The Polycentric City Region That Never Was.
Ludovic Halbert

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HAL Id: halshs-00125909
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Submitted on 23 Jan 2007

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VERSION PROVISOIRE

Titre :
The polycentric city-region that never was:
Paris agglomeration, Bassin parisien
and spatial planning strategies in France

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Edited Version:
Abstract: This paper highlights how, in the Paris metropolitan region's case, two polycentric spatial planning policies at national and regional levels incidentally prevented the development of a polycentric Mega-City-Region. The national policy aiming to reduce economic imbalances in the French territory has failed to promote a coherent Bassin Parisien system. At the same time, polycentric planning within the Paris-Ile-de-France region restricted the economic and urban growth to the adjacent new towns. This resulted in the reinforcement of the Paris agglomeration, thus limiting further integration of surrounding FURs in a polycentric Mega-City-Region that never existed.

Key words: Paris metropolitan region, polycentricity, spatial planning, competing scales.
Introduction

Expanding contemporary city-regions are becoming increasingly more a complex issue for spatial planners and policy-makers. To some authors, the functional urban complexes resulting from current socio-economic dynamics seem to be out of reach of any structured metropolitan governance (Lefevre, Jouve, 2002) while other academics argue that discrete but efficient forms of governance accompany the dramatic changes of our urban spaces (Le Galès, Lorrain, 2003). The interest for the new urban soft functional spaces has percolated from the urban research arena and private actors’ day-to-day experience of a globalised economy to policy-makers’ spatial planning debates. In France a call for projects launched in 2003 by the state-related agency for aménagement du territoire (Datar) proposes for instance to create regional think-tanks in major national city-regions via a policy of ‘metropolitan contracts’. The paradox is that the Paris region, which is the first French global city-region (Sassen, 1994, Taylor, 2004) has not been selected. This paper will explain why under the light of the last fifty years of spatial planning (1950-2000) this is not so much of a surprise.

The absence of the Paris city-region is all the more problematic as the deconcentration of population and of some activities since the 1960’s has increased functional linkages with a set of peripheral functional urban regions not only in the administrative Ile-de-France region but also in surrounding regions such as the cities of Beauvais, Compiègne or Chartres but also, as some have argued (Gilli, 2002) with further distant ‘cathedral cities’ like Rouen, Orléans, Reims or Amiens, in effect extending the large Bassin parisien perimeter. Commuter analysis (MIIATBP, 2002, Halbert, 2004a) shows functional linkages that are dominantly centre-periphery but also sub-regional networks indicating forms of more polycentric interactions.
Yet, major firms from the knowledge economy do not seem to follow this deconcentration pattern. I propose the hypothesis that unlike activities with low knowledge and contact intensity (basic logistics, some manufacturing activities, back offices), their location and their functional patterns tend to be still relatively concentrated (Halbert, 2004b).

The reason may be found in the spatial logics of the global post-fordist economy which rely on core areas of metropolitan regions that act as gateways, knowledge and information integrators as well as insurances in a world of economic uncertainty (Veltz, 1996, Hall, Pain, 2006, Halbert, 2004c). However, this is also the result of policy-makers' priorities and some partially unexpected results of spatial planning strategies. I argue first that there is only a very limited and recent interest in the Paris city-region case for knowledge intensive activities – especially for Advanced Producer Services – and that no specific policies have been implemented yet to influence or at least accompany their locational strategies. This result can in fact be broadened to all activities of the regional knowledge economy. Second, following Peter Hall's view on Paris and London's diverging spatial patterns (Hall, 1995), I stress the importance of leading institutions – especially the central government – in favouring a limited deconcentration within the Paris agglomeration, thus preventing a deconcentration at a wider metropolitan scale.

