



STUDIA REGIONALIA

Journal of the Polish Academy of Sciences:
Committee for Spatial Economy and Regional Planning
&
European Regional Science Association
(ERSA) Polish Section

Volume 50, 2017, pp. 87–101
doi: 10.12657/studreg-50-05

SMALL TOWNS IN SETTLEMENT SYSTEMS – THE METROPOLITAN AGE

Piotr Korcelli, Ewa Korcelli-Olejniczak
Institute of Geography and Spatial Organization,
Polish Academy of Sciences,
Twarda 51/55, 00-818 Warszawa, Poland
korcelli@twarda.pan.pl; eko@twarda.pan.pl

Abstract: The category of small towns is progressively polarized under the impact of metropolitan development. There is a growing diversification of such places with regard to functions performed and the overall position in settlement systems at regional and national levels. Aside from the division line which separates these towns that are located within, from those situated beyond the commuting range of large urban centres, this is increasingly related to local, territorial capital held. In general, however, the flattening of urban hierarchy and the decreasing importance of hierarchical linkages affect in particular the role of local service centres, especially in sparsely settled peripheral areas. Concerning the future, three alternative development paths are discussed in the article against the relevant conceptual background. These refer to the cyclical nature of urbanization processes, assume an extrapolation of trends observed or, alternatively, consider a containment of metropolization phenomena. With respect to policy related questions, changes in small town networks in peri-urban zones are identified as a specific, sensitive issue.

Key words: small towns, metropolitan development, settlement systems

JEL codes: R10, O18

1. Introduction

When expressed in terms of the location of cities and their size distribution, settlement systems display a considerable stability at both national and regional levels (Dziewoński 1971; Pumain 2000). Still, their functioning as well as internal morphological patterns evolve under the impact of social, economic and technological change. The shifting position of small urban places in spatial and functional structure of settlement represents an important dimension of these general trends.

In the present article¹, this aspect is traced back to the advent of metropolitan age which was identified in North America as early as the 1920s and became identified with relative distance decay and the rapidly growing human interaction in space (Borchert 1967). This process, which entered an advanced development stage during the late 1970s, along with the progressing globalization and the transition to information processing economy (Hall 1993), has arrived in Poland (in East-Central Europe in general; see Korcelli & Korcelli-Olejniczak 2015) together with the systemic transformation of 1989–1990.

The functions of small towns, their spacing and hierarchy were attracting considerable scientific interest in mid-twentieth century, along with the dissemination of Walter Christaller's (1933) central place theory (Harris & Ullman 1945; Smailes 1944; Berry & Pred 1961)². Since then, the main focus on the urban studies agenda has shifted towards the multiple questions concerning metropolitan development. Using a phrase coined by Elisabeth Lichtenberger (1994, p. 8), "urban research is transformed into metropolitan research, with the concept of inter - metropolitan competition assuming the role of a new scientific paradigm". Still, a revival of the interest in small town studies can now be observed, along with the increasing perception of life quality among the factors shaping the contemporary patterns of human settlement.

At this point, a relative character of the small town definition should be noted. The population size comprises just one of its basic components, along with the range of influence and the administrative status. Even in respect to the former criterion (20 thousand inhabitants being used most frequently as the upper limit in empirical, including the ESPON studies in Europe), the division lines between the categories of small and medium sized towns, as well as that of small cities (see: Bell & Jayne 2006) tend to be regarded as flexible.

In this article, questions pertaining to the changing role of small towns, at both the regional and the national level, are posed mainly from the angle of their relations *vis-a-vis* large urban centres. The aim is to outline the scope of change to be considered foreseeable in a mid term. Factors affecting the position of small urban places are discussed in the first section against selected theoretical concepts. The second section focuses on alternative development trends and their preconditions as perceived from a future perspective.

2. Theoretical concepts, trends and factors of change

As pointed out by John W. Webb (1959), the decreasing friction of space and the growing spatial population mobility lead to the increasing specialization with

¹ The manuscript was prepared as a part of studies carried on in the framework of National Science Centre's research project No: 2015/19/B/HS4/00114 - Small towns in North-Eastern Poland – patterns and factors of functional change.

² In Poland at that time numerous studies were devoted to "the small town crisis", a consequence of Second World War and of subsequent political and economic change (Kostrowicki 1953; Dziewoński et al. 1957; Kielczewska-Zaleska 1964).

respect to goods and services provided by individual urban places. In this process, and owing to the appearance of new goods of higher market range, the tributary areas of larger centres expand at the cost of those served by smaller ones. This signifies a concentration trend within the central place hierarchy, via elimination of its lower tiers. Negatively affected are in particular those local service centres situated in predominantly rural areas due to the concentration of farm land and a thinning-out of rural population densities.

Gerald Hodge (1965, p. 88), who illustrated this trend by using the case of Canadian province of Saskatchewan, predicted a decline in the number of such places by some 20 percent over a period of two decades. He wrote: “The form of the space economy in rural parts of the Great Plains has changed dramatically in the past twenty years. There are fewer farmers and fewer, but much larger, farms, and the farms have been highly mechanized and commercialized with a consequent altering of the kinds and volume of goods and services needed on the farm. Improvements in means of movement have tended to make rural people less dependent upon their local trade centres for these goods and services, even when they can be supplied.”

