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ANALYSIS OF THE MOBILITY OF ECONOMIC ACTIVITIES IN URBAN AREAS

SINCE 1950 there has been a marked change in the localisation of many economic activities. Although the process is especially typical of industrial enterprise, tertiary activities such as the retail trade or services to industry have also been affected and even activities which, we call "heavy tertiary" (wholesale trade, garages, forwarders, etc.) which, due to their surface area and transport requirements are in many ways similar to manufacturing industry.

In spite of the numerous articles written about this problem, exhaustive analyses are relatively rare and often limited to the most striking aspects, such as the creation of big industrial estates or activities, the opening of new shopping centres or the development of large office areas. On the other hand nothing, or hardly anything, is known about changes in localisation in the heart of an urban centre or in a suburban district and often little is known about the changes of occupations in the pre-existent urban network.

The aim of this article is to show the interest of studies about the mobility of business organisations and to present some types of research that could be done in this field of investigation.

THE CONCEPT OF MOBILITY

By mobility we mean any change in the *civil status* of the businesses with results in a change in *the localisation of these*

businesses. Any extension on the spot as well as any internal changes in the business (e.g. modification of the activity, growth or decline, legal or financial change) are not taken into consideration.

Four kinds of situations are therefore valid :

- creations or openings,
- cessations or closures,
- extensions on a site different from the original one,
- transfers.

However, as the table clearly shows, the same situation can be classified differently depending on the point of view concerned. Thus, if a spatial point of view is adopted—as is often the case in geographic studies—the opening of a new business by a firm from outside the region is considered as a creation, whereas, as far as the firm is concerned, it is an extension of its activity and, from an industrial point of view, it is either a creation (if the field of activity is new) or an extension (if the new business is working in the same field of activity as the parent company). Likewise, the cessation of a business due to the transfer of its activities outside the region represents a closure for the region whereas it is a change in localisation for the firm.

It would therefore seem to be of the utmost importance that in studies on the mobility of activities, the researcher clearly defines his *point of view of analysis* in order to be able to make further comparisons. Personally we tend to prefer the spatial point of view but we are aware that the resulting classification is extremely dependent on the area studied, e.g. in urban areas : the city centre, the agglomeration or the urban region.

Furthermore, attention should be drawn to the misunderstanding produced by certain individual concepts such as “spreading out” or “decentralisation” which are used in French studies. By “decentralisation” French authors generally mean the total or partial transfer or extension of a company out of the limits of the Ile de France region (on this subject see T. Saint-Julien, 1973) whereas if the new division remains in the region the operation is called “spreading out”.

TABLE 11.1 : Classification of the kind of operation of localisation according to the spatial point of view, the industrial point of view and the firm's point of view

Kind of operation of localisation	Spatial point of view	Industrial point of view	Firm's point of view
1. Opening of a new business by individuals or a new company	creation	creation	creation
2. Opening of a new business by a company from outside the region but already working in the same field of activity	creation creation	extension creation	extension extension
3. Ditto but a new field of activity for the company	extension	extension	extension
4. Opening of a new business by a company already in the region and already working in the same field of activity	extension	creation	extension
5. Ditto but a new field of activity for the company	closure	closure	closure
6. Cessation of the activity of a business—voluntarily or due to bankruptcy	dislocalisation	dislocalisation	dislocalisation
7. Cessation of part or all of the activity due to its transfer elsewhere in the region	closure	dislocalisation	dislocalisation
8. Ditto but complete transfer out of the region	dislocalisation	dislocalisation	dislocalisation
9. Ditto but partial transfer out of the region	creation	dislocalisation	dislocalisation
10. Opening of a business originally transferred from a place outside the region	creation	dislocalisation	dislocalisation

MEASUREMENT OF MOBILITY

This measurement necessarily involves the existence of a card index of the companies and businesses. Such a *card index* would include, for a given period, any changes in localisation that have affected production or services units.

With official statistics and particularly the data transmitted after census, it is not possible to keep a check on the civil status of the businesses. In addition, this information does not permit studies on the significant spatial sub-groups: city centre, old suburbs, harbour areas, etc. Indeed, if only 2 or 3 sets of statistics are available it is only possible to analyse the balance of the evolution, often on a local or regional scale. In addition, comparisons are made difficult by the changes which often affect the spatial divisions (e.g. changes in the limits of the agglomerations) or the activity code numbers of the businesses.