In the context of a special issue dealing with polycentrism, I intend to demonstrate more specifically in this paper that this does not result from too little polycentric planning for has been the spatial planning paradigm since at least the 1950’s. It is in fact the consequence of many polycentric policies that rarely considered the enlarged city-region scale as efficient, thus thwarting the development of a polycentric organisation restricted to the Paris agglomeration. I will not discuss here the benefits of such spatial patterns (i.e. competitiveness or durability of polycentric vs. monocentric city-regions), but analyse the processes that led to the reinforcement of the Paris region relative monocentricity within a dominant political narrative of polycentrism.
This paper is based on the analysis of spatial planning documents as well as four workshops held in the first half of 2005 where public bodies have expressed their views on current planning issues at the metropolitan scale. The lack of any documents at the enlarged city-region level as well as the large number of documents that are partly or entirely located within the functional soft perimeter described by the Polynet research (Table 1) indicates i) the numerous public institutions involved in the spatial planning field and hence the potential risk of both vertical and horizontal disintegration of public action and ii) the relatively secondary importance given to metropolitan planning in the institutional landscape.

Table 1: Documents dealing partly or totally with the enlarged Paris city-region perimeter

<table>
<thead>
<tr>
<th>Scale</th>
<th>Name</th>
<th>Acronym</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>European</td>
<td>European Spatial Development Plan</td>
<td>ESDP</td>
<td>European-scale spatial polycentrism (Paris + Bassin parisien are part of core areas vs. European peripheries)</td>
</tr>
<tr>
<td>North-West Europe</td>
<td>North-West Europe Vision</td>
<td></td>
<td>Macro-regional scale spatial polycentrism at this scale (Bassin parisien is on the periphery of the Euro-core)</td>
</tr>
<tr>
<td>National</td>
<td><em>Schémas des Services Collectifs</em></td>
<td>SCC</td>
<td>Sectoral planning of major equipments and services (roads, railways, energy, environment, higher education)</td>
</tr>
<tr>
<td></td>
<td><em>Plans d'Action Stratégique de l'État en Région</em></td>
<td>PASER</td>
<td>Plan defining national objectives to be implemented in a given region for a period of four years</td>
</tr>
<tr>
<td>National/Regional</td>
<td><em>Contrats de Plan État-CPER</em></td>
<td>CPER</td>
<td>Contracts for a period of around six</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Plan Name</th>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional</td>
<td>Schéma Régional d'Aménagement et de Développement du Territoire</td>
<td>SRADT</td>
<td>Regional planning document elaborated by the Régions</td>
</tr>
<tr>
<td>Regional</td>
<td>Schéma Régional d'Aménagement de la Région Ile-de-France</td>
<td>SDRIF</td>
<td>The Ile-de-France region special planning document. Legally binding all other planning documents (including municipal plans), it used to be state written until today (1965, 1976 and 1994); current revision regionally-led for the first time</td>
</tr>
<tr>
<td>Local</td>
<td>Schéma de COhérence Territoriale</td>
<td>SCOT</td>
<td>Planning document at cross-municipal level</td>
</tr>
<tr>
<td>Local</td>
<td>Plan Local d'Urbanisme</td>
<td>PLU</td>
<td>Planning document at municipal level</td>
</tr>
</tbody>
</table>
Figure 1: Agglomeration, FUR, MCR and Bassin Parisien: the multi-scalar geography of the Parisian metropolis
1) The knowledge economy: from theoretical acknowledgment to limited practice

Policy documents have only recently taken on board findings on global cities and metropolitan dynamics and only in a limited way in terms of operational implementation\(^2\). Both the regional knowledge and globalisation changes are recent concerns. It is in the 1990’s that introductory chapters acknowledge changes in the production systems and the central role of metropolitan regions in the context of a globalised (-ing) economy. Some researchers have contributed to this change (Sassen is frequently quoted, as well as some French economic geographers such as Beckouche). The globalisation narrative and concepts have since become important: accessibility, network, connectivity, widening and deepening of labour markets, knowledge intensive activities are current references. The 2005 Datar’s ‘poles de compétitivité’ is in this context the latest example of a growing interest throughout the 1990’s and 2000’s in the regional knowledge economy concept. Unsurprisingly, the Paris city-region is deeply involved in this new policy for technological development. Among the 67 projects aiming at promoting partnership and cross-fertilisation between public research and private firms, 7 are based in the Ile-de-France region and a further 11 of them are located in the surrounding regions.