Another pattern of change can be found in zones surrounding large cities (Berry 1960).

As spatial accessibility improves, small towns – local service centres of various rank, once engulfed by the wave of suburban development become integrated into the expanding metropolitan communities by acquiring new roles of sub-centres specialized in residential, commercial, recreational or industrial activities performed at the level of metropolitan area’s constituent parts. This change was interpreted by B.J.L. Berry as a special case of centralization trends operating throughout urban hierarchy – the entire central place system.

Such a process entails the rapidly increasing role of large urban centres in the organization of economic activities and social life in space (Pred 1975). Their dominance is expressed in terms of the emergence of metropolitan regions (Duncan et al. 1960). At a national urban system level, spatial organization is conceptualized so as to comprise two interdependent elements (Berry 1973, p. 8): “a. A system of cities, arranged in a *hierarchy* according to the functions performed by each. Corresponding *areas of urban influence* or *urban fields* surrounding each of the (major) cities in the system”.

Based on the new pattern of human interaction in space (Maik 1988), the metropolitan dominance indicates the formation of spatial structures and functional linkages that are superimposed upon, and are transforming the pre-existing urban system (Korcelli-Olejniczak 2012, p. 39). In this spatial pattern, small towns arranged in a flattened hierarchy³ and linked with individual metropolitan cities as well as intermediate level centres of subdominant rank, are increasingly differentiated with respect to economic and social functions performed. At the same time, their fortunes become perceptively dependent upon the territorial position held, be it a location within a metropolitan area (daily urban system of a metropolis), or in a more distant, regional hinterland zone.

³ One with a gradually decreasing number of hierarchical levels.

The pattern of spatial population redistribution that corresponds with the vertical concentration of economic and social functions in urban systems is formulated as a rule of hierarchical migration flows (Korcelli 1987). In the process of inter-urban migration, urban places in a given population size category, when considered as an aggregate are expected to be net gainers in their population exchange with places in each of the smaller-size classes, and net losers with respect to each of the larger-size groups. These relations are defined in terms of differences between relevant destination – specific outmigration rates. In this pattern of migration flows, small towns which comprise the lowest size category are characterized by the largest values of total outmigration rate. Their migration losses tend to be partly compensated for by an inflow of migrants from rural areas, as well as relatively higher in comparison to larger cities, birth rates.

Such a configuration of internal migration is characteristic for the stage of urbanization processes (including the metropolization, as well as an earlier, the so-called agglomeration phase), at which rural-to-urban migration gives way to inter-urban flows (Zelinsky 1971). Depending on the distribution of absolute volumes of migratory movement, it can yield a dynamic growth of large or, as in the case of Poland during periods preceding the systemic transformation, in particular the medium sized cities. The persistence of this model, one attributed to the ascendancy of spatial concentration forces at both a national and a regional level, was questioned at the end of 1970s, with a turnaround of the pattern of migration flows as observed in Western Europe and North America, to the benefit of smaller urban places, including those situated in peripheral areas (see, among others: Vining & Kontuly 1978). This, basically unanticipated shift, referred to as the *counterurbanisation* phenomenon (Berry 1978), pointed to an inadequacy of the existing urban development theory (Zelinsky 1977), as the various explanatory factors proposed, of economic, cultural, or policy – related nature, failed to provide a consistent explanation of the observed change (Bourne 1980). Since these trends were basically discontinued by giving way to a relative re-centralisation during the 1980s (Cheshire 1995), they could largely be interpreted as a deviation from the long-term development course.

Conversely, in the concept of *differential urbanization* (Geyer & Kontuly 1993; Geyer 1996), the migration turnaround phenomenon is incorporated into a secular, cyclical urbanization process consisting of consecutive phases of *urbanization*, *polarization reversal* and *counterurbanization*, in which the mainstream migration flows are directed towards the large, medium-sized, and small cities, respectively. The driving mechanism of this change is identified as a transition from *productionism* (the notion used by B.J.L. Berry, 1978) to *environmentalism* oriented motivations of migration moves – a growing weight attached to quality of life in the choice of residential, and, increasingly, also of work place location.

The *differential urbanization* model still leaves some basic questions unanswered. First of all, since a shift back to *productionism* orientation is not easily conceivable, it remains unclear which factors become responsible for the continuation of the process once its first cycle is completed. Secondly, owing to a somewhat blurred distinction made between the national and the regional (as well as the subregional) level, the crucial differentiation in population dynamics between small towns

situated within and those located beyond the metropolitan areas is not really captured in the model. Preference for small town life (Gordon 1979), as embodied in the *environmental* perspective is expressed by both the suburbanization and the ex-urbanization phenomenon; in fact, primarily by the former in terms of the number of migration decisions.

In the present course of accelerating metropolitan development, which is shaped by the mutually interwoven forces of globalization and the rapidly expanding role of information flows in both economic activity and social life, a progressive diversification within the category of small towns with regard to functions performed is observed. At the same time, such places become increasingly polarized in terms of the overall position held in urban systems. Initial expectations concerning the spread and the effect of tele-working have hardly materialized (Pumain 2002), since denser interaction networks generate new demand for more intense, face-to-face contacts.

