs and processes but then takes them one step further.

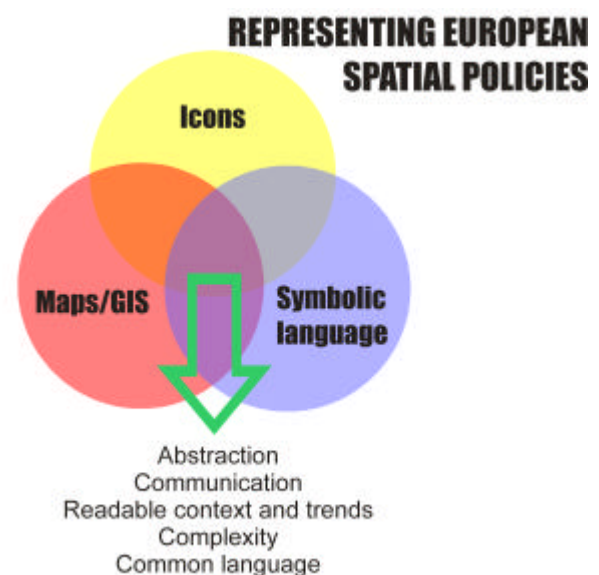
Cartography, as a rational and objective representation of reality, follows a scientifically oriented methodology. As in any science, the method is more important than the final outputs, since they are always provisory (a scientific answer can be rejected if wrong, but there is no way to ensure its permanent acceptance). Cartography can be meaningful or misleading depending on the consistency of the data used as input and the process applied to transform it into a particular map. In any case, maps always provide a partial view (any scientific answer is never complete, but provokes new questions). Transparency of data and its manipulation is required to make the overall method objective,

and ensure that others can duplicate it and achieve exactly the same output.

Infography may use cartographic products and methods as inputs, but is less restricted by strict scientific rules. Its creative methods follow an artistically oriented procedure. While scientific methods always start with a predetermined question (and usually provide partial answers which will lead to further questions), artistic methods start by seeking a solution to a question which is not clear or may be simply unknown. Creative methods invent symbols (not unlike an alphabet) and rules to operate with the symbols (a sort of grammar). They do not discover these symbols on their way towards the “truth” via a systematic searching process - they invent them based on analogy or pure imagination. Creative methods are meaningful when they are efficient at communicating, suggesting and evoking in the minds of the majority of viewers the desired information. And while creative methods are effective in communicating feelings and emotions they may be risky for communicating concepts or ideas which should be very specific.

### 4.3 Infographics in European Spatial Policies

The examples of Infographics in European Spatial Planning Policies show that two major approaches must be considered when producing images to communicate spatial development policies and present aims and options:



Rational approaches, which follow strictly systematic methods to develop “policy-oriented” maps starting from cartography produced by GIS software tools. Creative methods, which produce images based on symbolic languages, selected from the themes emphasised in spatial planning studies. Policy actions directly linked to policy aims, such as “strengthening”, “promoting” or “protecting”, can be integrated into the same images.

**4.4 Examples of Visualising European Spatial Policies**

Along the continuum stretching from strict rational methods to creative methods, a variety of in-between approaches have been developed. In fact, the purely scientific methods presented in the Collection involved an implicit process of translating conventional scientific languages (in this case, cartographic rules) into a “policy-oriented” language, and the purely creative methods attempted to follow the opposite direction. Therefore, none of them can really be labelled as “pure”.

used to invent the symbolic languages expressing policies.

*ESDP Policy Option 3*  
Promoting integrated spatial development strategies for city clusters ...



**Germany**

The first explicit “in-between” approach presented in the Collection proposes the superimposition of policy symbols onto a cartography of spatial patterns and trends. This approach clearly suggests to readers that policies are “created” (like the symbols representing them) to solve real spatial challenges, after these were objectively defined so that they could be mapped with scientific cartographic methods. The unavoidable distinction, or even gap, between policies and problems (together with the fact that policies never emerge “only” from scientific knowledge) becomes apparent.

*Urban-Rural Partnership*



**Denmark**



**Belgium**

Other approaches consisted in rationalising creative inputs or vice versa. In one proposal (see Italy), virtual landscapes were created by superimposing the three layers constituting today’s built environments: physical features, such as mountains; communication networks, including transport and telecommunications; and building structures, especially in urbanised areas. Each layer was represented according to its intrinsic spatial attributes (physical ele-

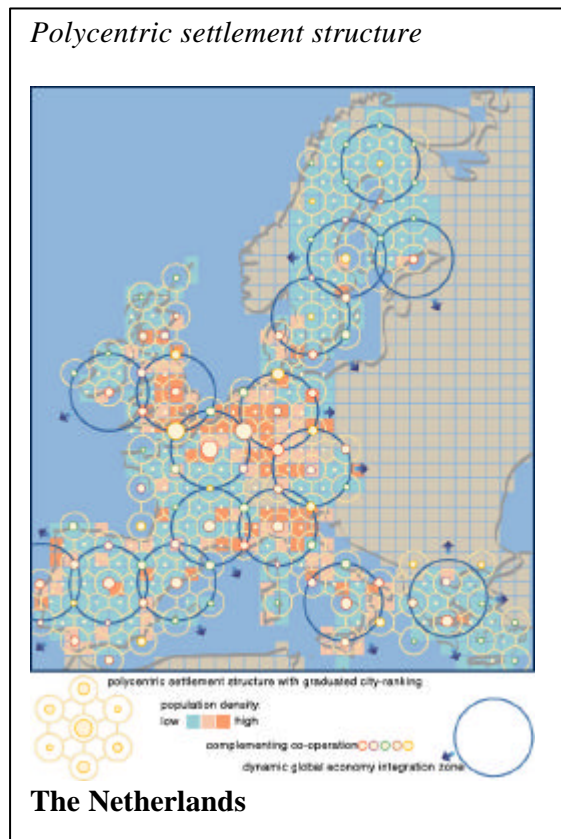
Since scientific methods have the advantage of providing objective visualisation of real problems and opportunities, as well as future trends, they can be used as a cartographic basis. And as creative methods have advantages in representing abstract aims and actions, and thus in imagining desired futures, they can be