Yet, the implementation in spatial planning documents of this growing interest for the knowledge economy is much more limited. With the exception of the national ‘pôles de compétitivité’ recent policy, it is difficult to find evidence of specific proposals to promote knowledge intensive industries in the Paris enlarged urban region. There are of course what one could call ‘contextual’ initiatives such as the promotion of e-accessibility or policies to increase the skills of the workforce via higher education. However, the main activities of a knowledge-related economy do not benefit from any particular policies both in terms of economic development and of spatial planning. For instance, creative industries, high tech industries or Advanced Producer Services are never
mentioned in the planning documents. In some cases, one sees vague territorial specialisation taken into account as some leading hot spots are mentioned such as the ‘pôles d’envergure européenne’ (European scope poles) in the 1994 Ile-de-France Schéma Directeur (SDRIF). Needless to say, the modest level of implementation of spatial policies dealing with knowledge-intensive activities is associated with a total lack of considerations for the potential linkages of such a knowledge economy with the rest of the regional economy, therefore pinpointing the failure to address the too well-known risk of socio-spatial dualisation described in the international literature (Sassen, 2001) and, quite interestingly, mentioned in the most recent policy documents (the "internal imbalances" described in the introduction of the Contrat de Plan Etat-Région Ile-de-France 2000-06).

2) The polycentric city-region: politically irrelevant?

The current lack of documents dealing with the enlarged Paris city-region, i.e. looking across regional administrative boundaries of the Ile-de-France, has not always been so. The Contrat de Plan Interrégional du Bassin Parisien (CPIBP, 1994-1999) constitutes a unique and interesting attempt to develop a planning strategy associating the Datar national planning agency and the eight constitutive regions. This contract was the implementation of the 1992 Charte du Bassin parisien which reflected a synthesis of negotiations between the different regional and national partners. Three scenarios depicted in the 1992 White Papers (Datar, 1992) served as the basis of a joint regional-national public action. The strict Paris-centric concentrated metropolitan scenario was thought to follow ‘natural’ – read market-led – tendencies with the reinforcement of the Ile-de-France region in an ever increasing monocentric pattern consequently limiting the development of peripheral cities. It was criticised on the base that it would lead to internal congestion within the Paris agglomeration and to economic decline for the rest of the Bassin parisien. The ‘multipolar and centralised
Halbert, L., 2006, "The Polycentric City-region that never was: Paris agglomeration, Bassin parisien and spatial planning strategies in France", Draft Version for Built Environment, edited in:

The 'metropolitan network scenario' was based on the joint development both of the Paris region and of surrounding cities, thus favouring the constitution of a single enlarged functional region. The 'metropolitan network scenario' argued on the contrary that Bassin parisien’s cities had to gain greater autonomy vis-à-vis the Paris region and become a set of interlinked European metropolis, as if by-passing the capital region (Figure 2). The later scenario seemed to have been the most popular both with the Datar and with non-parisian regions.

Figure 2: The "metropolitan network scenario": Paris vs. Bassin Parisien
However, the 2000-06 round for *Contrats de Plan* demonstrated the incapacity of public bodies to continue to work hand-in-hand at a cross-regional scale: in this sense, political polycentrism failed to address the enlarged metropolitan scale of the contemporary Paris city-region. Nowadays, only some limited cross-regional projects remain, including a railway line to be built from Normandy to La Défense, Paris and Roissy airport and the improvement of the railway line between Paris and Orléans.

The lack of a strategy does not mean however that a large city-region scale has become irrelevant. For instance, the *Contrat de Plan Etat-Région d’Ile-de-France* (2000-06) associating the national government and the Ile-de-France region stresses the importance of addressing issues at an enlarged metropolitan scale regardless of administrative boundaries for

> 'shared development, based on the promotion of complementarities and a common management of interregional issues’ (CPER Ile-de-France, p. 66)

The Article 22 of the *CPER Ile-de-France* insists for instance on the importance of cross-regional cooperation in the field of environment, research, higher education and transportation. A focus is placed on facilitating the integration of surrounding cities that are always more part of the Paris city-region. Seemingly, most recent documents in other regions around the Ile-de-France such as the Champagne-Ardennes and the Picardie *SRADT* make extensive references to the benefits resulting from linkages between their own regional development and that of the French capital region, acknowledging growing functional linkages.