These trends, together with the expansion of higher-order professional services, both business and individual clientele (health, higher education) oriented, foster the metropolitan cities in their role of the nodes in spatial organization at a broad resolution level, from regional to transnational scale. While adjusting their functional structure to the changing economic and social determinants, the large cities continue to deconcentrate by shedding their land intensive activities onto peri-urban zones of mixed rural-urban land use, described as “rapidly growing multifunctional areas with high transport dependence, fragmented communities and degraded landscapes” (Ravetz & Loibl 2011, p. 30).

Economic spread effects radiating from large urban centres rarely extend further than the first ring of smaller cities located beyond the metropolitan area; their labour markets being partly integrated with the metropolitan market (Fassmann & Goergl 2010). More distant places are typically affected by backwash effects, including human capital outflow.

While looking back to the classical study by J.W. Webb (1959), on: *Basic concepts in the analysis of small urban centres in Minnesota*, John R. Adams (2017, p. 2) gives the following account of the contemporary condition of such places:

“... the rural towns remote from metro areas, and which depend on natural resource exploitation, have been hurting. The money... derived from the local export-based economy, and supplemented by earnings of long-distance commuters, has been diverted to the modern suburban shopping malls along the Interstate Highways. Meanwhile local ‘Main Street businesses’ and their associate real estate values have gone bust.

The important exceptions to general decline have been: (1) places within 60-to-90 minute automobile commuting distance from major urban or metropolitan job centres, or (2) the occasional town that has managed to develop and retain a highly successful manufacturing company selling its products to the rest of the country or abroad, or (3) seats of county government, or (4) college or university towns. There are several such towns in Minnesota, and quite a few in Wisconsin where small town and small city manufacturing often is still flourishing. Across the country, though, the patterns of success, holding on, or decline are mixed.”

As J.R. Adams notes, at present there is in fact very little scientific inquiry underway in the United States that pertains to small town and rural life.

In Europe alike, with a clear focus being put on large cities and metropolitan areas, their internal social divisions and mutual competition, relatively little (though with notable exceptions, see: Bell & Jayne 2006) can be found in the recent research on urban change, including cross-national comparative studies, which concerns explicitly the smaller urban places. The importance of agglomeration effects (Krugmann 1995) and production clusters (Porter 2003) as factors supporting the metropolization of space, is emphasized. So is the role of globalization processes, as seen in their varied dimensions, such as the formation global city networks (Derudder et al. 2012). Also, such novel notions as *smart, innovative and learning* city are used primarily in reference to large urban centres.

In spatial policy focused studies, including the ESPON projects, the small and medium sized towns are often considered as secondary components of spatial and functional structure of settlement, a kind of residuum of settlement systems which are shaped by metropolization processes (Gloersen et al. 2007)⁴. Rather than by using an analysis of employment composition, as practiced generally in earlier urban typologies, the functions and the role of small towns are now typically identified on the basis of their relations with the nearest metropolitan centre, or centres. Ways to strengthen the territorial position of smaller urban places (ESPO 1.1.1, 2004) are sought in the improvement of their mutual spatial accessibility, though also in increasing their functional specialization.

Such an approach is exemplified by a general typology of small and medium sized towns which focuses on their role as performed in a broader territorial context (ESPO 1.4.1, 2008). This role is seen to be largely determined by the accessibility to transportation networks, more specifically by travel time to the nearest large city. Towns that are located within, or at the edge of metropolitan areas, are shown to serve as residential zones or provide locations for industrial and commercial functions, thus augmenting the metro area's overall development potential. In the case of clusters of small medium sized towns situated at a greater distance from a metropolitan centre, their mutual interlinking and functional complementarity is seen to contribute to territorial cohesion at both a regional and national level. Finally, towns which are situated in peripheral regions and perform the role of local service centres for the surrounding rural areas, can succeed in developing some unique functional specialization based upon endogenous resources. For the latter town category, however, it is noted that the diminishing friction of space, i.e. decreasing relative travel cost and travel time tend to bring a loss of trade and other service functions that relocate to higher ranking urban centres. Hence, the future position of these small urban places will increasingly depend on such assets as access to attractive natural landscape and high life quality conditions in general.

At a national scale, problems and prospects facing small urban centres may be exemplified by the case of Federal Republic of Germany, where central place theory

⁴ Also, the role of small towns in rural development has focused the attention of planners and researchers; see: Courtney, Lepicier, Schmitt 2008).

is applied as a spatial policy concept (Blotevogel 2005). In that country, with a very dense settlement network, a concentration in the urban hierarchy as brought by economic, technological and demographic change is evidenced by a contraction in the number of central place levels which are identified for the purpose of planning practice, by a gradual elimination of the lowest – the small centre (*Kleinzentrum*) level. At the same time it is recognized that the role of centres of the next lowest level (*Grundzentrum*), in contrast to those at intermediate and upper levels, which also perform the so called development functions, is restricted to basic service functions of local range (Greiving & Flex 2016).

