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Research Topics of Geography of Enterprise and Decision-Control Functions in Poland against Global Trends

Abstract: The article is a review of the research conducted in Poland on geography of enterprise, understood as a sub-discipline within the scope of socio-economic geography, including research on the behaviour of economic entities, especially large ones, in geographical space. First, the fundamental methodological issues, including terminology, were discussed and then the source query was made. It allowed for identifying about 200 bibliographic items, of which about ten are discussed in detail as the most representative of this research speciality. The results of the study are discussed in two periods: before 1989 and after that date, as the fundamental influence of the political change and the rebirth of the free market economy in Poland after the communist period. In the modern period, three main research trends have been distinguished, referring to global research: transformational-globalisation, localisation (also called organisational-systemic) and behavioural. Moreover, urban research is discussed. In conclusion, geography of enterprise is still too weakly defined in Poland, and it is conducted from the “industry” positions of geography (especially geography of industry), which results from the institutional and organisational assumptions of the Polish socio-economic geography after the methodological conference in Osieczna in 1955.

Keywords: corporate geography; decision-control function; economic control function; geography of enterprise; transformation

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INTRODUCTION: GEOGRAPHY OF ENTERPRISE, ITS METHODOLOGICAL FOUNDATIONS AND THE EVOLUTION OF RESEARCH IN THE WORLD

Geography of enterprise is a subdivision of socio-economic geography dealing with behaviours in the space of business entities. It has a well-established position in the world, related to the fact that in a free market economy enterprises are the primary

subject of broadly understood economic space. Therefore, it is the subject of interest not only of geographers, but also economists, sociologists, political scientists, psychologists, urban planners and other representatives of mainly social sciences. It sometimes results in competence disputes between geography and economics (Czapliński, 2008). They are related in particular to the fact that as part of the organisation and management sciences, in the 20th century, an extensive and recognisable field of research, first described as “economics and/or organisation of enterprises” and then “enterprise science”, developed in Poland before the Second World War (Bielski, 1967).

In the Western countries, research in the field of geography of enterprise and decision-control functions was conditioned by the development of industry in the first half of the 20th century. Geography interests in this subject were especially visible in the United States (Hoover, 1937), where the company headquarter was usually a place of activity (production). The beginnings of geography of enterprise were shaped, therefore, by discussing the classic theories of location, first of all of the industry (Krumme, 1969; Hamilton, 1974; Dicken, 2013). It was only in the further period that this field was linked to the services sector and theories concerning the network of centres and settlement hierarchy (Goodwin, 1965; Pred, 1974).

The concept of geography of enterprise in the context of a new research course probably appeared for the first time in 1960 in the work entitled “Towards a more humanistic economic geography: The geography of enterprise” by the quoted above economic geographer Robert B. McNee (1922–1992), associated with the Department of Geography at the University of Cincinnati. The phrase ‘geography of the companies’ was used in his previous work (McNee, 1958). This earlier paper included analyses of the interaction between companies and their impact on the spatial organisation of economic activity. Particularly keen interest in the subject of geography of enterprise has been noted since the 1970s, when the issues have become more frequently discussed in the literature on economic geography. In addition to studies within the more or less the classic location trend, the subject of decision-control functions, i.e. the issues of location and range of impact of company headquarters, has also developed. It has become one of the most critical issues along with the progress of globalisation, used for instance to identify the settlement hierarchy, including the so-called world cities (Friedmann, 1986; Sassen, 1991; Knox, Taylor, 1995).

There are many interlocking trends associated with corporate research in geography, based on the achievements and methodologies of various social science disciplines, as well as humanities and technical and even natural sciences. It makes this sub-discipline one of the most eclectic not only in human geography but also in a broad spectrum of social sciences. It includes:

- localisation trend, relatively the oldest and associated with research on the selection of the place of activity, including in particular the seats of management, and research on the spatial organisation of economic management and the impact of management centres (‘power geography’). Within this trend, research on decision-control functions (management and control) is delimited. This trend, therefore, can be called organisational-functional (Strykiewicz, Wajda, 2003);
- behavioural trend, which mainly concerns spatial aspects of making decisions related to the operation of enterprises, such as location, behaviour in space, business profile, organisational and spatial structure, marketing strategy, investment decisions and others;

- transformational-globalisation trend, related to the understanding of the enterprise as the main carrier of economic and, indirectly, social transformation in space at various territorial scales, most often international. It is a relatively recent trend, but currently the most frequent and at the same time the most interdisciplinary one;
- narrower, more specialised directions related to specific aspects of business activity and characteristics of the enterprises themselves, such as size, type of activity, degree of internationalisation, financial flows, specific areas of occurrence (e.g. cities), etc., the most original of which is the so-called financial geography, that is the research on flows and spatial impact of financial institutions ('geography of banks').

Noticeable eclecticism and sometimes even a particular methodological and terminological disruption, including the diversity of conceptual and theoretical approaches and methodologies, resulted not only in the formation, often independently of one another, of separate development paths, but also the use of many possible terms related to geography, enterprise and management. The sub-discipline discussed in this review was most often described as 'geography of enterprise' or 'geography of companies', but also 'corporate geography', 'managerial geography', 'geography of multinationals', 'organisational geography', 'management geography' and others.

