Uneven Development of a Post-Industrial City as Exemplified by Łódź (Poland)

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Zusammenfassung

Ungleiche Entwicklung einer postindustriellen Stadt. Das Beispiel Łódź (Polen)

Die soziale und ökonomische Struktur der Klein- und Großstädte war schon immer sehr komplex. Demgemäß ist der urbane Raum als menschliches Konstrukt, bedingt durch die Komplexität seiner internen Struktur, heterogen und unterliegt vielen Transformationen. Unterschiedliche Dimensionen wie zum Beispiel die objektiven (Gesellschaft, Wirtschaft, Stadtplanung, etc.) oder die symbolische, in der der urbane Raum, basierend auf der Erfahrung und Wahrnehmung seiner Bewohner, eine bestimmte Wertung zugeschrie-

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ben herhält, bilden einen möglichen Referenzrahmen für die Beschreibung der Ungleichheit in der Entwicklung des urbanen Raumes.

In Anlehnung an die theoretischen Konzepte des Postmodernismus und Poststrukturalismus in der Humangeographie, die den sozialen Raum als dynamisch, sich ständig reproduzierend und als Gegenstand unterschiedlicher sozialer Diskurse und Praktiken beschreiben, setzt sich der vorliegende Beitrag mit der Identifizierung der signifikanten Orte in der Stadt Łódź in Polen vor dem Hintergrund ihrer Veränderungen seit dem 19. Jahrhundert auseinander. Methodisch werden sowohl quantitative als auch qualitative Methoden verwendet. Der Fokus des Artikels liegt auf ausgewählten Aspekten des räumlichen Strukturwandels, mit dem Schwerpunkt auf den aktuellen Entwicklungen in der Stadt Łódź, die mit dem neuen Dynamismus in der Transformation der großflächigen urbanen Räume verbunden ist. Die Zielsetzung der Arbeit liegt in der Identifizierung jener städtischen Teile in Łódź, deren Veränderung die Bewohner entweder für "Entwicklung" oder "Krise" halten. Ergänzend wird das Augenmerk auch darauf gerichtet, wie die Wahrnehmung der urbanen Transitionen durch die Stadtbewohner ist, und zwar vor dem Hintergrund der rasanten sozio-ökonomischen Entwicklung einer post-kommunistischen und post-industriellen Stadt, die ein Teil der Europäschen Union ist.

Schlagwörter: Stadtentwicklung, Strukturwandel, Transformationsprozesse, postsozialistische Stadt, postmoderne Stadt, ungleiche Entwicklung, Łódź, Polen

Summary

The social and economic structure of towns and cities has always been characterised by a considerable degree of internal complexity. In consequence, the urban space as a human construct becomes non-uniform, and subject to various transformations over time. Unevenness across urban space may be described by reference to different dimensions, which can be objective i.e.: relating to the society, economy or urban planning or else symbolic, as inhabitants assign values to it, based on their individual experience and imagination.

Drawing on theoretical concepts of a postmodernist and post-structuralist approach in human geography characterising social space as dynamic, reproduced constantly, and deemed to arise out of various different social discourses and practices, the paper uses both, quantitative and qualitative methods to identify the places which are significant for the Polish city of Łódź in context of its transition since the 19th century. Attention was paid to selected aspects of spatial change, with the focus being on the contemporary development of Łódź, as associated with a new dynamism of large-scale urban developments. A key aspect of the work has been the attempt to identify those parts of the Łódź cityspace that inhabitants identify with either development or crisis, as well as the transitions characterising what people imagine in a period of rapid structural change associated with revived investment in the post-communist and at the same time post-industrial city, most especially in the wake of Poland's EU accession.

Keywords: Urban development, urban transformation, transition processes, post-industrial city, uneven development, Łódź, Poland

1 Introduction

The social and economic structure of towns and cities is characterised by a considerable degree of internal complexity (e.g. PACIONE 2009; KAPLAN and HOLLOWAY 2014), and this ensures that the space societies generate is non-uniform, and subject to various transformations over time (CASTELLS 1977). Unevenness across urban space may be described by reference to different dimensions, which can be objective (relating to urban planning, the economy or society), or else symbolic, as inhabitants assess (assign value to) it, by way of individual experience and imagination (cf. KNOX and PINCH 2010). This is of particular importance where a society resembles that of Poland in having come through a multi-dimensional transformation variously described as a transition, modernisation, Europeanisation, globalisation or democratisation.

