THEORETICAL AND METHODOLOGICAL ASPECTS OF THE IDENTIFICATION AND DELIMITATION OF PERIPHERAL AREAS

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ABSTRACT

This article focuses on the topic of the polarisation of space. Its objective is to give a basic overview of the theoretical and methodological aspects of research on peripheral areas and to discuss selected aspects. Attention is given to the concept of polarisation of space as a central theoretical point of departure in studying peripheral areas. In the second section, attention is directed at defining the terms marginality/peripherality and marginal/peripheral areas. The meaning of these terms is understood differently by many authors. As part of the issue of evaluating the polarisation of space, central methodological problems, which can be encountered in specific empirical studies, are discussed.

Key words: periphery, marginality, definition, theoretical and methodological aspects, Czechia

1. Introduction

The deepening dichotomy between core and periphery is an expression of globalisation processes, at a worldwide scale, as well as a manifestation of transformation processes, at a national scale. Research on this dichotomy and on the question of the polarisation of space, in general, has been a popular topic for geographic research in recent years. The objective of this article is to present an overview and discussion of selected theoretical and methodological aspects of research on peripheral areas. Attention is given to the concept of polarisation of space as a central theoretical point of departure in studying peripheral areas. A second no-less significant objective of the submitted article is to define certain fundamental terms, used in studies of peripheral areas, including a discussion of their delimitation. An extensive portion of the article is devoted to a basic overview and discussion of definitions for marginality and peripherality. This includes a summary of fundamental approaches, which can offer insight in defining marginal/peripheral areas. We have also attempted to create something of a subjective categorization of selected definitions. As part of the issue of evaluating the polarisation of space, central methodological problems, which can be encountered in specific empirical studies, are discussed.

2. Selected theoretical approaches in research on the polarisation of space

In general terms, the polarisation of space can be understood as a legitimate result of the development of the hierarchical organisation of geographic systems. The creation of cores (centres) and peripheries, as two extreme poles of polarised space, is a logical outcome of the structural-functional differentiation of space, it is also by large a product of socio-economic driving forces. The concept of core (centre) and periphery represents one of the key models of geographic research and is considered by many authors to be a fundamental theoretical point of departure in studying marginal/peripheral areas (Cullen, Pretes 2000; Jussila 1998; Leimgruber 2004).

In the past, a large number of authors focused on the polarisation of space. They tried to explain the factors behind the uneven socioeconomic development of regions, which in turn leads to the emergence of core and peripheral areas. Scientists began to closely monitor process of uneven development in the 1930s, discovering that it was, for the most part, motivated by a series of dramatic events, which had an impact on economic unevenness. These primarily included the collapse of the New York Stock Exchange and events connected with World War II (Sommers, Mehretu, Pigozzi 1999). One of the first authors to focus on the polarisation of space was W. Christaller in his central places theory (1933/1966, taken from Blažek, Uhlíř 2002). This theory was based on fundamental geographic patterns, i.e. a decline in the number of centres dependent on their significance (Blažek, Uhlíř 2002). Central and non-central (peripheral) areas differ, according to Christaller, in whether or not they provide central functions, in pursuit of which residents from non-central places must commute to meet their needs. Distance can, therefore, be considered a basic criterion in determining peripherality. In spite of unrealistic assumptions and deficiencies (e.g. purely geometric approach – settlement system located on a homogenous plain, the entire theory ignores the impacts of history...
making it static in nature), according to Blažek and Uhlíř (2002), the central contribution of this theory lies in its attempt to explain the geographic organisation of society as a whole, including efforts to define a complete set of characteristics of the system of central places and regions. Böventer (1969) also focused on Christaller’s theory, attempting to summarize the contributions and weaknesses of its concepts. According to him, central places theory loses "its explanatory power as soon as agglomeration economies become of paramount importance within very densely populated areas. The model has not been formulated so as to help solve the problems of the Ruhr area or of the big American metropolitan areas (pp. 123–124)."