However, the location of enterprise geography in the structure of socio-economic geography and the separation of it as a sub-discipline is not apparent. To a large extent, its research scope, both in Poland and in the world, coincides with traditional geography of industry. This applies not only to research methods but also to the approach to the enterprise as the entity organising space. In Polish specialist literature, J. Grzeszczak (1985), T. Strykiewicz (1987, 1994) and B. Domański (1997a) pointed it out relatively early. In turn, R. Walker (1989) claimed that enterprises operate within broader spatial structures, hence giving independence to geography of enterprise is pointless. This criticism, however, seems to have a weakness related to the fact that the objects of interest of other industry geographies are also located within more general structures and are subject to their laws.

Since the enterprise is the most important or at least one of the most critical organisational forms in economic space (in addition to households in particular), it would be difficult to imagine the omission of this subject in socio-economic geography. Therefore, the enterprise is the object – directly or implicitly – of various studies on entrepreneurship, regional development, as well as the entire spectrum of partial industry analyses among the areas of geography (of industry, services, trade, transport, etc.). It may be suspected that this is not a lack of research, but certain inertia associated with traditional divisions in socio-economic geography is the reason why Poland's geography of enterprise is not a clear sub-discipline of research, as is the case in countries with well-established free market economy.

RESEARCH IN GEOGRAPHY OF ENTERPRISE IN POLAND BEFORE 1989

The enterprise has been subject to more frequent geographic surveys in Poland since relatively recently. In the years 1945–1989, the country developed in a centrally controlled economy, and therefore the critical decisions were taken by the state. Hence, the industry-related way of perceiving human activity developed, sanctioned by the

conference in Osieczna in 1955 (geography of industry, trade and services, transport, etc.), and subjective approaches (including humanistic and behavioural) were almost absent before 1990. Nevertheless, quite early, as already in the 1960s, a few studies were created, which with all conviction can be classified as falling into the traditional current of the contemporary geography of enterprise.

Polish economic geographers in the first place researched local service ranges in the field of wholesale trade (Eberhardt, Wróbel, 1963). The research was based on the assumption that these ranges were one of the easily obtainable indicators related to the development of regional centres at the level between the voivodeship and powiat. The results of the research were therefore of practical value because they could be included in the work on the territorial reform of the country in 1975. The quoted authors state that in the case of wholesale trade the control function was strongly centralised. The management was the Central Boards of Commerce, mostly located in Warsaw (10 units) and Łódź (5 units). Similar rules were in force for industrial plants. In later studies, R. Guzik and K. Gwosdz (2000) stated that in 1974, the management of the industrial sector was based on the existence of 8 ministries and 74 subordinate organisations. In the conditions of central planning and management, the analysis assumed predominance of Warsaw as a central location for business headquarters, and regional dependencies of the location of headquarters of regional branches were considered.

Over the next 20 years, the issues of development of the control function were practically absent from the subjects of geographic surveys. The only more comprehensive study in the whole country was the study of P. Eberhardt (1986), who repeated the research related to the spatial organisation of enterprises controlling the sphere of supply, distribution and trade. Data from 46 enterprises or institutions with regional branches were collected at that time. It turned out that only 2 out of 46 surveyed enterprises had a territorial organisation coincident with the then administrative division into 49 voivodeships; 11 divided Poland into 17 service regions, referring to the former territorial division. In addition, cities were ranked according to the number of regional branch offices located in them: Warsaw (44), Krakow (41), Wrocław (41), Katowice conurbation (40), Łódź (40), Poznań (39), Szczecin (38), Gdańsk-Gdynia (37), and Lublin (35).

In the 1980s, the first studies on Polish diaspora enterprises appeared, primarily of a documentary and actual value (Manikowska, Matykowski, Stryjakiewicz, 1985; Skalmowski, 1988). However, penetration by global companies was negligible at the time, due to the political and economic determinants, which was also emphasised in international studies (Bornschiefer, 1982). It was only after the political breakthrough that a comprehensive study on the impact of the power of large industrial plants on the socio-spatial structures and the organisation of space was written (Domański, 1997b, 1998). Industrial control was understood there as an industrialisation policy during the command-and-distribution period.

From the research mentioned above, it can be concluded that while in the 1960s the organisation of control functions was closely related to the administrative structure, in the last decade before the collapse of the command-and-distribution system, this order has significantly eroded. In the analyses cited, it was recognised that the location of the control function proves the attractiveness of a given city as a regional centre and the more management bodies, the higher its rank in the spatial structure of the country.

RESEARCH AFTER 1989

Methodological basis

The political and socio-economic transformation has generated an expected increase in the attention focused on the economic issues in geography. However, the research of enterprises in this discipline – as a force of inertia – were undertaken within the framework of “industries” geography, especially in geography of industry, despite several essential voices about the theoretical-methodological and organisational restructuring of this type of analysis (Chojnicki, 1996; Domański, 1997a).

As mentioned in the introduction, there is a severe methodological difficulty, involving the delineation of the research area, which is the basis for the development of research on the enterprise in a typical geographical sense, distinguishable from non-geographic approaches. One can propose a definition that is closest to the system-organisational and behavioural approach: “geography of enterprise is a sub-discipline or a research speciality within socio-economic geography, which includes the research on the location, impact and organisation of enterprises in space. This approach assumes that geography of enterprise refers to concrete, conscious human decisions. These decisions are based on features related to basic spatial relations, such as distance, direction and typological bond, i.e. the type of relationship (dependence) with the surroundings” (Śleszyński, 2007: 35, modified).