The social sciences have various means of describing the desired effect of complex cultural, economic and social transformations, resorting to such notions as the post-industrial society, postmodernist society, information society, and so on. In turn, some researchers draw attention to the particular role played by urban societies in cultural transition processes, formulating new concepts such as the post-polis (Rewers 2005) or the exopolis (Soja 1992), with the aim being to fit a description to the whole gamut of profound social and simultaneous spatial transformations ongoing in contemporary cities, and especially metropolises. This same kind of notion is taken up in many strands of critical human geography (see Cresswell 2013), with differentiation in urban space seen as going beyond inevitable unevenness into the realm of "inequality", with all the attendant connotations of inappropriately disparate access to high-price (desirable) resources and positions (cf. Barnes and Curry 1992; Smith and Katz 1993, among others).

The interpretation of change in urban space is thus very much related to the adoption of a defined vision of society. Ruth Panelli (2009, p. 186) distinguishes six approaches to the interpretation of relationships pertaining in society and across space, as seen from the point of view of social geography. One of these is the postmodernist and post-structuralist approach, wherein the nature of social space is dynamic, reproduced constantly, and deemed to arise out of various different social discourses and practices.

Contemporary research into cities' social space, especially in the context of the development of global capitalism, has indeed been linked with the concept of postmodernism (e.g. MINCA 2009; JAMESON 1991). Intellectual ferment in the 1990s and at the turn of the millennium was evoked by the work of David Harvey (1990) and Edward Soja (1996). And, notwithstanding criticism received (e.g. from Barnett 1997 or Merrifield 1999), these ways of thinking remain a source of inspiration, representing a basis for further creative thought when it comes to the description and interpretation of transformations of cityspace, not least in countries in transition into post-communist social and economic systems (see for example Masso et al. 2014, and Vogt 2005).

Inspired by the considerations of Henri Lefevbre (1991), as well as Pierre Bourdieu (1977), David Harvey (1990, pp. 220–221) offered a conceptualisation and interpretation of space in the form of a "grid of spatial practices", whose foundation was reflection on cultural change in the face of ongoing postmodernism. Deemed of particular importance to the geographical interpretation of space was a distinction drawn between three lev-

els of interpretation of spatial practices, i.e. the material spatial practices (experience), representations of space (perception) and spaces of representation (imagination). In the view of HARVEY (i.a. 1990 and 2005), such a complex way of looking at the relationship between a society and space provided for the more insightful interpretation of uneven development in cities and regions, in the circumstances of progressing global capitalism.

In contrast, Edward Soja (1989, 1996 and 1999), applying complex reasoning again relating largely to theses advanced by Lefevbre (1991), as well as Harvey (1990), brought in the concept of the "trialectics of spatiality". This time the argument was that spatiality is a crucial organising base of postmodern culture, it being emphasised that the said spatiality is a force generating relationships in a world ruled by global capitalism. Like that of Lefebvre, this concept also integrates three conceptions of space, i.e. "firstspace" (the material world); "secondspace" (imagined representations of spatiality); and "thirdspace", a conceptualisation that integrates the previous two concepts. In the view of Soja (1999), that thirdspace is of key importance in overcoming opposition from the first (objective) and second (subjective) versions of space. Thirdspace offers liberation from imposed forms, providing for all kinds of ways of uncovering spatiality relating to people's self-fulfilment in the modern world, and hence multi-dimensional, open, fluid, and forever being contested.

The works of Harvey and Soja offer a theoretical base upon which it is useful to describe transformations of space in a large Polish city that is Łódź. Attention was paid to selected aspects of spatial change, with the focus being on the contemporary development of Łódź, as associated with a new dynamism where large-scale urban developments are concerned – all the more so under the influence of programmes receiving EU funding. A key aspect of the work in question has been the attempt to identify those parts of the Łódź cityspace that inhabitants identify with either development or crisis, as well as the transitions characterising what people imagine in a period of rapid structural change associated with revived investment in the post-communist and at the same time post-industrial city, most especially in the wake of Poland's EU accession.