"(...) today, the Ile-de-France region and its periphery is the only French region that truly weights at European and world levels and that can compete with the other major demographic and economic concentrations in North-West Europe. In this context, the Picardie region is bound to play a special role as a
This reflects a substantial change in the general orientation of spatial planning in France. From the post Second World War decades up to the 1990’s – and the *Charte du Bassin Parisien* and its implementation document (the *CPBIP*) are spectacular examples of this – the logic was mainly a redistributive one. Paris was considered as concentrating too much of the national economic development thus impoverishing surrounding cities and rural areas - hence the 'monocentric' and the 'multipolar and centralised' scenarios of the 1992 *Charte du Bassin parisien*. Polycentric spatial planning was therefore not so much a tool to enhance functional linkages but one to inhibit growth of Paris. Parisian Malthusianism and national polycentric planning used to be closely associated.

3) National polycentrism and Parisian Malthusiansim

Jean-François Gravier's book *Paris and the French desert* (1947) was central in the success of what became an anti-parisian narrative that lasted at least for over forty years among the national elites (1950-1990's). The macrocephalic urban hierarchy which resulted from centuries of political concentration under the monarchies and the republics became unacceptable to state representatives. Under de Gaulle's government, a major national planning policy known as the *Politique d'Aménagement du Territoire* was proposed and implemented by a newly created national agency, the *Datar* (*Délégation à l'Aménagement Territorial et à l'Action Régionale*). The purpose was to enhance redistributive policies both in shifting public investments from Paris to less favoured areas and to reduce uneven economic spatial development between Paris and *Province*.

The *métropoles d'équilibre* policy (1963) was a direct implementation of this national polycentric planning. Implementing theories such as "growth poles" (Perroux, 1955), investments in transport infrastructures and in public equipments were undertaken in major second-rank cities such as Lyon, Marseille,
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Toulouse, Bordeaux, Nantes, Lille and Strasbourg. These measures were reinforced by a series of fiscal incentives and taxes aiming at diverting Paris growth to the rest of France. All firms willing to open or extend a site in the Ile-de-France region had to seek permission from the "decentralisation committee" (Comité de decentralisation) which strongly promoted relocation in other parts of the national territory. A fee had to be paid on all new offices built in the Paris region whereas fiscal and financial incentives (Prime d'Aménagement du Territoire) were granted if firms accepted to relocate in a perimeter strictly avoiding the Paris region. However, these policies did not yield the expected results. First, it did not slow down the growth of the Paris region; second, the benefits of industrial relocations did not accrue so much to the "métropoles d'équilibre" but to the closest cities to the Paris region. Quite remarkably, a policy aiming at promoting a less uneven development at national scale through more polycentric a spatial organisation ended up fuelling functional deconcentration from the Paris region to surrounding cities, thus promoting what could look like a more polycentric enlarged city-region.

This unexpected result is still visible today as most of the "cathedral cities" of the Bassin Parisien still show specialisation in low-skilled manufacturing, logistic and business services activities that developed first in the fordist era of the 1960's and 1970's and then later in the 80's and 90's with the deconcentration of warehouses and of some back-office activities such as call centres. However, one must keep in mind that such deconcentration did not affect high level command functions which remained in the Paris agglomeration. International literature and recent research on Advanced Producer Services executives in Paris (Halbert, 2004b) find an explanation in firms' spatial strategy which prefers core areas like Paris. I argue that it also results from the paradoxical national public planning policies which, as shown above, promoted on the one hand polycentrism at national scale but also initiated a very spatially focused polycentric strategy within the central part of the Paris Ile-de-France region itself, thus limiting the potential deconcentration at a wider – for instance metropolitan – scale (Hall, 1995).
4) Polycentrism within the agglomeration