During the period following World War II, core-periphery theories emerged (e.g. the theory of growth poles, theory of cumulative causation, theory of uneven development and the theory of polarised development). These are so-called divergent theories, meaning that long-term uneven economic development leading to the emergence and deepening of regional differences is their central common feature and assumption. The theory of polarised development (core-periphery theory) is one of the most significant from this time period. Its author J. Friedmann first attempted to define the terms core and periphery and contributed a great deal in taking on the issue of researching the polarisation of space. This theory arises out of the premise that the fundamental distinguishing point between core and peripheral regions is their degree of autonomy, or their level of dependence on other regions (Blažek, Uhlíř 2002). A centre (core) is a region with a high degree of autonomy and the ability to create innovations; it is capable of grasping the central changes (impulses) of development. In contrast, a periphery is implicitly defined as an area, which has not grasped these changes (Havlíček, Chromý 2001). Friedmann also defined six cumulative mechanisms (effects), which cause polarisation between core and periphery to increase, contributing to further strengthening of the position of the core (the dominance effect, relations effect, information effect, psychological effect, modernization effect and production effect). Another of Friedmann’s contributions is the designation of four stages in the development of a spatial economy (the theory of polarized development represents the second of these stages of development): 1. pre-industrial society with local economic structures; 2. the emergence of a core-periphery polarity and its subsequent deepening (divergence); 3. the dispersion of economic activities and, to a lesser degree, administrative functions from the core to the periphery; 4. gradual integration, growth of interconnectivity and dependence between core and periphery. Hampl (2001, p. 316) reacted rather critically to this model. According to Hampl, making a distinction between the 3rd and 4th stages of development of a spatial economy is very debatable. In essence, this would mean "the culmination of the diffusion of progress throughout the entire system and the attainment of the complete organisation of the system at a new, qualitatively improved level." According to Hampl, such a thing has never happened with a societal system and could not happen, because "the removal of differentiation would, essentially, lead to a cessation of development and to the degradation of the system..." In contrast, it is always "only about attaining a certain level of suppression of unevenness, which should suffice for increasing the level of organisation and internal cooperation of a system."

At the beginning of the 1980s, Gottmann (1980) conducted research on the polarisation of space and the core-periphery relationship, primarily from a political point-of-view. According to Gottmann, periphery is determined by physical geographic conditions, historical developments, political organisation and the strength of economic functions. In contrast, Reynaud (1981, taken from Leimgruber 1994) emphasizes the role of human activities, while combining a spatial model of core and periphery with a social configuration. He rejects the simple polarisation of space in the sense of core and periphery, because it assumes a certain evolution of this mutual relationship, indicated by its changing intensity (a so-called dynamic concept). It also includes the phenomenon of time, which means that nothing is final or definite. Historic developments can take place in a number of waves, in which the position of the core and periphery change. This means, for example, that the significance of a core, that loses its dominant role, can decline and, contrastingly, a periphery can separate itself from a core, strengthening its own significance. It is even possible for a mutual “exchange” of historical positions to occur. As an example, Leimgruber (2004) uses traditional industrial regions, which at one time ranked among the strongest economic areas (the Ruhr area, northeast England). Reynaud demonstrates his dynamic conception with a typology (see Tab. 1), in which flows of people and capital act as determinants in one column and raw material flows in the other. Altogether, he defines four types of centres, six types of periphery and seven differing relationships to describe their mutual combinations. Schuler and Nef (1983, taken from Havlíček, Chromý 2001) build on Reynaud’s ideas, in the sense of the continuity between core and periphery. “Core and periphery are not spatially separated, they merely exhibit changing degrees of centrality. It is not, therefore, so much a dichotomy between two extremes, but rather a continuum open to changes in time. A centre is, herein, simply located at the top of a so-called pyramid of power (Havlíček, Chromý 2001, p. 5).”

At a theoretical level, Havlíček and Chromý (2001) have also conducted research on the general principles and tendencies governing the development of the polarisation of space. In connection with the first stage of Friedmann’s model for the development of a spatial economy, they defined four abstract developmental types of polarisation of space (increasing polarisation, stagnating polarisation, diminishing polarisation and equalizing polarisation), which take into account differentiated development of core (a centre) and periphery over time.