2 Methods

Drawing on the aforementioned theoretical concepts, the focus will be on both, quantitative and qualitative methods used to identify the places which are significant for Łódż in context of its transition. Thus, the work embraced a retrospective method of comparative analysis, involving already-gathered or general knowledge on the functional and morphological development of urban space; as well as a cartographic method using GIS to present types and ages of construction; as well as the utilisation/management of urban space in the context of identified settlement structures and territorial development. On the scale of the city as a whole, the cartographic method allows linkage of a genetic or functional nature to be sought out, in regard to areas, the uses made of them, and the ways in which they are managed. This method is also effective at detecting heterogeneity within a city's physical space. Distinguishing six historical phases to the city's development allows for main processes underpinning the functional and spatial transformations taking place in Łódź post-1900 to be denoted.

Photographic essay-based research on social perceptions of the dynamics to contemporary spatial transformations of Łódź was carried out in the years 2011–2016, among students of the second year of supplementary Master's Degree studies at the Faculty of Geographical Sciences of the University of Łódź. The students represented the kind of deliberately selected group of young people generally regarded as the most attentive and critical observers of reality, while the fact of having five years of geographical education behind them justified treatment of these students as experts particularly sensitive to the space around them. The results obtained attest to recipients' rapid reactions to changes made to both the city's material structure and the new vision of post-industrial Łódź that has been crystallising steadily.

The 197 photographic essays prepared by the students in the years 2011–2016 conformed to the same methodology for qualitative research, and used techniques for the analysis of the semantic field, proposed by R. ROBIN (1980). This entails the search for words and phrases appearing in the analysed text (in this case descriptions offering interpretations of individual photos in the essays) and remaining in the network of relationships with analysed concepts (key words). This allows for a "reading off" of full significances, and the context in which the words occur. The technique derives from linguistic studies commenced with in the 1930s, and it can also link up with a qualitative analysis of content, or discourse analysis. Study of the semantic field entails the arrangement of words that are spoken or used in such a way that they are re-ordered in line with "significant readability". This takes place through the building of an inventory comprising:

- descriptions indicating the features of an object (what it is like, i.e. its nature or mode
 of existence);
- associations indicating what the object is associated or connected with, or accompanied by;
- oppositions indicating what stands in contrast or contradistinction to the object;
- equivalents expressions that can replace the object in defined contexts (i.e. act in an identical way);
- actions towards the object indications as to activity engaged in vis-à-vis the object;
- actions of the object indications of the activity of the object and its consequences, both as a set of visual materials and as the open declaration of an inhabitant regarding the time experienced in the cityspace.

3 The genesis of unevenness in Łódź urban space

When set against other large cities in Poland, Łódź appears as a rather specific centre. It emerged as a result of the vibrant industrialisation processes taking place in the 19th century. Indeed, through to the beginning of the 19th century, this was a small, peripheral town of not more than 500 people. However, during the first hundred years of industrialisation and spatial development, the number of inhabitants mushroomed to 320,000 (though around 500,000 if areas of intense suburbanisation were included). Łódź in fact reached its peak population at the end of the 1980s – at around 850,000. The nearly 30 years since

the end of state-socialism have then seen the city shrink in population by about 150,000 (DZIECIUCHOWICZ 2014).

A characteristic feature of Łódź that took shape in the circumstances of 19th century capitalism was the existence of very marked social and spatial disparities. The structure in terms of urban planning was in large measure shaped in the second half of the 19th century and first half of the 20th. A main factor behind the transformations taking place was large-scale manufacturing, especially in the dominant textile industry. That left areas of high social status as enclaves in the space of an industrial 19th and early 20th century Łódź that was overwhelmingly dominated by the dwellings of the poor populace.

After the Second World War, the communist era brought new industrial districts and large housing estates within the city that resembled buildings from the late 19th century in the one sense that they reflected the ideological primacy of the goal of industrial output, though obviously now from the point of view of communist, rather than capitalist, ideolo-









First row, left: The industrial cityscape of Łódź in its period of big-city growth (1910); – First row, right: The part of Łódź city-centre transformed in the communist era. Here, the Modernist architecture of a multifunctional office, gastronomic and commercial complex (1968); – Second row, left: The devastated landscape of formerly industrial land reflecting the collapse of the textile industry post-1990. Here, the former Uniontex "Defenders of Peace" Cotton Industry Mills (the merged enterprises once in the hands of K. Scheibler and L. Grohmann); – Second row, right: The revitalised post-industrial complex of what were once the Cotton Mills owned by Izrael K. Poznański. Here, the market square at the heart of the *Manufaktura* commercial and entertainment complex.