On the other hand, with a precise card index of all the business in the study area at two different dates it is possible to analyse the mobility components precisely.

From this point of view the study done by P.E. Lloyd and C.M. Mason (1978) of the city and conurbation of Manchester is a very good example. As is shown in Fig. 11.1 components of industrial change have been taken into account; the exits, the in situ changes and the entries. Under exits the authors have separated closures and transfers whereas under entries the creations are separated from the dislocalisations. The figure clearly shows that the balance of the evolution is, in fact, only the difference between all the growth and reduction operations of both businesses and employment.

The existence of exact data about the number of businesses, the staff employed or all other quantitative variables which show the size of the businesses (e.g. surface occupied or sum of investments) also make it possible to calculate certain *rates*.

Let us suppose that for a given period t_0-t_1 we have the following information about the number of businesses :

x or the number of businesses in t_0

y or the number of businesses in t_1

a or the number of businesses which did not change their localisation during the period t_0-t_1

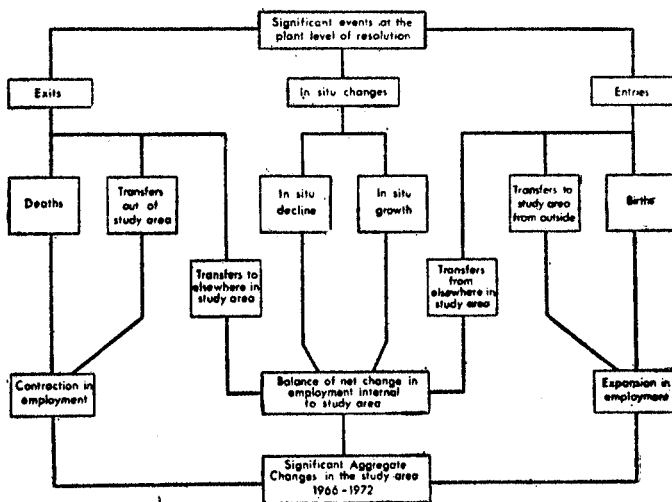


FIG. 11.1 : Components of industrial change

Source : P.E. Lloyd and C.M. Mason, Manufacturing industry in the inner city : a case study of Greater Manchester, in *Transactions, Institute of British Geographers*. Vol. 3, n. 1, 1978, p. 79.

b or the number of businesses which ceased their activity entirely

c or the number of businesses which were transferred within the study area

d or the number of businesses which were transferred out of the study area

e or the number of new businesses created during the period t_0-t_1

f or the number of businesses which were the result of a transfer from outside the study area

The following can therefore be calculated :

increase in number of businesses = $e+f$

decrease in number of businesses = $b+d$

balance of evolution = $y-x$

$$\text{rate of closure} = \frac{b}{x}$$

$$\text{rate of disappearance} = \frac{b+d}{x}$$

$$\text{rate of openings} = \frac{e}{y}$$

$$\text{rate of increase} = \frac{e+f}{y}$$

$$\text{rate of mobility of the original businesses} = \frac{b+c+d}{x}$$

Some of these rates were calculated by P. Aydalot (1978) during a survey of 1,800 of the biggest French companies. The analysis enabled this author to differentiate the mobility according to different variables of the firms, the businesses, the original surroundings and the new surroundings.

Indeed, mobility study cannot be limited to simple calculations on the number of businesses. It is advisable to integrate *various characteristics of the firms and businesses* involved, e.g.

- the branch of activity (e.g. manufacture of clothing, wholesale),
- the function of the business (e.g. factory, laboratory, sales office, etc.)
- the size of the business (number of people employed, ground surface),
- the localisation of the registered office,
- the size of the firm to which the business belongs (translated for example by the number of businesses which belong to the firm),
- the date of implantation.

The calculation of the rates defined above by category of business proves very interesting as it makes it possible to pick out the commonest features of the most or the least mobile units according to the mobility situations (creation, transfer, closure, etc.) (see P. Aydalot, 1980, pages 9-25, in particular).

SPATIAL TRENDS IN MOBILITY

In addition to measuring mobility, it is also necessary to study the movement itself by analysing the *characteristics of the areas* affected by the movement as well as the *directions and distances covered* in the case of extensions and transfers.