The transformational-globalisation trend

Two fundamental conditions contributed to the popularity of this trend: the political breakthrough of 1989, which was the beginning of socio-economic transformation, and the accumulation of phenomena and processes of economic interdependence, which were strongly connected with this breakthrough, including the collapse of the communist system in the countries of Central and Eastern Europe. It resulted in a natural transfer of the interest in the entire economic geography to the role of spatial transformations and shifts. T. Rachwał (2008, 2015) notes that geography of industry is dominated by the issue of broadly understood restructuring of spatial arrangements in various territorial scales (local, regional, national, global, etc.).

The transformational-globalisation trend is admittedly practised in Poland, but it does not facilitate its identification from the position of the geography of enterprise. The vital monographic studies that deal with the issues of business operations in space have been prepared from the “industry” positions, i.e. in particular, the geography of industry. What should be particularly mentioned is the concept of spatial adaptation of industry in the transformation period (Stryjakiewicz, 1999) (which incidentally remains one of the most original theoretical and conceptual achievements in Polish socio-economic geography after 1989), as well as the explanation of the restructuring of a traditionally industrial region (Tkocz, 2001). In turn, B. Domański (2001) dealt with the factors of locating foreign enterprises and A. Tobolska (2004a) with ownership and organisational transformations in large Polish industrial enterprises.

The transformational-globalisation trend in Polish literature of geography of enterprise is dominant. Relatively most of the studies are published in the series of the

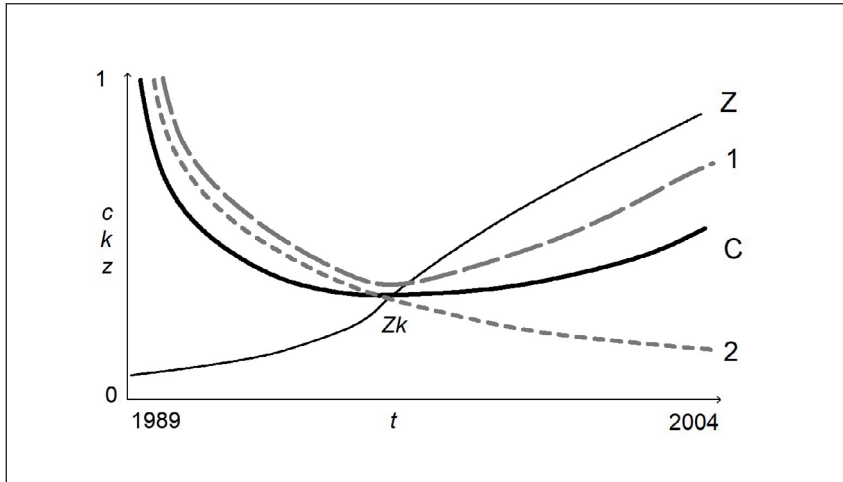
Studies of the Industrial Geography Commission of the Polish Geographical Society edited by Z. Ziolo and T. Rachwał and published in Krakow. The studies to be mentioned include, for instance, those of P. Czapliński (2000, 2011), T. Rachwał (2003a, 2003b, 2006a, 2006b, 2013), E. Rydz, W. Szymańska (2003), S. Sala (2003, 2006), M. Niemczak (2008), A. Świdurska (2010), and W. Kilar (2009a, 2014a). The undertaken themes concern both Poland and the whole world or its parts (Ziolo, 2001, 2003, 2004, 2006, 2009, 2011; Kilar 2009a, 2014a, 2014b; Raźniak, Nowotnik, 2015; Raźniak, Dorocki, Winiarczyk-Raźniak, 2016; Raźniak, Dorocki, Płaziak, 2017; Dorocki, Raźniak, 2017; Raźniak, Dorocki, Winiarczyk-Raźniak, 2018).

In the group of the transformational-globalisation studies, we can distinguish case studies of particular enterprises, both Polish (Adamczak, 1994; Parysek, 1994; Rochnowski, 1994; Tobolska, 1994; Wypchło, 1994; Rachwał, 2000a, 2000b, 2001; Klimczak, 2004; Kilar, 2006) and operating in Poland (Wilkosz, 2006; Matykowski, Tobolska, 2009; Lizak, 2009; Czapliński, Stawarska, 2010), but also in a European (Kilar, 2014b; Raźniak, Dorocki, Winiarczyk-Raźniak, Płaziak, Szymańska, 2016; Zdanowska, 2017) or global perspective (Wajda, 2003, 2006; Wajda, Zalewska, 2003; Wajda, Zoričić-Wołek, 2003; Kilar, Cieluch, 2008; Kilar, 2009b, 2010, 2011, 2014b, 2015; Bonar, 2011; Boguś, 2011; Lizak, 2012; Wdowicka, 2017). The analyses concern mainly changes in the spatial organisation. There are also several reviews, methodological and concept-model papers on this topic (Smętkowski, 2000; Stryjakiewicz, 2002; Stryjakiewicz, Wajda, 2003; Tobolska, 2006a, 2006b, 2006c, 2010; Gierańczyk, 2008). In spite of the unambiguous sometimes overtones of the title, pointing to the subjective approach to the issues of the enterprise, some of these studies are difficult to explicitly qualify to geography of enterprise, because the analyses presented in them are given from different conceptual, theoretical and methodological positions originating mainly from classical studies of geography of industry, services and tourism (Korcelli-Olejniczak, 2010; Taylor, Ciechański, 2016).