Source: Cyfrowe Archiwum Łodzian (miastograf.pl), M. Kossowski

Figure 1: Urban landscapes in different periods of the economic and social change taking place in Łódź

gy. Elite housing districts were then occupied by former country-dwellers moving into the city, while the most imposing formerly-residential heritage architecture was occupied by state or public institutions and adapted to new functions, with this leading to their gradual devastation, or at least to an impairment of their once-precious aesthetic features.

Łódź is thus an interesting subject for research into changes taking place both during and after the communist era, including in the circumstances of European Union membership and integration. Under the communist-era economy, no attention was paid to the Lódź's historic value, with the entire heritage of capitalism made over in the direction of the centrally planned economy, and with considerable destruction, in some cases even "annihilation", ensuing. Where the social structure of the city's population was concerned, changes reflected both the influx of new inhabitants and a rise in the overall level of education, and the ongoing existence – and in some senses even the strengthening and augmentation – of Łódź's working-class character. Certainly, industry continued to be totally dominant, and first and foremost textiles. However, the post-1945 period was characterised by chronic underinvestment, and this led – taken together with the aforementioned lack of respect for history – to a fixing and promulgation of the stereotype of Łódź as a grey, dirty city lacking tourist attractions.

Poland's systemic transformation proved partiularly tangible (in the sense of difficult) for Łódź. The textile industry was unable to ward off the crisis of the early 1990s, and it was perhaps not without significance that it had a predominantly female workforce. The industry contracted, and in effect collapsed, as eastern markets (especially those of the former USSR) became inaccessible. That meant a harder struggle for Łódź than for any other Polish city affected by the transformation. Unemployment, especially among women, had to be coped with, along with a worsening of the situation regarding most of the social ills, the emergence of enclaves of extreme poverty and exclusion and the physical degradation of a great deal of the cityspace.

However, while most of the large textile and clothing factories closed, the status of Łódź (plus adjacent towns and villages) as Poland's main centre of the textile industry never changed. Production transferred from the large mills to various small and medium-sized enterprises, many of which rose up from the ruins of the old factories, making use of their buildings, machinery and workers. The centralised system by which trade had been organised gave way to the founding of Central Europe's largest textile trading hall, which brings together producers and buyers from Poland and other Central and Eastern European countries.

New conditions, especially financial conditions for public and private investments, arose with Poland's 2004 accession to the European Union. However, from the beginning of the 21st century onwards it was possible to note new impulses for social, functional and physiognomic change in the city of Łódź. From being a highly industrialised centre it has been evolving in the direction of a city providing services, up to and including those typical of the metropolitan level. Today's Łódź is seeking a new identity, albeit one that is also based clearly around its cultural past. The opening-up of the city to the influences exerted by globalisation and modernisation are resulting in far-reaching change in its social and material space. Old inequalities present in the urban space are being overlain by new ones induced by either the inclusion or exclusion of particular social groups, inter alia in

respect of flows taking place at European and even global level. This all leaves Łódź as a fascinating subject of academic study as it is fascinating in its own right as a city, with all its social and spatial unevenness existing on varying scales and involving both areas in close proximity to one another (i.e. differences in the advanacement of modernisation and revitalisation efforts in regard to individual buildings, yards and streets) and the city as a whole (with transformations taking place in given city districts).