In Poland, trends observed are rather specific, since according to the official statistics, towns with less than 10 thousand inhabitants are accounting for a growing fraction of total urban population – from 8.7 to 9.7 percent in the period of 1990–2015 (GUS 2016). This, however, is a statistical fallacy which mirrors the recent restitution of town rights of a number of small settlements (Krzysztofik & Dymitrow 2015) on one hand, and a very incomplete registration taken of migratory moves, both internal and international on the other. The suburbanization phenomenon and labour – related migration outflow abroad, particularly large in the years following Poland's entry to the EU (2004), and originating over-proportionately from smaller towns and rural areas (Okólski & Fihel 2008), have brought about a decomposition of the earlier, hierarchical pattern of migration flows within the national settlement system. Nonetheless, in the light of statistics based on domicile registration, which fail to account for a major part of de facto migration moves, cities of over 100 thousand inhabitants maintain net migration gains vis-à-vis smaller urban places (Kupiszewski et al. 1998; Korcelli 2008), while at the same time experiencing a considerable population outflow towards the surrounding areas of rural administrative status.

As an effect of the systemic transformation, as well as the decreasing friction of space, the place of small towns in Poland's settlement system is being redefined (Heffner 2005; Heffner & Solga 2006; Marszał 2009; Bartosiewicz & Marszał 2011). Their economic activities, the functional relations in space, as well as inner morphology are becoming re-shaped under the impact of the dominant metropolization phenomena. The set of small towns is increasingly differentiated with regard to the social and economic situation of its individual units. Negative consequences of the external change have affected in particular the former mono-functional industrial centres and, in spite of considerable inertia observed in this respect (Sokołowski 1999, 2006), also those among small urban places that perform the role of local service centres for the predominantly rural territory. The latter trend is of a much longer, in fact a secular character.

As elsewhere in Europe, in Poland it is the large cities and metropolitan areas that focus the attention of urban research and spatial policy, at both the national and a regional level (KPZK, 2012). Studies concerning smaller towns, which are relatively numerous, often look at functional change that occurs in such places from the perspective of their situation within city regions (Heffner & Marszał 2008; Korcelli-Olejniczak 2013; Heffner & Twardzik 2014; Czapiewski et al. 2016). While spread effects in the vicinity of large urban centres involve a growth of residential, and in

some cases also industrial functions, the local service functions of small towns tend to decline. Those towns situated beyond the city commuting range are typically exposed to overall backwash effects that involve a loss of human capital as well as specialized functions. In the case of numerous small places this also pertains to services of more ubiquitous character which, following their notable expansion during the earlier period of systemic transformation, now tend to suffer from shrinking local market potential. Within more distant regional hinterland zones, however, small urban places are often found to continue to perform as local service and production centres for the surrounding rural areas. At the national scale, these socioeconomic polarization trends are reflected in increasingly articulated territorial division lines between metropolitan and non-metropolitan areas (Domański 2008).

3. Future perspectives

The basic question concerning the future of small towns is whether the metropolitan development represents a reversible or, like the urbanization phenomenon of which it is a part, a finite process. If the latter is true, then it can be assumed that in a model case, at a national scale the share of metropolitan areas in total population number and (or) the total volume of economic activity tends to increase until it approaches asymptotically a point of saturation – a certain maximum level at which the stability is reached. Deflections of the curve, such as the *counterurbanization* phenomenon of the 1970s, can be interpreted as deviations from the otherwise regular trajectory, of lesser or greater magnitude, caused by some external, economic, social and political factors of basically transitional type.

Once, however, the settlement patterns which have been molded under the prevailing metropolization regime become ill-adapted to fundamentally changing external conditions of natural or human origin, a renaissance of small and medium sized towns appears to be the viable alternative, as it is such places that offer suitable locations not only in terms of residential functions, but also for a broad spectrum of industrial and service sector activities.

This change may be conceptualized either in terms of a new, longer development path or, as in the *differential urbanization* model (Geyer 1996), in the form of a single phase – a part in the general urbanization cycle.

In scenario-based studies on future patterns of human settlement in Europe (PLUREL, 2007; Kunzmann 2008; ESPON 3.2, 2007; ESPON ET 2050, 2013), both of these two perspectives can be found, even if only implicitly. Prospects concerning small and medium sized towns, usually treated as one broad category, are generally presented against the future situation of metropolitan cities and metropolitan areas. In these projection that assume a continuation of observed development trends, towns that are located within daily commuting range of major cities are shown to experience a dynamic development in the future, by attracting economic activities, new residents and public services from both the metropolitan core and inter-metropolitan, urban and rural places. Development opportunities are also attributed to those among smaller towns, situated further out in metropolitan hinterland zones

that house prominent institutions, such as universities and clinical hospitals, are conveniently located with respect to major transportation nodes, in particular commercial airports and harbours, or to open space of high natural quality. The towns which fail to meet the above criteria are shown to be threatened by migration outflow and a loss of more specialized economic functions. Finally, according to studies referred to above, in the peripheral areas, affected by decreasing population density, the settlement network undergoes a further concentration process, one involving a continuing erosion of economic base of local service centres, and accompanied by progressing population ageing and social dysfunctions.

The anticipated continuation of metropolization trends in the future is based on assumptions concerning rapid technological progress, in particular the expansion of the ICT sector, which would lead to overall economic growth, an increase in spatial population mobility and a consolidation of inter-metropolitan networks. It would also stem from progressing globalization and prevailing neo-liberal approaches to the role of planning and spatial policy.

