

Job dispersal in urban areas

Dependence, autonomy or integration for peri-urban areas and their inhabitants?

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As a starting point, we would like to consider the notion of “solidarity within geographical areas”. In its original meaning, “solidarity” denotes the constant relationship (i.e. the total lack of irregularity) between different points in a volume, thus referred to as a solid. When applied to geographical areas, the notion of solidarity therefore supposes that there is a constant relationship between different locations in such an area. In the case of urban areas, and in the context of this paper, it is the relationship between the central part of a dense, continuous agglomeration and the low-density, intermittently built-up urban belts around it that are of interest: the permanence of “solidarity” relationships in the sense that we have just outlined will be discussed (i.e. it is understood that it is not about solidarity between social groups or between individuals).

Housing dispersal is well-documented as being the most prominent factor behind the morphological changes in French agglomerations and their peri-urban belts over the last four decades. But measurements of the length and direction of commuter journeys, which continued to be focused on the centre of urban areas, imposed the idea that urban belts and city centres remained interconnected. In other words, the working population living at the fringes of agglomerations and in the surrounding rural belt (25%-50% of the population in urban areas) sustained a continued functional relationship between rural belts dotted with town residences and dense areas in the town inherited from the urban past. Such areas have high employment content, thus ensuring that strong economic, social and cultural ties are maintained not only between these areas, but also and especially between their populations – who are particularly remote in terms of residence and consumption routines.

After four decades of urban sprawl affecting housing, shops and services, however, and even if commuting to the centre continues to be significant, it would be useful to take a close look at how job dispersal affects the composition of peripheral areas which offer all the resources essential for the emergence of an independent “belt commu-

nity”, i.e. a community that lives independently from the inherited city, giving meaning to the notion of “territorial disassociation”, which is rooted in geography and probably involved in the break-up of social cohesion that we consider here as a reality. It is clear the references must be switched in addressing the issue of urban sprawl in terms of employment and peripheral areas: the centre-urban belt gradient is reversed and the overwhelming flows converging towards the centre are considered as deafening statistical “background noise”.

What does urban sprawl mean for jobs?

It is important to reiterate what job dispersal was exactly, particularly in comparison with the dispersal of housing and, therefore, the working population. In the official report published in 1979 entitled ‘*Demain l’espace ; l’habitat individuel périurbain*’ (Mayoux, 1979), the authors briefly outlined the process in which the city dwellers had embarked upon: early peri-urbanisation of middle-range housing, later – but closer-range - dispersal of jobs, overall conservation of time budgets owing to reduced travelling times made possible by meshing transport networks (particularly roads) and increasing their capacity: in other words, solidarity in geographical areas (or the unity of the labour pool) was ultimately dependent on changes in daily traffic parameters.

To answer this question, we studied French urban areas with more than 80,000 jobs. This sample is made up of 39 urban areas of various shapes and sizes, representing 55% of jobs from all urban areas, excluding the Paris urban area. For the purpose of this relatively rough analysis, our study

breaks down geographical space within urban areas into three zones, using the INSEE definition: central cities, the remainder of the agglomerations (defined by the morphological continuity of urbanisation) that we will refer to as “suburbs”, and finally peri-urban areas, which we will refer to as “urban belts”. We did not take into account multi-polarised areas or rural areas. It is the communal composition of these zones, as established in 1999, which was adopted to calculate changes between 1982 and 1999.

Within the 39 urban areas considered, the urban belts’ share of the total number of jobs was 11.7% in 1982, at a time when peri-urbanisation was rising. The geographical distribution of the 1982-1999 total was quite different: urban belts had claimed 19.3% of the jobs, central cities 5.4% and the suburbs 75.3%. In all, the urban belts provided 930,000 jobs in 1999, i.e. 143,000 more than in 1982. These volumes seem particularly low in comparison to the suburbs, but in proportion to the total volume of jobs in 1982, the relative increases are on the same scale: +18% in the urban belts and +23.5% in the suburbs.