4 Contemporary dimensions of unevenness in Łódź urban space

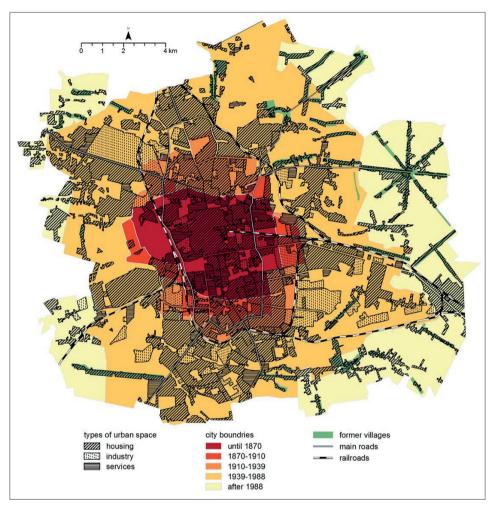
Uneven spatial development in towns and cities is a reflection of three groups of factors, i.e. 1) the primary – associated with the natural background conditions, 2) the social and political, and 3) the genetic and functional. All three groups of factors act synergistically, denoting their augmented joint impact in diversifying elements of urban spatial structure, to the point where marked unevenness arises. The consequence of this kind of combined impact is greater than would result from the straightforward addition of the impacts of separate groups of factors, especially when it comes to the generation of a diversified structure to the settlement "tissue", on its physical, functional and social planes. Urban space is thus the most heterogeneous space in the lives of human beings, given that it came into being at different points in time, in various conditions, and with a view to changing or evolving human needs being met (SULIBORSKI and DMOCHOWSKA-DUDEK 2014).

Today's Łódź is – on the one hand – a set of many previously modified and at the same time independent settlement units of differing origin, historical development, function and urban-planning or architectural features; and – on the other – certain open areas that were once cultivated fields, as well as areas of woodland, surface waters and wasteland, which have been – and continue to be – brought successively into use. Łódź's system of settlement and physical development was dependent on the city's functional development, which was in turn associated with population increase, and hence also with changes of organisation of land already occupied, as well as territorial expansion in general (see Fig. 2).

At least six historical phases to the city's development are identifiable, and the first five of these have become the subject of a process of synthetic description (Table 1; Fig. 3). This has been followed by a broader presentation of contemporary functional processes and their role in the generation of unevenness or heterogeneity in urban space in the transition period, as well as the period of time since Poland acceded to the European Union.

The current stage of transformation in land management in Poland was kicked off by political change in the late 1980s and early 1990s. It can be summed up as a "political, economic and social transformation", and has entailed the transition from the system of Real Socialism back to one based around democracy and the free-market economy. The new political and economic system set in train a series of processes that inter alia translated into a change in the means by which the Łódź city area is managed.

The founding of a new spatial order for Łódź has been proceeding via a variety of pathways, but two among these would seem to be of most importance. On the one hand there



Source: Authors' own elaboration

Figure 2: The territorial development of Łódź in context of contemporary functional structure

is activity in general pursued in the public interest and considered to arise from a planned spatial policy of the local authority, while on the other hand there is (sadly predominant) activity of a mixed speculative and rational nature that most represents the interests of given influential individuals, enterprises and firms.

In practice, the activity of the authorities is seen mainly on a point-by-point basis, with the points in question mainly being located in the city-centre area as conceived broadly (which is to say the area that mainly took shape in the late 19th and early 20th centuries). Initially, there was a process by which the buildings of public institutions were either

Phases of the functional transformation	Characteristics of the functional transformations and their influence on physical development
1423–1820: pre-industrial phase deter- mined by environmental requirements, and based on "Western" urban-plan- ning models.	Spatial development subordinated to people's then-dominant forms of economic activity, i.e. agriculture, trade and craftsmanship. The 1423 formal establishment of Łódź as a town with a German-type charter denoted compliance with rules regarding a regular shape, albeit as somewhat modified by the topography of the Łódka Valley. Mainly involved in agriculture, the towns inhabitants never numbered more than 700 in this period.
1820–1870: rational and planned phase entailing the establishment of new urban-planning forms.	This period began with a planned campaign by the authorities of the Kingdom of Poland entailing both urbanisation and industrialisation ongoing on state-owned parts of the Łódź landed estates. The spatial structure of an industrial city was shaped in the form of belts of settlement that became nodes initiating the later filling-in of urban space with built-up areas. The development was regular, dispersed and monotonous, and the structure (still readily discernible) ensured that for decades Łódź was known for its elongate North-South shape, as well as a unique centre running along what is today Piotrkowska Street for as many as 4 km, plus a checkerboard pattern of intersecting streets.
1870–1918: spontaneous, speculative phase engendering spatial chaos	A process of change ongoing under the influence of rapidly developing manufacturing (in line with Poland's Industrial Revolution). Technological change (mechanisation) went hand in hand with social change (with the enfranchisement of the peasants in 1864, and of the middle-class townspeople in 1866), and these steps forward made possible the dynamic development of highly-specialised textile-related functions to which the cityspace and its surroundings were entirely subordinated. The previously existing diffuse system of settlement in Łódź and lingering areas of open land now rather quickly played host to a mixture of housing and factory construction. Łódź transformed into an industrial metropolis at this point, with physical development processes slipping out of control. It was first and foremost the dynamic nature of the industrial function that created new urban space in Łódź; its development being associated with a free-for-all and huge urban-planning chaos entailing shifts in the locations of built-up areas in comparison with the past situation (first and foremost the dwellings of weavers and millworkers), and with factories and workers' settlements built, as well as magnates' palatial residences and mansions, city-centre tenement houses and various public or commercial buildings (churches, hospitals, banks, etc.). The area within the city limits was mostly filled with substandard urban fabric spreading at great speed, and those limits were eventually crossed in the circumstances of sub-standard development of suburbia.
1919–1939: inter-war years characterised by planning that imbued (or augmented) the existing urban space with forms linked to public services and housing	A process imbuing the earlier spatial chaos with a degree of order, and also witnessing within the city the creation of new public spaces more in tune with social urban-planning, as well as the development of social and administrative functions.