In contrast to the above, a discontinuation, followed by a turnaround of observed trends, presented in the form of alternative to the above scenarios, is assumed to be conditioned upon the growing impact of negative externalities of metropolitan development and of the dim sides of big city life, rather than on the attracting force of small urban places. Such negative aspects are seen to be related to international migrations of large scale, population ageing, or rising energy cost. The latter factor in particular is identified as potentially responsible for a more important role of smaller urban centres and economic linkages of local range in future spatial organization of settlement. It implies a gradual shift from individual to collective means of transportation in passenger traffic and a notable decrease in the range and intensity of daily work commuting. It suggests a contraction of suburban and peri-urban development and a return to more compact urban forms. All this calls for long-term, proactive and well coordinated action aiming at territorial cohesion, as well as for a greater responsibility given to public policy and its bodies. Whereas this may in a way lead to a comeback of traditional, hierarchical patterns of urban networks, it does not seem, however, to preclude a concentration of population and economic activity in large cities at the expense of smaller urban places.

A question arises, how should a change in the position held by small towns in an urban system be actually measured. This was already an issue in the 1970s, as reflected by the debate between the proponents of the “clean break” (Vining & Strauss 1977) and of “the development wave” (Gordon 1979)⁵ interpretations of the *counterurbanization* phenomenon. The latter was more recently related to as a “counter-urbanization cascade”⁶ by A.G. Champion (2002), in his explanation of population gains observed at the lower levels of the urban hierarchy in Britain.

⁵ The term of *clean break* was introduced in order to denote a radical departure from, rather than a modification of past trends. Conversely, *the development wave* stresses a *de facto* trend continuation, with areas situated at increasingly large distance from metropolitan centres involved in the suburbanization process.

⁶ This term is to express a transfer of population growth to urban places of successively lower hierarchical levels over time.

Today, along with the progressing *peri-urbanization* process (Piorr et al. 2011), it becomes even more difficult to draw the lines between these among small towns that owe their growth to spatial extension of metropolitan areas, i.e. deconcentration of population and economic activity at the sub-regional level, and those whose positive change may be interpreted in terms of demographic and functional recovery of smaller urban places in general.

The cyclical nature of urban change is not really considered in the scenario based, cross-national studies herewith referred to, although it often finds a reflection in research on individual cities and metropolitan areas, as well as on national settlement systems (Braun 1987; Champion 2002; Rerat 2012). When applied for the sake of future projections, such an approach requires the recognition of an internal mechanism responsible for the revolving character of the process. As pointed out earlier, the successive dominance of *productionism* – and *environmentalism* – oriented motives of interurban migration moves, as assumed in the *differential urbanization* concept (Geyer 1996) does not quite meet this criterion.

Such a factor, one internal to the migration phenomenon, can be identified with the relationship between the individual's age and his/her propensity to move, which assumes a regular pattern, with a distinct peak in the age profile for the 20–29 years span (Rogers & Castro 1982). Under the prevailing migration regime, in the process of migratory exchange between the large cities and metropolitan areas on one hand, and smaller towns and rural areas on the other, there tends to be a progressing accumulation of the elderly population in non-metropolitan areas. As a consequence, their out-migration potential becomes gradually dissipated which may lead to a turnaround in the volume of flows, i.e. net migration losses being experienced by metropolitan areas, with their relatively younger, and more mobile population. The subsequent stage would again be marked by migratory gains on the part of the latter areas. Whether, or when this sequence (which abstracts admittedly from the role of international migration, large cities oriented in general, as well as of inter-metropolitan moves) may occur, depends upon a broad array of external factors of economic, technological, environmental, political and social character. These include the crucial variables pertaining to population heterogeneity, not only by age, but also ethnicity, lifestyles and values which evolve over time and markedly differ in space.

Which among these approaches can be selected in an attempt to outline the role of small towns in spatial and functional structure of settlement within a foreseeable future? At the present state of knowledge, the turnaround of metropolitan development which, as a result of the intervention of external factors, or as an effect of the intrinsic cyclical nature of the population redistribution process would lead to a return of earlier urbanization forms, do not seem to provide a sufficient bases in this regard. Instead, such an approach may be identified with the one, according to which the metropolitanization process continues to run its course, though at a gradually decelerating pace which implies a mutual mitigation of its driving and the countervailing forces; a kind of flexible equilibrium in a long-term perspective. At such a state, the attracting power of the large cities and metropolitan areas, stemming from their role of centres of corporate control, specialized services and major

transportation hubs would be weighted against the comparative advantage of smaller urban places in the domain of environmental, social and cultural assets.

At this point, the concept of the urban – rural region (Nilsson et al. 2012; see also Korcelli et al. 2012), offers a convenient point of reference for drawing such a future settlement pattern. At its bases, stemming from the idea of rural – urban partnership (Bengs 2005), is the assumption concerning functional complementarity of, rather than competition in city – hinterland, as well as inter – urban and rural – urban relations (which take account of the provision of *ecosystems services*), one which is reflected in a sort of a balance in terms of in- and out-migration incentives offered at each level. Here, as in other concepts, the role of small towns situated in hinterland zones of large urban centres is identified with the life quality factor, but it is also conditioned by the presence of other endogenous resources, including cultural heritage, social capital, as well as the quality of public sector institutions at a local level. These, in addition to the adequate infrastructural facilities are the boundary conditions that allow the smaller urban centres to maintain and to develop a broad range of specialized activities, both in the service and the industrial sectors, based on longer traditions, as well as newly arrived.