De Gaulle's policy of "grandeur de la France" which was used to justify the development of the nuclear weapon or the withdrawal from NATO was implemented in the economic field with the promotion of national firms and of an internationally competitive economy. In this context, Paris was thought to be the cutting-edge weapon in a worldwide economic competition. Thus, while the Politique d'Aménagement du Territoire was doing its best to limit the development of the Parisian economy for the sake of a more balanced national territory, the government was supporting at the same time a major scheme to enhance the international attractiveness of the Paris region. The development of La Défense in the 1960's and 1970's was conceived to give an internationally visible business district to the nation as a whole. The symbolic architectural rupture embodied by the high rise buildings against the historically horizontal skyline could be seen as a signal to competing nations that Paris was the leading city of a strong national economy. French and foreign firms now had modern and large offices in Europe where to locate their headquarters and their battalions of clerical workers. Forty years later, the five "pôles d'envergure européenne" depicted in the current 1994 SDRIF follow the same logic of international attractiveness. Even though not directly referring to the regional knowledge economy concept, the specialisation in high tech industries, business services, international tourism, research and higher education of these poles are responses to increasing international competition brought by global economic changes. Interestingly the corner-stone for sustaining the competitive edge of the Paris region since the 1960's and up to the latest regional Schéma Directeur (1994) has been the implementation of a polycentric city-region. The five pôles d'envergure européenne are indeed the nodes that are supposed to sustain the future development of a polycentric region.

The long inherited monocentric Parisian geography was stigmatised in the context of the fast growing population (Baby-Boom period). To prevent anarchical urban sprawl, all Ile-de-France planning documents favoured, at least since the 1960's, polycentric spatial planning policies (Figure 3). The *Villes Nouvelles* in the Paris Ile-de-France region has been a key element of this. Although inspired by the British new towns, one must notice differences in the French case which have dramatic results in today's economic geography for the entire Paris City-Region (Hall, 1995). The major transport infrastructure and equipment schemes (hospitals, universities, cultural equipments) of the *Villes Nouvelles* have shaped a more polycentric urban geography on which some deconcentration trends have crystallised. However, this deconcentration is of very restricted reach. Unlike the British New Tows that were located from 35 to well over 100 kilometres from central London, the five "Parisian" *Villes Nouvelles* and the Roissy airport - which may appear as a sixth important peripheral pole - are all located within a radius of less than thirty kilometres. Originally planned to polarise the deconcentration of residents, they have however been overwhelmed by the spreading Parisian agglomeration (Berger 2004). Moreover, the major investments that led into the building of the *Réseau Express Régional* lines (Regional Express Railway Network) reinforced the functional integration of the *Villes Nouvelles* thanks to a radial pattern linking the new towns to the central core area. One can wonder to what extent these investments have limited further deconcentration to other towns in Ile-de-France or in the Bassin parisien.
Spatial planning policies for locations of higher education can give some insights. Newly created universities in the *Villes Nouvelles* have increased an already tough competition on cathedral cities that already had difficulties in competing with prestigious Parisian higher education institutions. To follow the comparison with London's case, Orléans will obviously never reach the top-rank of Oxford in terms of higher education and research. However one cannot exclude the hypothesis that the universities of Saint-Quentin-en-Yvelines and Orsay located in the south-west part of the Ile-de-France have attracted students that could otherwise have stayed or gone to the Loire Valley city.
Conclusion:

Even though polycentric spatial planning has been the core concept of most policies at national and regional level since the 1950’s, it has hardly ever been implemented at the enlarged city-region scale that is to say in a perimeter associating Paris urban region and its surrounding cities. This is probably because polycentric planning was already been used at two other competing scales.

It was central at the national scale with the redistributive policy from Paris to the rest of the national territory. This national level policy may have paradoxically favoured some forms of functional division of labour in the enlarged Paris city-region. It is also verified with the implementation of polycentrism at the agglomeration scale: deconcentration within the central area was polarised by the "peripheral" poles located on the outskirts of the agglomeration. The proximity of these poles to the dense central area reinforced a more monocentric pattern at city-region scale.