What blurs our view of changes in employment in urban belts is, of course, the large-scale residential migration that occurred – leading to a sharp drop in the job/working population ratio (63 jobs for 100 people in employment in 1982, and just 54 in 1999). But the data can be considered from another angle: agglomerations represented 88.3% of jobs in urban areas from the sample in 1982, and this share barely changed between 1982 and 1999 (87.6%), whereas the number of jobs rose by 600,000. The urban belts’ share thus remained unchanged (12.5% in 1999 compared with 11.7% in 1982) and dispersal mainly occurred between central cities and their suburbs.

The fact nevertheless remains that the rudimentary breakdown between the suburbs and urban belts adopted for this general analysis conceals the fringes of agglomerations, composed of the outer area of the suburbs and the innermost area of the urban belts, which is tangential to continuous urbanisation. These fringes deserve special consideration, based on an appropriate scope of study.

Despite this reservation, the job volumes concerned

and the flows of working populations do not challenge the fact that central cities – and their belt of suburban *communes* at an increasing rate over the past two decades – have a very powerful polarising influence. The question as to whether some of the working population living in the urban belts is independent of the agglomerations, however, remains, since 930,000 jobs are found in these peripheral areas with low housing and employment density.

Dispersed jobs for the peri-urban working population?

Two aspects of this question should be clarified: what percentage of the local working population can be retained in the jobs set up in the urban belts (Table 2); and next, how are these jobs distributed in the peri-urban area, which includes nearly 4,000 *communes* (taken from the sample of urban areas with more than 80,000 jobs)?

The percentage of the working population living and working in urban belts (either in their own *commune* or a different one) is 40%, but this same population fills 66% of jobs available in the urban belts.

Table 2a: Home-work commuter journeys in urban areas with more than 80,000 jobs in 1999 (not including Parisian urban area)

From/to	Central cities	Suburbs	Urban belts
Central cities	1,862,300 ⁽¹⁾	471,100	98,900
Suburbs	998,700	1,923,200 ⁽²⁾	123,700
Urban Belts	547,700	399,600	619,500 ⁽²⁾

Table 1: Jobs and working population in urban areas with more than 80,000 jobs (outside Paris urban area), taken from geographic definition used in the 1999 Census.

	jobs 1982	working population 1982	jobs 1999	actifs population 1999	jobs/working population 1982	jobs/working population 1999	number of communes
Urban areas with more than 80,000 jobs	6,754,000	6,638,100	7,494,800	7,358,300	1,02	1,02	4108
Located in central cities	3,586,600	2,591,200	3,626,700	2,477,100	1,38	1,46	39
Located in suburbs	2,376,900	2,792,400	2,934,900	3,148,000	0,85	0,93	1028
Located in urban belts	790,500	1,254,500	933,200	1,733,200	0,63	0,54	3961
All urban areas (outside Paris)	12,232,900	11,968,700	13,374,600	12,998,300	1,02	1,03	12 180

Table 2b: Changes in home-work commuter journeys between 1982 and 1999 in urban areas with more than 80,000 jobs in 1999 (not including Parisian urban area)

From/to	Central cities	Suburbs	Urban belts
Central cities	302,600	121,900	43,300
Suburbs	74,800	162,800	65,300
Urban belts	198,400	202,800	-11,700

This reflects a form of independence, which is exactly what we wanted to highlight. Admittedly, the volume of the working population that both lives and works in urban belts only represented 620,000 people in 1999 (a drop of nearly 2%), compared with the two million people that live and work in the suburbs. But in relative terms, the difference between urban belts and suburbs is reduced: 63% of the working population that live in the suburbs also work there, and they fill 66% of the jobs on offer, just as in the peri-urban areas.

Taking steps towards attractive peri-urban areas?