4. Conclusion

The re-definition of the position of small towns within spatial and functional structure of settlement is a significant, although to a certain extent a hidden aspect of contemporary metropolization processes which involve an interplay of various factors, both economic and demographic change, as well as shifting societal goals and values. Among trends observed, an increase in the range of urban experience, i.e. the growing differentiation with regard to overall development of small urban centres is a prominent tendency. The first, although by far not a universal division line in this respect extends between these places that are found within the daily commuting range of major urban centres, and those situated in regional hinterland areas, especially in the sparsely settled peripheral zones. Interrelated with this, there is a gradual departure from the transparent urban hierarchy and the prominent role of hierarchical linkages; a flattening of the urban hierarchy and growing irregularities, especially at its lower levels, with local service centres being particularly affected by the concentration process.

Against these established trends, there is a well recognized and growing importance of endogenous resources which form the local, territorial capital (Camagni 2002; see also Markowski 2015) in explaining the stories of growth, stability and decline of individual urban places. This is not interpreted as non-influence of factors such as transportation accessibility, or administrative functions performed, but to be seen in the sense that the latter no longer comprise the major determinants of the observed and future direction of change.

At this point some questions concerning the future role of spatial policy should be posed. When ruling out a strong intervention on the part of external factors of natural or political character, one may speak of alternative paths for continuing

metropolitan development in a mid-term. The trends extrapolation means its ever further expansion into peri-urban zones, with their scattered, amorphous settlement patterns. Conversely, the metropolitan containment implies its integration into the existing town networks. Further out from major urban centres, these are the linkages with wider, national and global markets that bring in any case new opportunities and new risks as to the future of many among the small urban places.

Finally, whereas the overall position of small towns as durable components of settlement systems will be sustained in the foreseeable future, questions are opened concerning shifts in their economic and social functions, together with related linkage patterns. Under the continuing expansion of the influence range of metropolitan cities one should expect growing differences among small urban places in terms of functions performed, together with a growth in specialization of towns' functional profiles. If the present-day *re-urbanization* tendencies gain momentum, deconcentration of residential functions will become more spatially selective, and more strongly related to local, endogenous resources of individual urban places. The selectivity in location choice in general will remain particularly high in case of small towns in national periphery areas.

References

- Adams JR (2017) Urban and Rural Definitions. Personal Communication, Department of Geography, University of Minnesota, Minneapolis.
- Bartosiewicz B, Marszał T (2011) *Gospodarka małych miast małych miast z perspektywy 20 lat transformacji*. Wydawnictwo Uniwersytetu Łódzkiego, Łódź.
- Bell D, Jayne M (eds) (2006) *Small Cities: Experience beyond Metropolis*. Routledge, Abingdon, UK.
- Bengs Ch (2005) Urban - Rural Relations in Europe. In: *Urban - Rural Linkages Approach to Sustainable Development*. United Nations Human Settlement Programme, UN-HABITAT, Nairobi.
- Berry BJL (1960) The Impact of Expanding Metropolitan Communities Upon the Central Place Hierarchy. *Annals of the Association of American Geographers* 50: 112–116.
- Berry BJL (1973) Growth Centers in the American Urban System. Volume I: Community Development and Regional Growth in the Sixties and Seventies. Ballinger, Cambridge, Mass.
- Berry BJL (1978) The Counterurbanization Process: How General? In: Hansen NM (ed) *Human Settlement Systems. International Perspectives on Structure, Change and Public Policy*. Ballinger, Cambridge, Mass.
- Berry BJL, Pred A (1961) *Central Place Studies: A Bibliography of Theory and Applications*. Regional Science Research Institute, Philadelphia.
- Blotevogel HH (2005) Zentrale Orte. In: *Handwoerterbuch der Raumordnung*. Akademie fuer Raumforschung und Landesplanung, Hannover.
- Borchert JR (1967) American Metropolitan Evolution. *Geographical Review* 57(3): 303–332.
- Bourne LS (1980) Alternative Perspectives on Urban Decline and Population Deconcentration. *Urban Geography* 1 (1): 39–52.
- Braun GO (1987) Theoretical Aspects of Complex Transition in Urban Systems. In: Bourne LS (ed.) *Second General Meeting of the IGU Commission on Urban Systems in Transition*. Pampolna, Italy.