In total, the “industrial” direction in geography of enterprise (or “enterprises” in geography of industry) has proved to be the most popular today. The effect was the development of the concept mentioned above of adaptation of industrial enterprises to new management conditions after 1989 (Stryjakiewicz, 1999). The subsequent, continuation studies carried out in Poznań concern mainly the trend of geography of enterprise, called by the authors “functional and organisational-systemic” (Stryjakiewicz, 2004a; Tobolska, 2004a, 2004b; Tobolska, Matykowski, 2006).

On the other hand, in the discussed transformational-globalisation trend, one should also mention the extensive monograph of P. Śleszyński (2007), in which the accents related to the transformation of enterprises after 1989, as well as changes in their location, are evenly distributed. This paper presents a model of changes in centralisation and spatial concentration of economic control functions (GFK) in the transformation period (1989–2004) (Fig. 1). An important variable in this model is the degree of centralisation, which is introduced to avoid the need to refer to space, and which illustrates the general functional transformations in the economy. In this way, a graph of the dependence of centralisation and spatial concentration is obtained. It turns out that they are convergent until the influx of foreign capital, understood as external control, gained importance.

Fig. 1. Model of changes in spatial centralisation and concentration of economic control functions (GFK) in the period of transformation (1989–2004)



Explanations: c, k, z – the degree of spatial centralisation and concentration, as well as of the inflow of foreign capital (0–1), t – time (1989–2004), C – curve depicting the changes in centralisation of economic control functions (GFK), 1 – curve depicting changes in spatial concentration of economic control functions (GFK) in the industrial and financial sectors 2 – curve depicting changes in spatial concentration of economic control functions (GFK) in the retail sector; Z – inflow of the foreign capital, Zk – growth in the dynamics of the foreign capital inflow allowing for reaching the ‘critical mass’ sufficient enough to reverse the co-dependency trend as regards spatial decentralisation and deconcentration of economic control functions (GFK).

Source: Śleszyński (2007)

Location trend and research of economic control functions

Location trend is associated with research of the management headquarters, mainly concerning the settlement network and the functional hierarchy of cities. For this reason, the resulting studies are most often taken by urban geographers, and only then by geographers of industry. After 1989, economists G. Gorzelak (1994) and B. Wyżnikiewicz (1997), first presented the analysis of the location of the headquarters of major enterprises in Poland. Both studies pointed to a significant diversification of economic strength or economic potential in the first years of transformation, including a large concentration of company headquarters in two voivodeships: Warsaw and Katowice, and an increasing spatial polarisation in this respect.

The first “typical” survey undertaken by geographers regarding the location of economic management functions is the study of R. Guzik and K. Gwosdz (2000), which examined the concentration of control functions in industry. The research, which covered about 700 largest enterprises in Poland, showed that the management system in Poland is similar to that in the UK and France, where the control function is concentrated in one central city – the capital. Similar research, but in a dynamic system, was also conducted by H. Rogacki (2004, 2006).

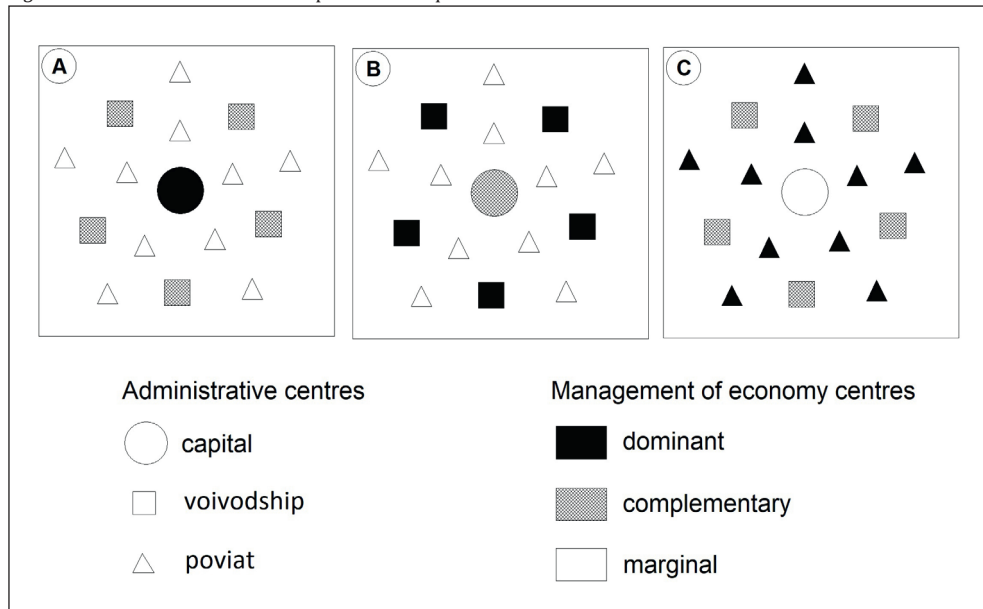
The issues of competitiveness and the rank of large Polish cities in the light of the inflow of foreign capital were developed in the study of B. Domański, R. Guzik, K. Gwosdz (2000), where the urban centres were ranked according to the location of

the headquarters of companies with foreign capital. In the Institute of Geography of the Jagiellonian University, there were also numerous studies on other aspects related to the location of enterprises, including the impact of transnational corporations in Poland on space (Domański, 2000, 2003a, 2005a, 2005b) and the relationship between the region and the economic power of industrial enterprises (Domański, 2003b), as well as more specialised ‘sectoral/industry’ issues (Guzik, Micek, 2007).