Another phenomenon was found to “underpin” the above: since the number of jobs rose by 143,000 in urban belts, this meant nearly 310,000 jobs were held by a working population originating from the agglomerations (70%) and also from multi-polarised *communes* and rural areas (30%). The number of working people living outside urban belts but attracted by jobs in them had almost doubled between 1982 and 1999, and their origins had shifted slightly in favour of migrations from adjoining areas (70% of the working population in 1999, compared with 65% in 1982, came from adjoining areas, suburbs and outside urban areas).

Another aspect of the emergence of an area that is not condemned exclusively to the role of a dormitory town and emptied of its working population by a central ‘vacuum’, is the attractiveness of peri-urban areas. This is demonstrated by changes in the percentage of incoming workers and can ultimately be compared fairly easily to that of the suburbs: in 1999, 34.5% of jobs in the suburbs were held by workers living outside the suburbs, compared with 33.6% of jobs in the urban belts; in 1982, 26% of them were held by external workers, whereas the peri-urban areas were more “closed”, only 20% of jobs were held by workers outside the urban belts.

The geographical distribution of jobs inside urban belts, which is a key factor in how these vast spaces are structured by urban centres capable of polarising scattered areas, is an aspect of the “sustainable town”, currently referred to as *mesh polycentrism*.

In the urban belts, an overview shows that jobs created between 1982 and 1999 led to a concentration of jobs, which, although modest, was no less perceptible: to reach a figure of 65% of jobs in urban belts in 1982, 12% of the *communes* had to be united, but only 9% in 1999 (note: these comparisons are based on the constant perimeter of 1999), whereas the suburbs show the reverse phenomenon (7% in 1982, 17% in 1999). The dispersal of jobs is understandable in that 74% of the *communes* in the suburbs had a positive job balance between 1982 and 1999, compared with 44% of the peri-urban *communes*. The suburbs are an integral part of the dense urban space, where separation from the centre is not clearly marked. In the urban belts, centres are emerging that are likely to polarise the peri-urban areas.

For a more specific summary of how the distribution of jobs in urban belts has changed over the last twenty years, we considered core *communes* to be those that offered at least 2,000 jobs in 1999, a method of selection which, though somewhat arbitrary, at least complied with the INSEE approach.

Table 3: Geographical origin of workers holding jobs in the urban belts (as a % of total number of jobs in the urban belts)

	1982	1999
Urban belts	79.9 %	66.4 %
Central cities	7.0 %	10.6 %
Suburbs	7.4 %	13.2 %
Multi-polarised and rural total	5.7 %	9.8 %
Number of jobs in the urban belts	790,500	933,200
Jobs in the urban belts held by workers living outside the urban belts	159,300	313,700



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Core communes emerging in urban belts

First of all, these core employment *communes* represent 2.5% of the 4,000 *communes* in the urban belts of urban areas with more than 80,000 jobs (excl. Paris); they group together 21% of their jobs in 1999 (equivalent to 200,000 jobs in 99 *communes*), but polarised 75% of the total jobs between 1982 and 1999. Although, we might be tempted to draw the rapid conclusion that urban belts are not very polarised by local employment centres, it would be more accurate to say that the dynamics behind peri-urbanisation has a definite polarising effect, but its current impact on the dispersal of peri-urban jobs is slight. It is important to bear in mind that the types of jobs on offer in the urban belts changed at the same time as their locations. On the scale of this analysis, these changes are obviously difficult to perceive.

The flows of working populations in urban belts, suburbs and even central cities have been clearly polarised by these *communes*. Globally, 2.5% of *communes* in urban belts that offered at least 2,000 jobs had a concentration of 12% of the flows generated by their jobs in 1982, compared with 22% in 1999 - implying very strong polarisation between 1982 and 1999 (76%). As a consequence, nearly 28% and 30% respectively of the working population from the suburbs

and central cities working in the urban belts were attracted by these core *communes* in 1999; around 20% of the working population living in the urban belts and the population working there but living in areas located outside urban areas are also attracted to them. In particular, it should be noted that changes between 1982 and 1999 clearly distinguish the equally sharp polarisation increases for the working population from the suburbs and the urban belts. In the same way, the commuter journeys for working populations from the urban belts, attracted by such core *communes*, increased between 1982 and 1999: in absolute terms around 60,000 “scattered commuter journeys” were transferred towards the core *communes* (equivalent to a reduction in 12% of scattered commuter journeys between 1982 and 1999).