- Camagni R (2002) On the Concept of Territorial Competitiveness: Sound or Misleading? *Urban Studies* 39 (13): 2395–2411.
- Champion AG (2002) Population Change and Migration in the British Urban System. In: Geyer HS (ed.) *International Handbook of Urban Systems*. Edward Elgar, Cheltenham.
- Cheshire P (1995) A New Phase of Urban Development in Western Europe? The Evidence for the 1980s. *Urban Studies* 32(7): 1045–1063.
- Courtney P, Lepicier D, Schmitt B (2008) Spatial Patterns of Production Linkages in the Context of Europe's Small Towns: How Are Rural Firms Linked to the Local Economy? *Regional Studies* 42 (3): 355–374.
- Christaller W (1933) *Die zentralen Orte in Sueddeutschland: Eine Oekonomischgeographische Untersuchung ueber die Gesetzmaesigkeit der Verbreitung und Entwicklung der Siedlungen mit staetischen Funktionen*. Gustav Fischer Verlag, Jena.
- Czapiewski K, Bański J, Górczyńska M (2016) The Impact of Location on the Role of Small Towns in Regional Development: Mazovia, Poland. *European Countryside* 4: 413–426.
- Derudder B, Hoyler M, Taylor PJ, Witlox F (eds) *International Handbook of Globalization and World Cities*. Edward Elgar, Cheltenham.
- Domański B (2008) Rozwój polskich metropolii a regiony peryferyjne. In: Markowski T (ed) *Rola polskich aglomeracji wobec wyzwań strategii lizbońskiej*. Studia KPZK PAN 120. Warszawa.
- Duncan OD, Scott WR, Lieberman S, Duncan B, Winsborough HH (1960) *Metropolis and Region*. The Johns Hopkins Press, Baltimore.
- Dziewoński K (1971) General Theory of Rank-Size Distributions in Regional Settlement Systems: Reappraisal and Reformulation of the Rank-Size Rule. *Papers of the Regional Science Association* 29: 73–86.
- Dziewoński K, Kiełczewska-Zaleska M, Kosiński L, Kostrowicki J, Leszczycki S, (1957). *Studia geograficzne nad aktywizacją małych miast*. Prace Geograficzne 9, IG PAN, Warszawa.
- ESPON 1.1.1 (2004). *The Role, Specific Situation and Potentials of Urban Areas as Nodes in a Polycentric Development*. Final Report. European Communities, Luxembourg.
- ESPON 3.2 (2007) *Scenarios on the Territorial Future of Europe*. Final Report. European Communities, Luxembourg.
- ESPON 1.4.1 (2008) *The Role of Small and Medium-sized Towns*. Final Report. European Communities, Luxembourg.
- ESPON ET 2050 (2012). *Territorial Scenarios and Visions for Europe*. Interim Report. The ESPON Monitoring Committee, Luxembourg.
- Fassmann H, Goergl P (2010) Wachsende Sradtregion – Modelrechnungen zum Bevoelkerungswachstum in der Stadregion Ost. *Mitteilungen der Oesterreichischen Geographischen Gesellschaft* 152: 183–200.
- Geyer HS (1996) Expanding the Theoretical Foundation der Differential Urbanization. *Tijdschrift voor Economische en Sociale Geografie* 87(1): 44–59.
- Geyer HS, Kontuly TM (1993) A Theoretical Foundation for the Concept of Differential Urbanization. *International Regional Science Review* 15(2): 157–177.
- Gloersen E, Dubois A, Schmidt P (2007) *The Role of Medium-sized Towns for Spatial Development*. Nordregio, Stockholm.
- Gordon P (1979) Deconcentration Without a “Clean Break”. *Environment and Planning A* 11: 281–290.
- Greiving S, Flex F (2016) *Neuaufstellung des Zentrale-Orte-Konzepts in Nordrhein Westfalen*. Arbeitsberichte der ARL 17, Akademie fuer Raumforschung und Landesplanung, Hannover.
- GUS (2016) *Demographic Yearbook of Poland*. Central Statistical Office, Warszawa.
- Hall P (1993) Forces Shaping Urban Europe. *Urban Studies* 30(6): 883–898.