In order to achieve this, maps have to be made. As in research on changes in industrial localisations in the area of Liege (B. Merenne-Schoumaker, 1980, planche 34) the following can be mapped :

- the businesses according to the type of localisation operation which produced them ; cessation (proper or due to a transfer), creation, extension ;
- for transfers and extension, the point of departure and the point of arrival of the business as well as the journey effected by joining these two points by a segment of a straight line.

It is also advisable to study the main features of the areas involved in the different changes principally by distinguishing those where the closures and/or transfers have taken place and those where there have been creations, extensions and transferred units (also see under head—Spatial Results of Mobility).

In urban areas it is especially interesting to separate intra-urban migrations from inter-urban ones as the firms responsible for these migrations generally differ and the processes originate in different causes.

In Western Europe, on the whole, the businesses in urban regions very often move a limited distance (5, 10, 20 kilometres depending on the size of the regions concerned) due to the management's desire to keep its customers, labour and human and economic relations. Furthermore, they generally move in a specific radius of the conglomerations, e.g. businesses in the north of the city will settle in the northern outskirts of the agglomeration (B. Merenne-Schoumaker, 1974, pages 49-50). Moreover, there is a big intra-urban movement which is strongly influenced by the land and property market. This diagram proves correct in both the case of a big city like Paris (see J. Palierne, 1964, pages 85-111 and A. Delobez, 1981, p. 77

in particular) and the case of an average city like Liege (see our research in the bibliography at the end of the article).

CAUSES OF MOBILITY

Although it is often difficult to know the true causes of the closure of a business exactly, it is, on the other hand, possible to find out the factors of localisation of both new units and dislocalisations.

As regards the latter, we believe like A. Fischer (1973, pages 96-97) that the *expulsion factors* (from the original localisation) must be distinguished from *attraction factors* (of the new site). Indeed, all the surveys we have done in industrial enterprise (B. Merenne-Schoumaker, 1978) in heavy tertiary (B. Merenne-Schoumaker, 1981a and 1981b) and in retail trade (B. Merenne-Schoumaker, 1979) show that most transfers are due, in the first place and above all, to difficulties encountered in the original localisation. In the case of industry and heavy tertiary activities the main causes of dislocalisation are : the decrepitude and unsuitability of the buildings, traffic and parking conditions, difficulties of proximity and pressure of land prices accentuated by town planning operations. In the case of retail trade the main factors of expulsion are : end of a lease, unsuitability of the premises, their price or the bad situation of the shop.

The requirements concerning the new site are therefore only taken into account at a second stage, when looking for a new localisation. The factors of attraction are principally : the surface area and the cost of the ground and/or buildings, the situation of the site, the policy of the authorities, the environment of the new site, etc.

The analysis of the causes of mobility therefore involves precise surveys with the firms in order to analyse the decision-making process. The quality of the work is very dependent on the investigator and the means of investigation (see B. Merenne-Schoumaker, 1982a, pages 106-107).

It should, however, be noted that in spite of a growing rationalisation of choices, precise studies of localisation are still rare, particularly in the case of directors of small businesses and when businesses are created. It is therefore advisable to be very

careful in this kind of analysis and to accept answers that are fragmentary but true rather than answers that are complete but incorrect.

SPATIAL RESULTS OF MOBILITY

In addition to research on the mobility of businesses it is also very interesting to study the areas affected by the changes, particularly, as already mentioned, the areas under development and those abandoned.

In actual fact the dislocalisation of many activities creates various problems. Generally the situation of most European cities is the following.

In the city centre premises are rarely abandoned but, helped by land speculation, there is a clear whittling down of functions and the "noble" activities (decision, research, offices of industrial firms, luxury trade) are often the only ones which can pay the price asked for. Certain economic fields are therefore ejected from the city as well as a certain type of population except from the dilapidated areas where the "marginals" are becoming more and more concentrated.

In the outskirts of the agglomerations the chief problem is the anarchic growth of urbanization and the recession of farmland. The city is diluting hence the difficulties for both the rural world (seriously threatened by the progression of the urban front) as well as for the city (faced with the problems of providing services and organising public transport).

It is, however, in the *close suburbs* and especially in the old industrial suburbs that the most acute problems exist due to the multiplication of wasteland and to the difficult conversion of activities (B. Merenne-Schoumaker, 1982b).