### Tab. 1 Types of centres and peripheries according to Reynaud

<table>
<thead>
<tr>
<th>The centre – periphery relationship</th>
<th>Flows of people and capital</th>
<th>Flows of raw materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. dominant C, dominated P</td>
<td>P → C</td>
<td>P → C</td>
</tr>
<tr>
<td>2. hypertropic C, abandoned P</td>
<td>P → C</td>
<td></td>
</tr>
<tr>
<td>3. dominant C, integrated and exploited P</td>
<td>C → P</td>
<td>P → C</td>
</tr>
<tr>
<td>4. hypertropic C, integrated and annexed P</td>
<td>C → P</td>
<td></td>
</tr>
<tr>
<td>5. declining C, P developing capital from C</td>
<td>C → P</td>
<td></td>
</tr>
<tr>
<td>6. autonomous C and P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. inversion: P becomes C and vice versa</td>
<td>C → P</td>
<td>C → P</td>
</tr>
</tbody>
</table>

Source: Reynaud (1981 taken from Leimgruber 1994; altered)

### 3. Marginality vs. peripherality: differences in perceiving and understanding both terms

In connection with research on the polarisation of space, we can encounter the terms marginality or peripherality. In geographic literature, both of these terms are viewed either as synonyms (in the circumstances of Čechia for instance, Havlíček and Chromý 2001 prefer this position), or in contrast both terms are duly separated on the basis of their meaning (Leimgruber 1994). According to this author, the core-periphery relationship is more geometric in nature, in the sense of the centre of a territory and its borders. On the other hand, the term marginality (or rather the relationship between core and marginal areas) has a somewhat broader application (meaning), as it implies a series of social, economic and political contingencies. According to Andreoli (1994, p. 41), the terms have the same meaning, whether from a philological or geographic point-of-view, i.e. "something that is far from the centre..." Marginal regions, however, represent something of a further level of peripherality. Peripheral regions are at least partially integrated into an economic system, in contrast to marginal regions, which are economically isolated (located outside a system), "they are excluded from political, social and economic decision-making processes (Mertins 1992, taken from Leimgruber 1994, p. 6)."

Schmidt (1998) adds another perspective to the discussion. In compliance with the authors listed above, Schmidt does not perceive centre and periphery to be two isolated poles; she also speaks of a continuum. With the inclusion of marginal regions, though, a centre – periphery – marginal region continuum (see Fig. 1) is established. It only applies in the sense of socioeconomic relations and not in a geometric sense. A periphery is, naturally, in a subsidiary position in relation to the centre; however, it is, contrary to a marginal region, still integrated into a system.

Leimgruber (2004) documents the distinctness in the meaning of the two terms on the example of the work of authors Pieroni and Andreoli (1989). The mutual interactions of productive forces and market integration are depicted on a simple schema (Fig. 2), wherein a high level is characteristic of a centre, while low levels are characteristic of peripheries. From the position of a marginal area ("margin") it is clearly evident that "marginal regions truly lie on the margin of a system or outside of the system (Leimgruber 2004, p. 49)."

From the concise overview, included above, it is clear that the authors tend to support the notion of separating marginality and peripherality on the basis of a differing level of integration into the system, without defining clear boundaries that would be a condition of integration within a system or of complete exclusion from it. The peripherality of an area is connected with spatial (situational) characteristics such as distance and transport accessibility. Marginality, on the other hand, is shaped more by a “multi-dimensional” spectrum of problems, from economic and cultural to social, political and historical. We meet with differences in the understanding of both of these terms, within research on marginal/peripheral areas in Čechia. Periphery, peripherality and peripheral area are, in general, more frequent terms; however, works of Vaishar (1999); Seidl, Chromý (2010), who discusses marginality and marginal areas, presents an alternative example.
4. Definition of marginality/peripherality and marginal/peripheral areas