Research in the field of geography of enterprise is also being developed in Warsaw, in the Institute of Geography and Spatial Organisation of the Polish Academy of Sciences. T. Lijewski (2000) presented the analysis of the course of the planned road network concerning the headquarters of the largest Polish companies. Then E. Nowosielska (2001) presented the location of the headquarters of major enterprises in the services sector in the layout of 16 voivodeship in 1999. The issues of geography of enterprise on a national scale were also undertaken in the studies of P. Śleszyński (2002a) and T. Lijewski (2003), where a strong dominance of control functions in the capital centre was demonstrated (the so-called Warsaw hypertrophy), with a tendency to deepen it. In the paper by P. Śleszyński mentioned above, the distribution of control functions relative to settlement centres was also presented (Fig. 2). As a result, three models (schemes) of management were created, depending on the intensity of the occurrence of industry types of the largest companies and their revenues in the capital and other voivodeship and powiat centres.

The study by J. Wendt (2001) presented the spatial structure of power centres in Poland. Featured, among others, were the factors and centres of economic activity for

Fig. 2. Location models of the companies’ headquarters



A – with the dominant role of Warsaw (highly specialised services); B – with the dominant role of voivodeship centres excluding Warsaw (low specialised services, partially manufacturing activities); C – with the dominant role of powiat centres excluding voivodeship ones (partially manufacturing services).

Source: Śleszyński (2002a)

which the location of the main headquarter of the largest enterprises, central banks and the territorial structures of selected service networks were important. Similarly, in Poznań, individual, specific types of activities were examined, e.g. banking, a pioneer in Poland in the field of economic geography (Stryjakiewicz, Potrzebowski, 1995; Weltrowska, 2003). In the latter advanced empirical study, among others, the typology of organisational and spatial structures of banks and their networks were presented. Other studies also showed that significant differences in the distribution of spatial economic power and control functions were characteristic of regional arrangements (Śleszyński, 2002b, 2005a, 2005b, 2015; Brambert, 2010).

In the location trend, particular importance was given to the control functions of the centres. Control, as a ubiquitous phenomenon, is one of the attributes of power that enables it to exercise this power. It involves not only its common understanding as checking (obtaining information about) a given state or assessing achievements with intentions, but also observation (monitoring). Hence, in the strict sense of the word, control is a condition or stage that occurs immediately before the decision is made. The economic control function is thus one of the functions of the city, usually exogenous, through which it becomes the organising centre, and therefore subordinating and possibly dominating over the surrounding space (Śleszyński, 2002a). In this way, this function becomes the basis (base) of the node centre in the concept of the economic region. The importance of the economic control function has increased significantly in recent decades along with the growth of enterprises, which are achieving increasing trade volumes. Even around 2010, several of the largest international corporations generated revenues higher than the Polish GDP (Zioło, 2009; Śleszyński, 2013).

The location of the headquarters of the company and the place of its actual operations do not always coincide. It is especially the case of enterprises with numerous branches: enterprises of the financial sector (banking, insurance) and trade and service, and, to a slightly lesser extent, manufacturing. Therefore, the location of enterprises' headquarters does not inform about the actual distribution of manufacturing forces, but only about the distribution of decision centres, i.e. the control function. Thus, we can talk about the location of the discussed headquarters in the context of "management space".

In free market economy, the location of the company's headquarters is therefore essential. One can identify the following roles resulting from the existence of an economic control function in a given locality (Śleszyński, 2002a):

1. economic role, the most complex one, which mainly consists in various contributions to the creation of local GDP and tax discharge, depending on the possession (or not) of non-local branches, subsidiaries, etc. Owning non-local branches is characteristic of, among others, large enterprises in the services sector, especially in banking. The economic role is also participation in investments and the multiplier effect, which in this case is based on the tendency to concentrate activities in the region of the impact of the headquarters of a large enterprise (incl. financial, legal and logistic services, economic consultancy, etc.);
2. social role in which two groups of strictly related issues can be distinguished: arising from economic aspects (e.g. impact on the unemployment rate, migrations related to attracting highly qualified staff) and creating an image by raising the prestige of the city and the region, which directly translates into, for example, investment attractiveness);

3. political role, which often results in the participation of business representatives in local authorities and thus the real impact of the company on local administration and management of the city and the region.