Phases of the functional transformation

Characteristics of the functional transformations and their influence on physical development

1919-1939:

inter-war years characterised by planning that imbued (or augmented) the existing urban space with forms linked to public services and housing

A preference developed for centripetal development that filled in spaces within the city area, as well as contributed to its better ordering. The justification for the spatial policy adopted was marked curtailment of specialised textile-making, given the loss of key eastern markets.

Most activity engaged in by the city authorities was concerned with their own land, on which one-off, dispersed buildings sprang up, as well as else parcelled-off areas of farms, which made way for estates of single-family housing.

This period also saw a further development of administrative and cultural functions, as well as management of the places supplying them. Greater significance (in the 1930s especially) was assumed by the construction of imposing public buildings, as well as detached housing for wealthier social strata, in the Constructivist style. Pursued by the local authorities, the process involving ordering of the cityspace and a return to respect for basic principles of urban planning and architecture did something to improve the lot of many inhabitants, with some of the disparities present being reduced as a result.

1939-1945:

breakdown of the city's functional bases during World War II and the occupation of this part of Poland by Nazi Germany. Destruction in the looted and pillaged city, mass expulsion of Jewish and non-Jewish inhabitants, closure of factories and worsening poverty among inhabitants. The Old Town and Bałuty areas formed the heart of the 4.13 km² Jewish Ghetto the Germans founded, and this ultimately had to accommodate a quarter of one million people, who were then murdered successively in the years to 1944. Many members of the Łódź intelligentsia and business circles lost their lives, while built Jewish heritage was destroyed. The biological and socio-cultural losses, and the destruction and decapitalisation of the whole Ghetto area ensured that already existing disparities in the northern part of the city were made far worse.

1946-1989:

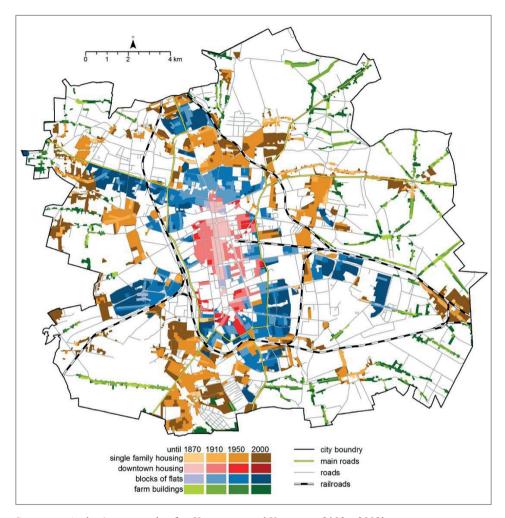
ideological phase based on the assumptions of "Real Socialism", which created new spatial forms (housing estates and residental and industrial districts) beyond the limits of the built-up area dating back to the 19th century or earlier parts of the 20th century

This period saw a dogmatic pursuit of the political, social and economic doctrines of a system dubbed communist, though not resembling it in the literal sense. Łódź came to incorporate 113 settlements, villages and housing estates of differing types whose names continue to function in society. The economic and spatial policy pursued rude roughshod over free-market principles and limitations (e.g. as regards land prices), as well as property rights. Physical development was again subordinated to the dictates of a specialised industrial function, with the key aim being steadily growing output, notwithstanding any social or environmental costs.