- Harris ChD, Ullman EL (1945). The nature of cities. *Annals of the American Academy of Political and Social Science* 242: 7–17.
- Heffner K (2005). Małe miasta a rozwój lokalny i regionalny. *Prace Naukowe, Akademia Ekonomiczna w Katowicach, Katowice*.
- Heffner K, Marszał T (2008) Ośrodki lokalne w strefie oddziaływania wielkich miast. *Biuletyn KPZK* 138, Warszawa.
- Heffner K, Solga B (2006). Small Towns as Local Economic Centres in Rural Areas. *Bulletin of Geography. Socio-Economic Series* 6: 77–88.
- Heffner K, Twardzik M (2015). Leaching Functions from the Outer Metropolitan Zones (Trade, Services). Increasing Peripherality of Small Towns and Rural Areas. *Journal of Economics and Management* 19 (1): 196–209.
- Hodge E (1965) The Prediction of Trade Center Viability in the Great Plains. *Papers and Proceedings of the Regional Science Association* 15: 87–115.
- Kielczewska-Zaleska M (1964) Changes in the Functions and Structure of Small Towns In Poland. *Geographia Polonica* 3: 78–92.
- Korcelli P (1987) Demographic Forces of Inter Urban Deconcentration. In: Friedrich P, Masser I (eds) *International Perspectives of Regional Decentralisation. Schriften zur Oeffentlichen Verwaltung und Oeffentlichen Wirtschaft* 87: 44–60.
- Korcelli P (2008) System osadniczy Polski – tendencje i uwarunkowania przemian. In: Markowski T (ed) *Koncepcja Przestrzennego Zagospodarowania Kraju a wizje i Perspektywy przestrzennego zagospodarowania Europy. Studia KPZK PAN* 122, Warszawa.
- Korcelli P, Grochowski M, Kozubek E, Korcelli-Olejniczak E, Werner P (2012). Development of Urban-Rural Regions: from European to Local Perspective. *Monografie* 14, IGiPZ PAN, Warszawa.
- Korcelli P, Korcelli-Olejniczak E (2015) Metropolitan Transition in East-Central Europe. *Mitteilungen der Oesterreichischen Geographischen Gesellschaft* 157: 29–49.
- Korcelli-Olejniczak E (2012) Region metropolitalny – pojęcie, struktura przestrzenna, dynamika. *Prace Geograficzne* 135, IGiPZ PAN Warszawa.
- Korcelli-Olejniczak E (2013). Warsaw Urban-Rural Region – an Alternative Development Perspective. *Geographia Polonica* 86 (2): 153–166.
- Kostrowicki J (1953) Problematyka małych miast w Polsce w związku z badaniami nad warunkami ich aktywizacji. *Przegląd Geograficzny* 25(4) 12–52
- Krzysztofik R, Dymitrow M (eds) (2015) *Degraded and Restituted Towns in Poland. Origins, Development, Problems*. University of Gothenburg, Gothenburg.
- Krugmann P (1995) *Development, Geography and Economic Theory*. MIT Press, Cambridge, Mass.
- Kunzmann K (2008) Futures for European Space 2020. *Journal of Nordregio* 8(2): 12–15.
- Kupiszewski M, Durham M, Rees P (1998) Internal Migration and Urban Change in Poland. *European Journal of Population* 14: 265–290.
- Lichtenberger E (1994) Das metropolitane Zeitalter in West und Ost. *Mitteilungen der Oesterreichischen Geographischen Gesellschaft* 136: 8–36.
- Maik W (1988) Rozwój teorii krajowych i regionalnych układów osadnictwa. *Seria Geografia* 37. UAM, Poznań.
- Markowski T (2014) Territorial Capital as an Objective of Integrated Development Planning. In: Klasik A, Kudłacz T (eds) *Integrated Development and Spatial Management of Urban Areas. Polish Experience*. KPZK PAN, Warszawa.
- Marszał T (ed) (2009) *Struktura funkcjonalna małych miast*. Wydawnictwo Uniwersytetu Łódzkiego, Łódź.
- Nilsson K, Pauleit S, Bell S, Aalbers C, Nielsen TS (eds) (2013) *Peri-urban Futures: Scenarios and Models for Land Use Change in Europe*. Springer, Heidelberg.

- NSDC (2012) National Spatial Development Concept. Ministry of Regional Development. Warszawa.
- Okólski M, Fihel A (2008) Bilans demograficzny Polski. Ekspertyza. Koncepcja Przestrzennego Zagospodarowania Kraju 2033. Ministerstwo Rozwoju Regionalnego Warszawa.
- PLUREL (2007) Scenario Framework. PLUREL Deliverable D 1.3.2. Centre for Urban and Regional Ecology, University of Manchester, Manchester.
- Porter ME (2003) The Economic Performance of Regions. *Regional Studies* 37(6/7): 549–578.
- Pred AR (1975) On the Spatial Structure of Organizations and the Complexity of Metropolitan Interdependence. *Papers of the Regional Science Association* 35: 115–142.
- Pumain D (2000) Settlement Systems in the Evolution. *Geografiska Annaler* 82B (2): 73–87.
- Ravetz J, Loibl W (2011) The Dynamice of the Peri-urban: Global Change and Regional Response. In: Piorr A, Ravetz J, Tosics I (eds) *Peri-urbanisation in Europe. Towards European Policies to Sustain Urban-Rural Futures*. Academic Books life Sciences, University of Copenhagen.
- Rerat p. (2012) The New Demographic Growth of Cities: the Case of Reurbanisation in Switzerland. *Urban Studies* 49(5): 1107–1126.
- Rogers A, Castro LJ (1986) Migration. In: Rogers A, Willekens FJ (eds) *Migration and Settlement. A Multiregional Comparative Study*. Reidel, Dordrecht.
- Smailes AE (1944) The Urban Hierarchy in England and Wales. *Geography* 29: 41–51.
- Sokołowski D (1999) Funkcje centralne w zbiorze małych miast i większych osiedli wiejskich w Polsce. *Przegląd Geograficzny* 71(3): 295–315.
- Sokołowski D (2006) Funkcje centralne i hierarchia funkcjonalna miast w Polsce. Wydawnictwo Uniwersytetu Mikołaja Kopernika, Toruń.
- Vining DR, Kontuly TM (1978) Population Dispersion from Major Metropolitan Regions: an International Comparison. *International Regional Science Review* 3: 49–73.
- Vining DR, Strauss A (1977) A Demonstration that the Current Deconcentration of Population in the United States is a Clean Break with the Past. *Environment and Planning A* 9: 751–758.
- Webb JB (1959) Basic Concepts in the Analysis of Small Urban Centers of Minnesota. *Annals of the Association of American Geographers* 49: 55–72.
- Zelinsky W (1971) The Hypothesis of the Mobility Transition. *Geographical Review* 16: 219–249.
- Zelinsky W (1977) Coping with the Migration Turnaround; the Theoretical Challenge. *International Regional Science Review* 2: 171–178.