I explain elsewhere that polycentric principle’s success in both regional and national planning may be explained by its ability to satisfy most actors involved in the development of a planning policy (Halbert, 2006). I rather insist here on the striking correlation between polycentric planning policies at national level and the Paris regional planning agenda. To some extent, this paper shows that competition between different spatial scales was produced un-intentionally by various well- or ill-meant policies. How did this happened if not under the auspices of what seems retrospectively a passionate relationship? Wellhoff (1995) retraces the early moments where doubts and fear overwhelmed all sentiments: as soon as the 1965 Schéma d’Aménagement et d’Urbanisme de la Région Parisienne was delivered, the Datar feared that Bassin parisien – which was considered to be "the link between Paris and other vital French regions" – became "torn apart" by contradictory attractions, and thus reduced to an economic desert (Datar, 1965). This led to a series of spatial planning directives.
approved in 1970 to "direct to the surrounding regions, activities that would otherwise fuel excessively the Parisian growth" (Datar, 1969 cited in Wellhoff, 1995, p. 9). After a period of relative calm, the 1990's were here again times of passionate debates (*Charte du Bassin Parisien*, 1992 and *SDRIF, 1994*). The current revision of the SDRIF will probably ensure a revival of the Bassin parisien issue as the central government will use it once more to focus the discussion on the revision of the Ile-de-France master plan.

However, today's general context has utterly changed. The rhetoric of globalisation that associates economic development and metropolitan strength is now dominant, the Paris region is valued as the first national champion that cannot be sacrificed any longer for the sake of spatial equilibrium. The aim is not so much to have less of Paris in France but to have more international cities like Paris in the national territory.

In this changing political context, should polycentrism at an enlarged regional scale be promoted? If some cathedral cities may not be considered as part of the enlarged Paris city-region although new transportation links can have integrating effect (as will probably the TGV line to Reims), there are still cross-regional issues that need to be addressed at the enlarged city-region scale. Some cities are growing or declining in the shadow of the Paris region. If we are to follow the general conclusions of international literature on polycentric city-regions, globalisation and post-fordist productive system rely on central core economies but also to some extent on secondary poles (Hall, Pain, 2006).

Yet, before any further recommendations can be made to policy-makers, one must mention our current deficiencies in understanding the functioning of the global city-region and especially of the enlarged Parisian metropolitan system. A demonstration is still to be addressed at the Paris metropolitan region level based both on the theory of the polycentric mega city-region literature and on detailed empirical studies. Whether this will be achieved during the current revision of the new regional master plan is not certain. So far, the discussions involved by the revision of the SDRIF have focused almost uniquely on the Ile-
de-France and its constituent territories. If I argue elsewhere that Paris’ economic core (the dense central part of the agglomeration) requires most of the attention of regional and national policy makers, I insist (Halbert 2004c), – and being in line with others (Belliot, 2005) – that it is important to enlarge the scope of the SDRIF to the cross-regional city-region.

References:

- Belliot, M. (2005), Région Ile-de-France: les enjeux masqués du SDRIF, *Urbanisme*, **345**.

- Perroux, F. (1955) La notion de pôle de croissance, Economie appliquée, 1-2
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Between 2003-06, he was the French partner of the European research consortium Polynet (P. Hall) that aimed to study the emergence of polycentric Mega-City-Regions in 8 North-Western Europe metropolises. He has also worked for several international and national public and private institutions on economic geography issues, and more particularly on firms' strategies and global city-regions (Datar, Puca, DREIF, IAURIF, EPRC, France Télécom, etc.).
He keeps focusing his researches on the relationships between firms and metropolitan territories via at least three research axes. The first one deals with the analysis of the real estate industry's role in the make up of firms' metropolitan geography. The second focuses on the so-called knowledge intensive activities that re-shape the post-fordist City. He has interests on the geography of cultural industries, high tech industries and Advanced Producer Services. The third studies public policies in regard to changes in metropolitan areas economy.

He also makes geographical documentary movies (Australia, India) and aims to progressively use video as a scientific tool (for research and communication).

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1 These workshops allowed the author to sense and discuss planning issues at metropolitan scales in the context of the ageing spatial planning documents and of the new debates raised by the current revision of the regional master plan.
2 See for instance the introductory part of the Contrat de Plan Etat-Region Ile-de-France 2000-06
3 The region located north of the Ile-de-France
4 Paris and La Défense two business districts, Roissy international airport area, the Saclay high-tech plateau and Marne la Vallée
5 Increasing competition due to globalisation is probably the most quoted economic change discussed in policy documents since the 1990's.
6 Schéma d’Aménagement et d’Urbanisme de la Région Parisienne (1965)
7 The passionate term used here is enlightening.