We can find a large number of definitions for marginality/peripherality in the literature. As has already been said, the terms marginality and peripherality are understood by different authors in a variety of ways. It is no different with attempts to define marginality/peripherality. On the one hand, the multi-dimensional conditionality of reality in a geographic sense, which leads to the emergence of a number of diverse types of peripheral areas and, consequently, to a number of approaches in understanding (defining) these regions, plays an important role. On the other hand, the subjective perceptions and point-of-view of a given author also play a significant role. For these reasons, an innumerable amount of concepts and definitions, which attempt to define marginality/peripherality, can be found in the literature. Due to this plurality, a universally valid definition, which would objectively explain this term and which would be viewed by the majority of authors as something of a "terminus technicus", will never come about. From the information above, it is evident that marginality/peripherality can be determined in two fundamental, analytical frameworks. One of these views marginality/peripherality as an objective reality, while the other sees it as a subjective reality (Schmidt 1998). Marada (2001, p. 13) accurately captures the complicated nature of the issue by stating that the term peripheral area is "more felt than precisely defined." Fernandes (2000) even speaks of the obscurity of the concept of marginality, which can only be specified with difficulty. Many authors agree that marginality is a relative concept. Whether from the point-of-view tends toward a subjective perception – marginality as a state of mind (e.g. Leimgruber 2000; Leimgruber, Majoral, Lee 2003), which can additionally include relativity arising from one's own definition of marginality/peripherality (Capella-Miternine, Font-Garolera 1999), or relativity, which focuses on specific historical developments and, consequently, longer-lasting peripherality. In this context, it is not possible forget to mention three main approaches on the conceptualization of space – absolute, relative and relational (see e.g. Harvey 2006), which have also important implications for the definition of marginality/peripherality (concepts of absolute and relative space refer to marginality/peripherality as an objective reality, concept of relational space refers to marginality/peripherality as an subjective reality). To be more detailed, absolute space exists independently of any matter (objects are fixed at an absolute location), while relative space exists with reference to things and processes, it can be understood "as a relationship between objects which exists only because exist and relate to each other (Harvey 1973a in Harvey 2006, p. 272)." Finally, relational space expresses the feeling and understanding of spatial relations which humans carry in their mind and on which their actions are based (Holt-Jensen 2009). In spite of the specifics listed, let's first take a look at approaches, through which marginal/peripheral regions can be defined. Leimgruber (1994) outlines four basic approaches: geometric, ecological, economic and social. These four, in turn, can be supplemented with political and cultural approaches as well as with a concept that reflects the subjective perception of marginality/peripherality. Schmidt (1998) builds on Leimgruber and outlines six basic approaches, wherein he adds concepts of political and cultural marginality to the four basic approaches.

- The geometric approach (geometric marginality): in this case, areas that are located along the edges of a country (this concerns border areas) are considered to be marginal regions. The central factor in determining the degree of peripherality is, consequently, the distance from the centre. A relatively well-formulated definition, in this direction, comes from authors Wasti-Walter, Váradi and Veider (2003, p. 799), who claim that "border areas are peripheral regions par excellence..." Primarily due to their distance from core areas, border regions are geographically isolated and economically marginalized. The marginality of a border region also depends, to a great degree, on the permeability of the border (Leimgruber 2004) and the nature of the border effect (Havlíček, Marada 2004). Strassoldo (1980, 1981) adds to this by stating that periphery (peripherality) is "shaped" by a border's level of impermeability. According to Schmidt (1998), however, it is helpful to consider the relative position of a region in space, in addition to its geometric marginality, as determined by the location of the region in absolute terms. This can be expressed through the accessibility of a certain area, not only for residents, but, for example, for goods as well.

- The ecological approach (ecological marginality): this term is somewhat atypical in nature. It could be said that it is generally related to economic aspects, through the utilization of natural conditions (Schmidt 1998). From this point-of-view, the core comprises an area with good environmental conditions, which is little used by humans or entirely unused. In contrast with this, we find areas that are densely populated and considerably transformed or devastated by human activities (Chroný, Jančák 2005). Human activity literally marginalizes the natural environment and ecological marginalization can lead to a decline in quality of life (Leimgruber 2000). Central areas, in terms of this approach, are almost always peripheral in terms of other points-of-view.