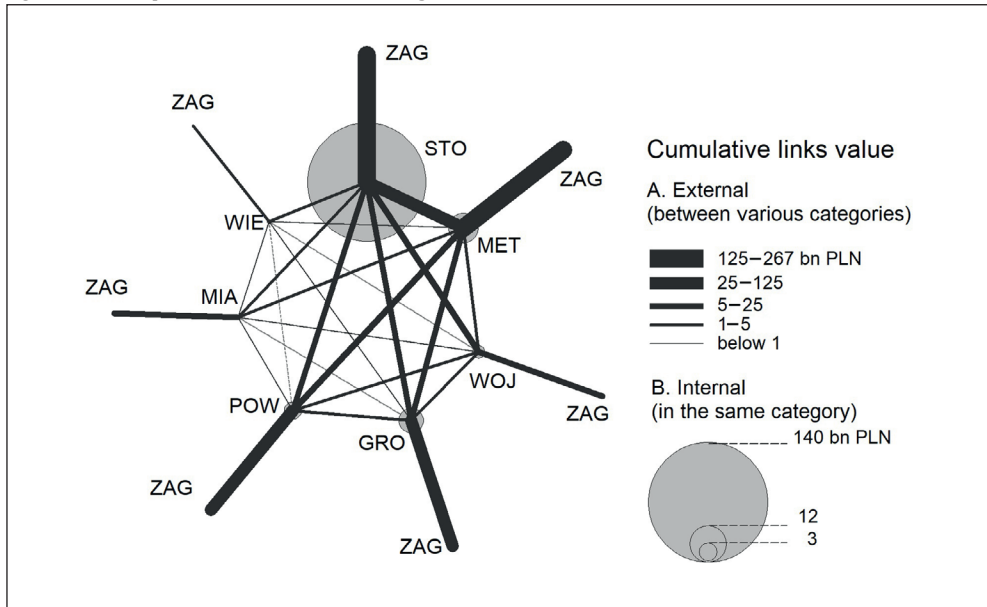
The specificity of the management function consists in exercising control not only over the centres, but, which may be more important from a functional point of view, over the information flow and money circulation. For this reason, financial institutions, especially banks, have the most influential position. In other words, concentrating the management control in one place results in a greater or lesser probability of interaction with another centre, and this depends on the direction of the control function development.

The most comprehensive and best-documented work in this trend is the study of P. Śleszyński (2007) regarding the shaping of economic control functions in Poland, mainly in the period of transformation (1989–2004). The research was based on the then unique revenue and shareholding bases of several thousand of the largest Polish enterprises, collected most often from annual reports or purchased from legally operating business intelligence agencies. Among other things, information was gathered on the capital relations of the largest 1,341 commercial law companies, which were analysed against the settlement structure of Poland and countries that bought shares of these companies, most often as a result of privatisation. For this purpose, the primary indicator of the strength of links was used, based on the volume of turnover and participation in the share capital. It provided the basis for developing models of ownership connections (Fig. 3) and the hypothesis of reducing cohesion and “cracking” or even “breaking” the Polish settlement system by foreign control, which became useful for the needs of the National Spatial Development Concept 2030 (Śleszyński, 2008b).

As for the above concept, it was found that in the international system, economic management centres located in Poland are subordinate in the national system: highly developed Western European countries and (besides) the United States. The main foreign control centres are concentrated in a few spatially small areas, connected in more than half with well-developed largest agglomerations, including the so-called global cities. There is a large selectivity concerning the selection of agglomerations controlling Polish centres, but they generally reflect the structure of economic governance in the owner countries. In Europe, these are primarily Amsterdam, Paris and London, in the United States – New York. In Poland, the capital city centre plays the role of the primary contact point and intermediary for further connections. In the national system, it has a strong dominant position over the entire area of the country. In this sense, referring to the Friedman centre-periphery concept, the other metropolitan centres are semi-peripheries, mainly Tri-City, Poznań, Wrocław, Katowice and Krakow, as well as some poviat towns (Płock, Lubin, and Jastrzębie-Zdrój). Other areas play the role of peripheries and are entirely dependent, primarily on Warsaw and foreign control centres, and to a lesser extent on other metropolitan areas.

However, a definite “break” of ownership bonding systems is that lower-level administrative and settlement centres are more heavily controlled by enterprises located abroad than those located at higher hierarchical levels in the country. This breaking of the existing economic hierarchy additionally confirms the concept of subordination. At the same time, in the international system, economic ties are more network-based, while in the national – polar (based on Warsaw). If we combine both observed types of relationships, we get a dependence system that in some way resembles a hierarchy (quasi-hierarchical system). This kind of connections results from the fact that the

Fig. 3. Ownership links of the economic management centres in Poland, 2004. Cumulative links values



Abbreviations for administrative-settlement categories: ZAG – foreign; STO – capital; MET – other metropolitan centres; WOJ – other voivodeship centres; GRO – other poviat centres with town status; MIA – other towns and cities; WIE – villages.

Source: Śleszyński (2007)

economy in the highly developed countries functions to a large extent in the network system, and Poland is just adapting to this model.

The above analyses were later supplemented with research on the links between the organisational (Śleszyński, 2011) and geopolitical (Śleszyński, 2013) structures. The control function tests were also examined in detail in the transport sector (Taylor, Ciechański, 2010a, 2010b, 2011a, 2011b, 2013a, 2013b, 2013c, 2014, 2015). The analyses showed, among others, the concentration of transport investments in metropolitan regions, explaining such a model of location as their role as sales markets and places with good transport accessibility.