As a result, seen from the core *communes* point of view, the populations working there have diverse places of residence: 32% of jobs are held by workers from agglomerations and 10% from areas located outside urban areas (only 58% from among the working population residing in the actual urban belts).

Thus, several other realities are hidden behind the overriding image of centripetal flows issuing from peripheral areas of the sprawling city. On the one hand, the peri-urban belts can indeed be seen as a “territory” for working populations who have found both homes and jobs there, as well as all the necessary resources and services, and are able to lead their lives there almost fully independently of the central cities and even the suburbs. This low-density community-based life in the city represents 40% of the working population who live there.

At the same time, this “impression of dispersal” itself hides the growth (still quite modest in 1999 with only one fifth of jobs on offer) of centres likely to polarise not only the flows of the working population from the urban belts but also workforce flows from agglomerations, themselves growing in size (they doubled between 1982 and 1999). Again, their modest appeal (around 22% of flows generated by jobs in the urban belts) hides the truly remarkably vigour of the polarisation of total flows observed between 1982 and 1999, which makes these few hundred peri-urban *communes* (out

Table 4: Working population with jobs in urban belts attracted by core communes according to their place of residence (as a % of total flows generated by jobs in the urban belts)

	1982 (en %)	1999 (en %)	différence en points	Soldes en valeurs absolues
Central cities	25	29.6	+ 4.6	+ 15,400
Suburbs	17	27.5	+ 10.5	+ 24,000
Urban belts	9.9	19.0	+ 9.1	+ 55,400
Outside urban areas	18	22.4	+ 4.4	+ 11,600

of the 4,000 sampled) home to 75% of total jobs and of the total work force flows within or entering the urban belts.

At the end of the day, although the urban belts are an integral part of the everyday life of two thirds of their resident working population, other aspects of their dynamics are more likely to connect them to agglomerations in a way that is less exclusively turned from peripheral areas to the centre, and inscribed in the dependence of dormitory towns on focal places. On the other hand, without alleviating this dominant flow orientation, produced by the mass dispersal of the working population, the counter flows observed between 1982 and 1999 show how, on a smaller scale, the polarisation of jobs in urban belts weaves a fabric of solidarity between areas in a reverse direction, which is likely to contribute to the integration of territories with high and low density inside urban areas.

Obviously, we cannot confine our study to job volumes: questions related to the type of jobs, (i.e. skill levels required, activity sectors, and also where the work force resides), remain to be explored in a detailed manner, particularly in terms of the form of their spatial distribution (dispersed or concentrated). These issues are crucial, insofar as the interface between skills, activity sector, working population migrations and geographical structure in urban belts reflects the process that ultimately increases the degree of autonomy and attractiveness of the urban belts. In particular, to consider this aspect alone, it is important to measure the percentage of jobs that are not directly related to the daily requirements of populations living in the urban belts (i.e. “residential” jobs, which increase at approximately the same rate as the population, or on the contrary, are in short supply, thereby underlining the dependence of urban belts on agglomerations, forcing peri-urban customers to look elsewhere).



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Generally speaking, work conducted on this aspect of peri-urban employment (Lainé, 2000) shows that “productive” activities (as opposed to “residential” activities) developed at a quicker pace than residential activities during the 90s, particularly in the fields of transport, logistics and company services. Tertiary activities, excluding transport and logistics, carried out by companies with more than fifty employees (thus excluding *a priori* retail companies and local services for private sale) have increased more quickly in urban belts than in suburbs and central cities. Trends observed from the 90s onwards would therefore seem to indicate that an increase in employment in urban belts cannot simply be attributed to residential jobs accompanying the growth of local populations.

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