- The social approach (social marginality): this approach is connected with the marginalization of social groups, "whose socialization process has been somehow disrupted, or to individuals who are situated outside one particular group or who belong to various groups simultaneously without being fully integrated (Leimgruber 1994, p. 11)." In the spirit of this approach, Cullen and Pretes (2000) view marginality as a social structure.
Power becomes the most important determinant of marginality. In this case, marginality is often represented through characteristics such as gender (e.g. Mehretu, Mutambirwa, Ch., Mutambirwa, J. 2001), ethnicity, religion or sexual orientation, and it often leads to the spatial segregation of minorities into slums and ghettos, primarily in an urban setting, in which so-called “micro-peripheral islands” (Blom 2000, p. 180) can be spoken of. These are areas, in which manifestations including social exclusion, criminality, illegal drug use and others are typically found.

- The economic approach (economic marginality): Along with the social approach, the economic approach is one of the most frequently used. The vast majority of instances, when we speak about marginal areas, we speak of economically marginal areas (Schmidt 1998). This approach is based on the regional differentiation of economic activities in a region (Chromý, Jančák 2005). An economic definition of marginality can arise from a number of varied elements, including natural factors and cultural and social characteristics of the residents; however, it is primarily based on economic indicators such as GDP (Leimgruber 1994). Great significance is also placed on political decisions, which can contribute significantly to the economic marginality of an area.

- The cultural approach (cultural marginality): is close to and, essentially, represents a special form of the social approach. It is associated primarily with the segregation of cultural minorities.

- The political approach (political marginality): political marginality is founded, primarily within a single country. Territories that are, for whatever reason, beyond the interest of those, who are entrusted with decision making power (e.g. national governments), which brings a series of negative consequences to these areas, can be labelled marginal (Schmidt 1998). According to Gottmann (1980), political subordination to the core (centre) is conveyed by peripheral location, as understood in the sense of the political approach.

Definitions of marginal/peripheral areas often emerge from a combination of the approaches listed above, wherein the economic and social approaches receive the greatest degree of use. Only in rare cases, is it possible to find a definition in the literature that would be founded on only one of the approaches (e.g. the geometric approach, which has significant application in terms of the peripherality of border regions).

Now, we will attempt to make something of a categorization (classification) of selected definitions of marginal/peripheral areas:

- Definitions primarily based on the economic approach: we can place the conception of authors Cullen and Pretes (1998, p. 183) among those definitions arising from the most-proliferated, economic approach. They state that “a region is deemed marginal when it is distant from markets, dependent on primary resources, has a small and sparse population, and is not politically or economically autonomous.” Tykkyläinen (1998, p. 123) defines a marginal area as “the frontier area of socio-economic activity, either booming or regressing, and being sparsely populated in most cases.” Marginal areas are distinguished by fluctuations in their inhabitants and are often located far from core areas, meaning economically prospering areas. Eskelin and Snickars (1995) define periphery as geographically removed and economically behind, an area that is dependent on external political decisions and is culturally “antiquated”. Artobolevsky (1997, taken from Garrod, Wilson 2004) also utilizes the economic approach in defining peripheral regions in a European context. These are characterized by a little-developed infrastructure, a low level of qualifications among the work force and high unemployment. On the other hand, peripheral areas are able to offer low cost labour, which can give them an economic advantage (Hall 1992, taken from Garrod, Wilson 2004). Marada and Chromý (1999, p. 244), who define periphery as “a territory lying outside economically, intensively utilized regions, distinguished by their remoteness from settlement centres, poor transport accessibility and low population density” also utilize a predominantly economic approach. According to Chromý and Jančák (2005, p. 106) “classical periphery is a territory lying outside economically, intensively utilized regions, distinguished by its high portion of rural settlement, low population density, high unemployment along with a high rate of employment in primary economic activities (especially in primary agricultural production) and a generally lower level of residents’ quality of life.”