Apart from the research mentioned above, the issue of locating economic activity in new political and economic conditions was often undertaken by economists (Rakowski, 1996; Kuciński, 1998; Głowacka, 2000; Pakulska, 2001). In economists' research, it is worth noting, in particular, the study of A. Cieślik (2005), devoted in large part to the factors determining the location of foreign enterprises in Poland and the choice of management seats. This study was awarded by the Polish Economic Society.

Behavioural trend

The behavioural trend, which is one of the most commonly practised in the world, was practically still absent from Polish geography. The only major work is the already mentioned study by B. Domański (1997b), in which the decisions of large industrial enterprises and their impact on the shaping of socio-economic structures were dealt

with. However, the behavioural or behavioural-decision-making trend is much better developed in economics and management sciences, but research in which any references to geographic conditions would be found is quite sporadic. However, recently in geography there are more and more large, comprehensive works, at least partly in the behavioural trend, in which questions are asked about the causes and motivations of spatial behaviour and decisions (Micek, 2017; Tobolska, 2017). This leads to the conclusion that we can soon expect the development of this trend in Polish geography of enterprises.

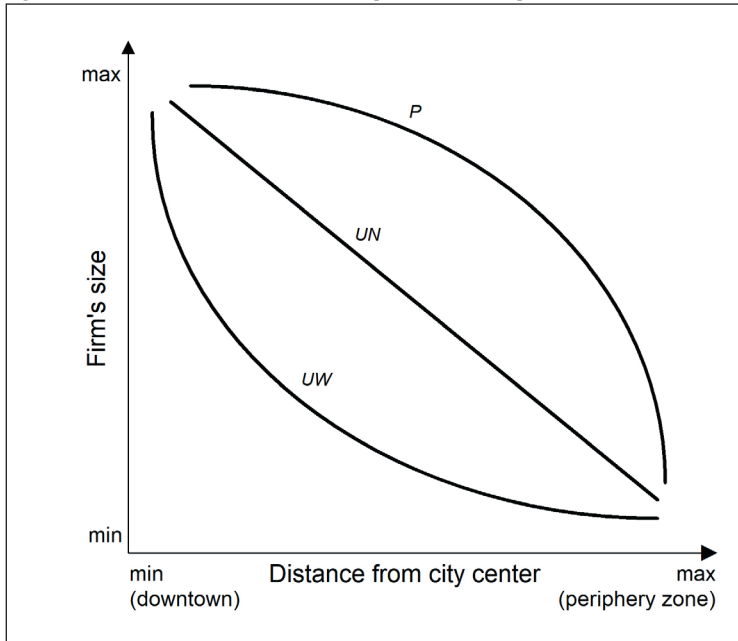
Research of enterprises in urban structures

Investigations of the location and impact of enterprises within cities, well developed in the world, have not been present in Poland so far. Undoubtedly, this is because before 1989 such analyses were limited due to the different political and economic system and the possible lack of impact of the land rent on the location of economic activity. Nowadays, the issue of the location of corporate headquarters is more frequent, but it is not explicitly the main topic of research. The more detailed studies emerging after 1989 usually concerned selected cities, in particular Warsaw (Dziemianowicz, 2000; Rutkowska-Gurak, 2000; Śleszyński, 2002b, 2006, 2014) and Poznań (Tobolska, 2004a, 2014b; Stryjakiewicz, 2009), studies on the impact of individual companies (Stryjakiewicz, 2005), and selected economic sectors or function groups (Wolaniuk, 1997; Misztal, 1998; Wilk, 2001; Śleszyński, 2003; Stryjakiewicz, 2009), as well as transformations of a part of the city (Rutkowska-Gurak, 2000; May, 2001; Śleszyński, 2004), and economic zones (Domański, Gwosdz, 2005), etc. Some of these studies can be classified as part of the “traditional” geography of industry and services, or be placed within urban geography.

The two monographs of the author remain the most comprehensive urban studies (Śleszyński, 2006, 2008a). The former has a mainly documentary value because it contains the most detailed analysis, regarding both space and genre, of the distribution of economic entities in urban space to date in Poland. The latter is a detailed location record of the headquarters in the eight most significant cities of the country. Moreover, it contains the analysis which has allowed to formulate the fundamental regularities of the location distribution (Fig. 4). It states, among others, that spatial concentration is most strongly affected by the largest enterprises, the public sector and more advanced activities, especially higher-level services. They are recorded in the form of regularity – the rules for the location of enterprises in urban areas:

- the principle of size. The larger the enterprise, the more often its headquarters is located in places occupying higher positions in the functional hierarchy, especially in the city centre;
- the principle of operation. The more advanced sector of the economy, the more critical area of the headquarters’ location within the functional structure of the city, i.e., as in the case of the largest enterprises, in the city centre.
- the principle of ownership. Capital in its nature (similarities) chooses locations: public closer to the centres of administrative power, private – according to market potential, foreign – indirectly, most often depending on the size and type of activity (see the law of size and activity).

Fig. 4. Location model of the firm's headquarters in the spatial structure of the city



M – manufacturing, LSS – low specialised services, HSS – high specialised services.