Thus one can see the interest of precise analysis of the changes in the activities of the various urban sub-spaces—these analyses being essential for any development or renovation operation. The research done by J.P. Bondue (1982, pages 356-402) on the evolution of acquisitions liberated by wholesale activities in the conurbation of Lille is a very good example from this point of view.

CONCLUSION

The mobility of businesses, major process of the evolution of cities and of the changes in urban spatial structures, appears to us to be one of the principal subjects to be explored when analysing cities.

That is why we have tried, in this article aimed at methodology, to demonstrate different ways of research that are possible as well as various methods that can be used effectively.

Doubtlessly the concept of mobility is often ambiguous. In addition the analysis requires lengthy and sometimes tedious research but the results of this research are very rich and indisputably likely to renew traditional studies of urban functions and areas.

REFERENCES

- Aydalot, P. (1978).—La mobilite des activites et de l'emploi. Resultats d'une enquete nationale menee aupres des grandes entreprises, in *Revue d'Economie regionale et urbaine*, n° 3, pp. 299-328.
- Aydalot, P. (1980).—L'entreprise dans l'espace urbain, *Collection Economic publique de l'Amenagement et des Tradports*, n° 8, *Economica*, Paris.
- Bondue, J.P. (1982).—La mobilite spatiale du commerce de gros et des entrepots dans la conurbation lilloise (1964-1980), *These de 3e cycle*, *Universite de Lille 1*, 420 p.+24 p. d'annexes.
- Delobez, A. et Collaborateurs (1981).—Les mutations recentes du stade commerce de gros en Ile-de-France, *Laboratoire Analyse de l'Espace*, *Action concertee Urbanisme commercial*, Paris, 226 p.+108 p. d'annexes.
- Fischer, A. (1973).—Pour une etude de la mobilite geographique des activites industrielles en France, in *Annales de Geographie*, n° 449, pp. 93-101.
- Lloyd, P.E. et Mason C.M. (1978).—Manufacturing industry in the inner city : a case study of Greater Manchester, in *Transactions, Institute of British Geographers*, Vol. 3, n° 1, pp. 66-90.
- Merenne, Schoumaker B. (1974).—Elements entrant concretement en compte pour le choix d'une localisation, in *Localisation des entreprises et developement regional*, *Premier Congres des Economistes belges de Langue Francaise, Rapports preparatoires*, Charleroi, pp. 33-55.
- Merenne, Schoumaker B. (1978).—L'analyse des localisations industrielles : des schemas classiques aux etudes de comportement, in *Bull. de la Societe belge d'Etudes geographiques*, t. 47, pp. 39-60.
- Merenne, Schoumaker B. (1979).—Motivations des localisations commerciales au centre-ville. Le cas des nouveaux commerces de l'hyper-centre liegeois, in *Revue de la Societe d'Etudes et d'Expansion*, n° 281, pp. 541-550.

- Merenne, Schoumaker B. (1980).—Les industries, in *Liege prepare son avenir*, E. Wahle, Liege, pp. 119-127.
- Merenne, Schoumaker B. (1981a).—Analyse de la localisation des garages et des societes de transport dans la region liegeoise, in *Wallonie* 81, n° 3-4, pp. 269-290.
- Merenne, Schoumaker B. (1981b).—Le commerce de gros a Liege. Permanence et renouveau des localisations, in *Bull. de la Societe geographique de Liege*, n° 16-17, pp. 49-64.
- Merenne, Schoumaker B. (1982a).—Perceptions spatiales et localisations, in *Percevoir l'espace. Vers une geographie de l'espace vecu*, Actes de la Table ronde 1981, Universite de Geneve, Department de Geographie, Geneve, pp. 103-116.
- Merenne, Schoumaker B. (1982b).—L'aménagement des friches industrielles, dans *Notes de Recherches de la Societe geographique de Liege*, n° 2, pp. 29-40.
- Palierne, J.L. (1964).—Mouvement des etablissements industriels dans la region parisienne, *Cahiers de l'I.A.U.R.P.* (Institut d'Aménagement et d'Urbanisme de la Region parisienne), Vol. 1.
- Saint, Julien T. (1973).—Signification geographique des implantations industrielles decentralisees en province, in *Annales de Geographie* n° 453, pp. 557-575.