*Urban-Rural Partnership*



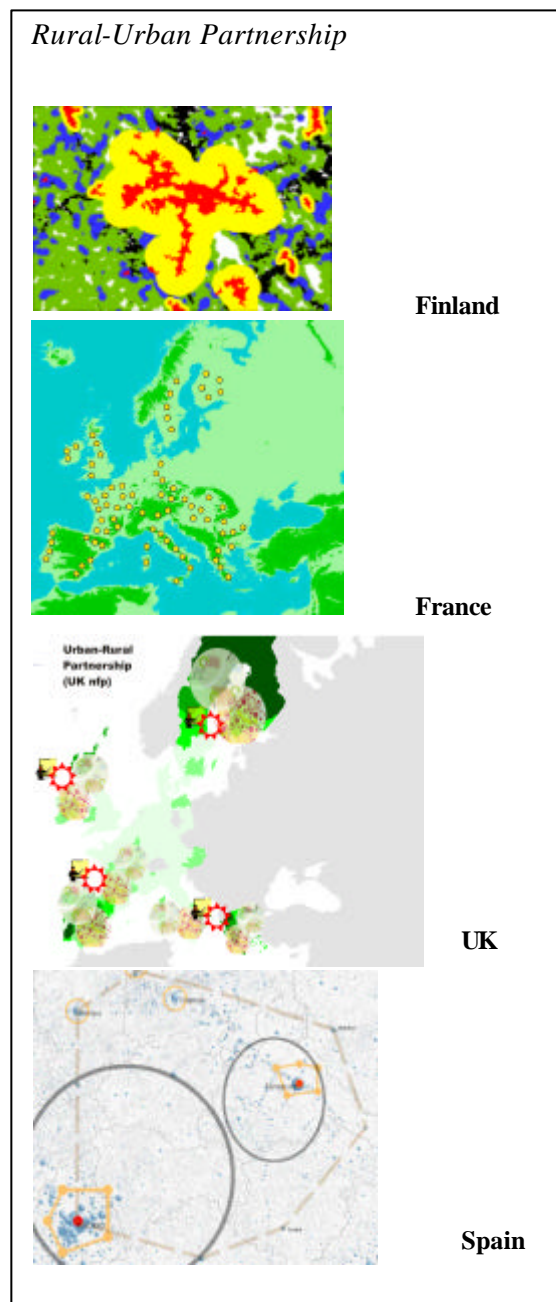
**Italy**

ments as realistic 3D images, networks as links and nodes, urban structures as grids). Selected fragments of the landscape were then chosen as representations of policies. In other proposals, the procedure was similar, but the virtual landscapes were created by re-designing maps produced by GIS.

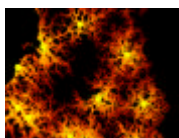


Any representation method presented in the Collection involves a combination of both rational and creative aspects. Somehow, the policies invented and the problems and trends discovered were merged. The paths of each alternative method may have started from very different beginnings, but the final proposals all show the same paradox, the one that never can be solved: there is a gap between policies and problems, between imagination and reality. Emerging from this unsolvable paradox is a tension.

Clever images are often embedded into metaphor or represented by metonymy (taking the part as the whole). In the case of spatial policies, images and maps always have this tension. As a reasonable goal, we can attempt to understand or perhaps even control, the fundamental tension in any image, and help readers to realise it.



In this Chapter just a very small variety of the Collection of infographics in European Spatial Policy could be presented. A CD-ROM containing the complete set of infographics elaborated during the Study Programme as well as presentations of the methodological approaches of each “author” is available. Altogether, this might represent the first letters of a new alphabet.



### Further Examples on Visualising

#### ESDP Policy Aims:



Polycentric Spatial Development



Urban-Rural Partnership

Dynamic, Attractive and Competitive Cities and Regions



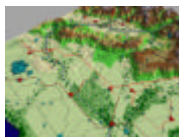
Indigenous Development

Efficient and Sustainable Use of Infrastructure



Natural and Cultural Heritage as Development Assets

Water Resource Management



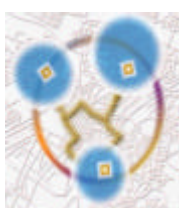
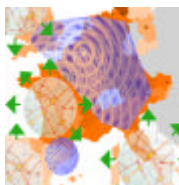
Creative Management of Cultural Landscapes



Parity of Access Infrastructure and Knowledge

Basis for Better accessibility

Diffusion of Innovation and Knowledge



*The aim of the Infographics work was to develop alternative methods for producing images visualising ESDP policy aims and options.*