Source: Śleszyński (2008a)

The role of the headquarters of large enterprises, as well as their interrelationships, is, therefore, one of the key (probably the most important) in shaping the Central Business District (CBD) in Polish cities during the transformation period (Śleszyński, 2004).

SUMMARY

Geography of enterprise in Poland is the sub-discipline relatively often selected for research, but it is still undetermined and only vaguely shapes its place in the structure of human geography, delineated during the post-war methodological conference in Osieczna. For this reason, it is most strongly associated with traditional geography of industry. At the present stage, the research is growing actively on the ground of localisation and transformational-globalisation trends, while in the least on the behavioural trend. Both earlier trends have been developed within the scope of industrial research and industrial economics, as well as classical or neoclassical location theories, including the theory of central places and the concept of the network of connections ('networking') and rooting of companies ('embeddedness'). The subject matter of the enterprise is inherently more frequent in research on regional development and on socio-economic transformation. Over time, the conceptual and theoretical advancement of geography of enterprise in Poland has been progressing.

The analyses concern both the entire country, as well as smaller regions and individual enterprises, especially industrial ones. There are also more and more studies on the location of companies in urban structures. Geography of enterprise is best

developed in Krakow (Institute of Geography of the Pedagogical University, Institute of Geography and Spatial Management of the Jagiellonian University) and Poznań (Institute of Socio-Economic Geography and Spatial Management of the Adam Mickiewicz University), and also in Warsaw (Institute of Geography and Spatial Organization of the Polish Academy of Science). There are also some "geographical" studies developed by economists (Warsaw School of Economics, Cracow University of Economics, and Poznań). In other centres, studies in geography of enterprise are sporadic. The favourable peculiarity in comparison with other sub-disciplines of socio-economic geography in Poland is the relatively routine undertaking of continental and global issues.

Much more literature has been developed on the subject of geography of enterprises *sensu largo*, that means all geographic surveys the main subject of which is the enterprise. These are, first of all, studies on the development of entrepreneurship, in which usually all companies or all entities of the chosen sector or type of activity are analysed – and not only the largest, having a fundamental impact on the shaping of control functions. It is worth noting that the first studies in this trend appeared very soon after 1989 and concerned an important issue of foreign enterprises (Matykowski, Stryjakiewicz, 1993).

Thus, in Polish socio-economic geography, a separate and distinct sub-discipline of geography of enterprise has not been developed, but it has some original achievements that could add to the world achievements. It should be mentioned above all, includes the adaptive concept of changes in the regional industrial structure, many studies concerning individual enterprises (whose meaning goes far beyond the classically understood case study) and the concept of economic control functions along with localisation models in the spatial structure of the country and large cities.

As far as the research challenges are concerned, it still seems crucial to overcome the industry-oriented, objective way of thinking about human activity in favour of subjective approaches. Then geography of enterprise in Poland may become methodologically similar to the research conducted in Western countries and gain on cognitive and explanatory efficiency. Recently, such a landmark work in Polish socio-economic geography may be a comprehensive study of G. Micek (2017), in which the author dealt with the geographic proximity of enterprises in advanced industry and services and the flow of knowledge. The second extensive work is the study of A. Tobolska (2017), which is currently the most detailed study on the impact of enterprises in Polish area.

It is much easier to identify new research areas, not only those not addressed or scarcely outlined in the review presented, but also the analyses requiring further research using the proposed methodology. Research into business connections seems to be particularly interesting. It applies to both the ownership structure, which is considered in one of the sections here, but also links between the various organisational levels of individual enterprises. Further research is also required into the spatial and temporal scales of the impact of economic control functions, related to the structure of branches, subsidiaries, etc., and their subsequent links with other entities.

Another issue requiring further detail is the role of foreign capital in shaping the spatial diversity of economic control functions. Particularly, further research is required on the attractiveness of individual regions and cities for company headquarters, as a result of which a particular system of economic subordination is created. In particular, concepts derived from the centre and periphery model, such as the economic domination of metropolitan areas (Korcelli-Olejniczak, 2012) may be applied here.

A huge issue is the role of the control function in shaping the spatial network organisation of the economy. The disintegration of hierarchical structures for networking, especially in the international and global context, has been one of the most specific processes in the structure of the world's economic space for two to three decades (Stryjakiewicz, 2001). It is necessary to specify the significance of ownership connections among other types of connections, especially those related to the real capital and information flow. It could lead to a more coherent and comprehensive concept of a control function in spatial and economic systems.

The possibilities of using economic control functions in related issues seem particularly appealing. Research into the distribution of company headquarters and the links between them can be useful not only in explaining the processes of socio-economic transformation, including centralisation and economic decentralisation. The particular application should be made in the studies on the formation of a new settlement structure, especially in urban systems. It would be worth combining these processes with political history after 1989, especially with the policy of individual governments towards privatisation and, in general, the role of large enterprises in the socio-economic life of the country.

The presented proposals are of a general nature and, indeed, do not exhaust the list of available issues. Most of them should undoubtedly be the subject of in-depth empirical studies and deserve extensive monographs. Along with the deepening of knowledge, the analysis of location conditions and functional connections, a more coherent and comprehensive theory of location of management and economic control functions should be created in the conditions of transition from a centrally controlled economy to a free market economy. In total, prospects for geographic studies on geography of enterprise in Poland seem to be promising.

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