- More comprehensively focused definitions: according to Mehretu, Pigozzi and Sommers (2000), marginality is a complex type of handicap, which individuals and societies are subject to (are experiencing) as a result of disadvantages that arise from uneven or unjust ethnic, cultural, social, political or economic factors. In another article (Sommers, Mehretu, Pigozzi 2001, p. 27) they add that “generally, marginal areas occur where there is a convergence of political, cultural, economic and resource problems.” Andreoli and Tellarini (1998) do not give a direct definition; instead, they list parameters, which characterize marginal areas. According to them, the incomes of residents in marginal areas are considerably lower, infrastructure is in bad shape and such areas are distinguished by a certain cultural isolation. These three factors generally work together and are moreover dependent on the nature of the natural environment, historic events that impacted the current state of the area and demographic developments. Boniface (2000) also refuses to give a direct definition; nonetheless, according to her, a number of countries are located in a marginal position, whether in terms of developmental, climatic, economic or geographic factors (i.e. in the sense of distance from main centres,
where important political decisions are made, decisions concerning the distribution of financial aid and aid in the form of grants, and where wealth is accumulated). Schmidt’s (1998, p. 59) definition is one of the most frequently cited: "marginal regions are essentially characterized by a – more or less marked – lack of integration in the present and dominant structures, processes and systems of corresponding time and spatial context, in any considered aspects, in some of them or in all them, in an additive or interactive way, generating also a – partial or total – feeling of non-belonging to the (meso- or macro-) system."

- Definitions partially taking the social or cultural approaches into account: we can classify the above-cited work of Cullen and Pretes (1998) into this group. They define periphery "as a power relationship between a group viewing itself as a center, and consequently viewing all minorities and nonmembers as marginal or other (p. 184; Cullen and Pretes 2000, p. 217)." For Enyedi (1994), periphery is synonymous with geographic and social distance from core areas of development. Leimgruber (2004, p. 48) cites a very interesting notion from Miller (1998), which considers the less frequent idea of cultural marginality. According to this author, marginal regions are distinguished by 1. a cult relationship to local environment, space and place; 2. a stable spectrum of awareness, which can include traditions and folklore and which arises from the relationship with environment, space and place; and 3. resources helping development and the retention of this awareness.

5. The issue of evaluating the polarisation of space

The issue of defining marginal/peripheral areas fits one of the most important topics within the framework of comprehensive studies concerning marginal/peripheral areas. This is related to the authors’ attempt to find an answer to a central question – where are peripheral areas located within a researched territory? Generally, it can be said that this is very much a "non-standard" issue, confronting several methodological problems, which are naturally interconnected to a significant degree (Havlíček, Chromý, Jančák, Marada 2005, 2008).

With regard to theoretical approaches to the evaluation of polarisation of space can be said that these approaches (especially identification of causes of uneven development) has fundamental consequences for conceptualization of periphery, with subsequent important methodological implications (i.e. identification of indicators of peripherality). Just the selection of relevant indicators, which would have sufficient declarative power, in terms of the peripherality of a given territorial unit, is the first discussed methodological problem. Practically every research project focusing on the polarisation of space offers a differing overview of indicators of peripherality. Leimgruber (2004) comes forward with a very interesting opinion, with which it is possible, to a certain extent, to agree with. He assumes that the subjective selection of indicators of peripherality influences the results of a given study in a significant way. This can, to a point, lead to the claim that "a region is marginal because someone (the researcher, local, regional, or national politicians, the business community, etc.) wants it to be marginal" (Leimgruber 2004, p. 50). We can further document the great variety in the use of differing indicators in the specific studies of certain authors. In this sense, an article from Copus (2001), which gives a summary of indicators of peripherality that were used by a wide variety of authors at the level of European Union member states, during the 1980s and 1990s. Economic indicators such as GDP or unemployment clearly dominate this group. Gurung and Kollmair (2005), for example, compiled a summarizing table of indicators of peripherality on the basis of a "brainstorming" activity conducted among members of their research office and then extended to include indicators selected from a number of other projects. These indicators were subsequently divided thematically into eight categories (social sphere, state of infrastructure, state of health, education, politics, economy, environment, indices of development). In contrast, for delimiting marginal areas within the USA, authors Lonsdale and Archer (1999) used only demographic indicators (natural increase, rate of increase from immigration, nationality, etc.). The opinion of these authors on the issue of determining marginal/peripheral areas is also interesting: "it requires a bit of courage to draw a line on a map outlining a marginal area" (p. 138).

Another problem, closely tied to the one mentioned above, is a matter relating to methods of evaluating the polarisation of space. Again, we are faced with a wide variety of approaches, which depend on the subjective selection of a given author. If we take an in-depth look at selected research projects, which include a wide variety of methods for evaluating the polarisation of space, we find that a large "space" in Czech, as well as in foreign, literature was given in the past to multivariate statistical methods such as factor/component or cluster analysis (Andreoli 1994; Marada and Chromý 1999; Musil 1988). Of course, a series of other approaches or methods is available. One of these could even be the relatively simple use of standardisation with a sequence of values from various indicators of peripherality, selected for evaluating the polarisation of space. Subsequently, as far as how to "work" with just such a set of indicators of peripherality is concerned, it is possible to proceed in a number of ways (for more, see Nared 2002 or Pileček 2005).

The third methodological problem is, essentially, conditioned by the objective of the research in question. It concerns the scale level, at which an evaluation of the polarisation of space will be conducted (at a macro-regional, meso-regional, micro-regional, or local level) – for more details see Dunford, Smith (2000).
Again, we can not forget the influence of the database, from the extent of which the focus of the future research can practically be derived, especially in the sense of selecting a scale level. At the macro-regional level, it is possible to imagine marginal/peripheral areas including entire continents or sections of continents (Hampl 2009; Sokol 2001). At the meso-regional level, we generally speak of sections of countries as marginal/peripheral areas. Central units of observation monitored at this level primarily include NUTS II – NUTS IV, statistical nomenclature units of the European Union; in Czechia, districts as well as, recently, municipalities with extended jurisdiction have been used (Marada 2003; Pelč 1999). At the micro-regional level, marginal/peripheral areas can be perceived as municipalities or parts of municipalities (Jančák 2001; Jančák, Chromý, Marada, Havlíček, Vondráčková 2010; Chromý, Škalá 2010; Moreno 2001). Moreover, we note that the position of centres and peripheries is subject to change in relation to the scale of the research, meaning the scale level (Schmidt 1998). What is considered to be periphery can, on the other hand, be a centre and vice versa (even a periphery can have its own centre).

In terms of selecting a scale level, let us take a closer look at the work of Czech authors. Since the beginning of the 1990s, natural processes have been initiated, which manifest themselves through the differentiation of space and lead to increases in the polarity between core and peripheral areas. The polarisation of space at the district level has been evaluated relatively frequently (Marada 2001; Marada, Chromý 1999; Pileček, Jančák 2010). In terms of data sources, selection of this scale level manifests itself as very appropriate, enabling researchers to use a relatively large number and variety of indicators of peripherality. However, districts present territorial units that are internally strongly differentiated and heterogeneous (Hampl 2001). Significant polarisation or, rather, dichotomy “within” a district has been shown, for example, by Chromý, Jančák and Winklerová (2003), who examined long-term changes in land-use in the Prachatice District. Differences arise not only from differing physical-geographic conditions of the various parts of a district (mountainous versus sub-mountainous territories), but also from the unique development of the territories (resettled territories versus areas of continuous settlement; Chromý, Janů 2003). For this reason, it is not possible to remain at the district level and it is necessary to take evaluations to a lower scale level (Jančák 2001). From this vantage point, articles from the end of the 1980s presented an interesting approach (Illner 1988; Musil 1988; and later Musil, Müller 2008). These authors used so-called generel units for their evaluations (in essence, these were the service areas of central municipalities; in 1980, there were 916 such units; Musil 2002). At present, when working with lower territorial units (municipalities), we are faced with insufficient data sources, which do not allow a researcher to conduct evaluations similar to those done at the district level. The recently established municipalities with extended jurisdiction and, likely, even the territories of voluntary associations of municipalities and micro-regions, could be appropriate units for further study. A problem, in the sense of insufficient data sources or regarding the operability of the association of municipalities in question, emerges once again with these units (Pileček 2005).

6. Concluding summary

It is clear from the above discussion that a number of differing theoretical concepts and approaches exist for studying peripheral areas. The objective was to discuss selected authors’ conceptions of peripherality and marginality. It is our opinion that it is possible to place a forward slash between these terms and perceive them as synonyms. However, from a terminological point-of-view, we prefer the terms periphery, peripherality and peripheral area.

The overview of definitions of peripherality reveals a great variety of opinions. In spite of this, the definitions included have certain elements in common. First and foremost, the economic point-of-view clearly dominates. Peripheries are often perceived as territories that are little-developed economically and that are located outside of developed regions. They are areas which are not economically autonomous, but which are dependent on the most-advanced regions. Additional frequently mentioned elements of periphery include actual remoteness (distance) from settlement centres, not only in a purely spatial sense (transport accessibility – the impact of natural barriers, insufficiently developed transport infrastructure), but also in a social sense (social exclusion, etc.). The absent or very limited opportunities of peripheries to participate in political decision-making processes also play an important role. A series of diverse demographic and socioeconomic characteristics manifest themselves relatively frequently. These often include, for instance, low population density, declining population, high unemployment rate, low levels of education, etc. Irregularly, we are confronted with less traditional elements or aspects of a socio-cultural nature, such as ethnicity, religion or even regional identity, which can play an important role in certain circumstances. However, such aspects are very difficult to pinpoint and quantify.

In our opinion, it is not possible to understand the term periphery only in the context of the various, individual approaches, on the basis of which peripheral areas can be defined. Periphery is a specific territory, distinguished by a complex assortment of negative characteristics (including spatial, demographic, socioeconomic and political as well as physical-geographic and cultural characteristics). It refers to a territory that is poorly integrated, in a given place and time, into dominating structures, processes and systems (Schmidt 1998).
The discussion of methodological problems in evaluating the polarisation of space has shown that using a homogenous set of indicators of peripherality to delimitate peripheral areas is rather uncommon. In terms of quantitative approaches, most studies utilise a combination of a wide variety of "types" of indicators. Here again, we are confronted with the above-mentioned problem of the relativity of the term peripherality and subjective perceptions of its meanings.

This broad discussion of the concept of periphery merely confirms the complexity of research on the polarisation of space, or rather, on territorial inequality and its development over time. Such discussion is, nonetheless, vital to current geographical research.

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RÉSUMÉ

Teoretické a metodologické aspekty identifikace a vymezení periferních oblasti


Velkou rozmanitost názorů přinesl přehled definic perifernosti. Přesto jsou některé prvky uvedeným definicím společné. Především jasně převládá ekonomické hledisko. Periferie jsou často chápány jako území ekonomicky málo rozvinutá nacházející se mimo vyspělé regiony. Jedná se o oblasti, které nejsou ekonomicky autonomní, ale závislé právě na těch nejvyspělejších regionech. Dalšími často zmínovanými prvky jsou faktická odlehlost (vzdálenost) od centra osídlení, a to nejen ve smyslu čistě geografickém (dopravní dostupnost – vliv přírodních překážek, nedostatečně rozvinutá dopravní infrastruktura), ale také ve smyslu sociálním (sociální exkluzí apod.). Důležitou roli také hraje možnost podílet se na politických rozhodnutích, kterou periferie obvykle nemají, nebo ji má jen velmi omezenou. Poměrně hojně se objevuje celá řada položek specifikujících socioekonomické charakteristiky periferní oblasti. v rámci problematiky hodnocení polarizace prostoru jsou pak diskutovány hlavní metodologické problémy, se kterými je možné se při konkrétních empirických výzkumech potýkat.

Podle našeho názoru nelze chápat pojem periferie jen v kontextu jednotlivých přístupů, z hlediska kterých lze periferní oblasti definovat. Periferie je totiž specifické území vyjadřující se komplexem negativních charakteristik (např. nízká hustota zalidnění, úbytek obyvatelstva, vysoká míra nezaměstnanosti, nízká vzdálenost atd.). Většinou utrženého území se setkáváme s méně tradičními prvky či aspekty socio-kulturního původu jako třeba etnicita, náboženství, ale i regionální identita, které mohou hrát v jistých ohledech důležitou roli. Jsou však velice obtížné postižitelné a kvantifikovatelné.

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