Marked and rapid change affected the spatial management of Łódź in the 1970s. This above all entailed a sprawling of urban development beyond the ring of the city's circular railway that had previously served to hold it in check. The basis for the new developments (both residential and industrial) was a remodelling and modernisation of the city transport network. The large new districts, separated from one another spatially, were mainly located to the east or to the west, along the city's main entry and exit routes.

Source: Based on Suliborski 2010; Suliborski and DMOCHOWSKA-DUDEK 2014, as simplified

Table 1: Phases of the functional transformation of the city, and their influence on its physical development



Source: Author's own work, after Kowalska and Kowalski 2002a, 2002b

Figure 3: Differentiated housing-related physical development of Łódź, by type and time of appearance

constructed anew or revitalised. Now, however, the effort assumes a more institutionalised form, within the framework of the "Gmina Revitalisation Programme" in force for the entire city area. This entails whole streets or quarters of the city-centre area coming under renewal (not least of course the so-called "New Centre" of Łódź).

All of the activity referred to is taking place in areas (and at different individual places therein) where the level of city investment is greatest. When put together, this does not look coordinated from either the spatial, the functional or the aesthetic points of view, given that it is effectively a mosaic of changes looking like spatial chaos as much as anything

else, in which new space or revitalised space sits side by side with abandoned, devastated or ruined sites and premises.

The change and differentiation process is taking in space shaped in the period of Real Socialism – with block housing estates and both industrial and warehousing districts. Space associated with housing is receiving an injection of services, mainly existential in nature, with use being made of abandoned premises formerly serving social, administrative or production related functions, though with new (mostly aesthetically displeasing) forms of use also appearing (be these huts or cabins or various kinds, stalls or even larger shops).

While the old and very anonymous block housing estates appearing in the post-communist era are being further humanised, this process also entails the conferment of a social or even elitist significance made apparent in the spatial sense by the fact that these estates are fenced off, and hence closed. The result is further unevenness and disorder in terms of quality, as well as the aesthetics of operational and spatial management.

1. Speculative game-playing in respect of space in the city, with the players being developers, business in general and individual investors.



2. The seemingly non-circumscribed development of individual-level housing, which is consequently characterised by a thoughtlessness regarding spatial and architectural cohesion.



3. Growing division of land, as manifested in an increasing number of separate plots of widely differing size, and consequently in an ever increasing number of internal barriers and boundaries.



4. A decline in the area of open space (including farmland), as more and more people leave the suburbs (in the traditional sense) for areas located close to the official limits of the urban area.



5. The emergence of many closed or gated housing estates, as a physical manifestation of disparities between the betterand worse-off in society.



6. Uncontrolled and non-aesthetic means of shaping the city's information coverage.



Source: Author's own elaboration

Figure 4: Main processes underpinning the functional and spatial transformations taking place in Łódź post-1900

Very dynamic change in terms of utilisation is also affecting suburban areas incorporated into the city in successive stages after 1945, and most especially the areas added in 1988. These extend along roads, and most especially the key entry and exit roads connecting the main city with nearby towns of the wider Łódź agglomeration. Some are on sites still serving an agricultural function a few years ago, with a diverse natural landscape. These first areas of land especially concentrate uses entailing the supply of services and housing or else production and housing, while the latter encompass very diverse forms of housing construction that may involve large residences surrounded by the high hedges, fences or walls indicating a new gated community, or else closed estates of invidual free-standing villas on former farmland, or else estates comprising single-family housing on standard plots.

Contemporary processes are producing a very rapid reshaping of the uses and means of management areas of land were associated with previously, with this leading to the emergence of new forms of unevnenness, often greater than before in both qualitative and quantitative terms. Overall, very dynamic change of the face of the urban landscape is taking place, with the result being increasing spatial and aesthetic chaos.

5 Society's imagining of development and crisis personified in urban space

"Places in which development is to be seen" made reference to the largest new developments in Łódź which inhabitants experience as they make everyday use of the city, or else know of thanks to the media. Analysis of the semantic field of responses accompany-

ing the photos in photographic essays (cf. chapter 2) allowed for the defining of development (growth) of cityspace as defined subjectively (Table 2).

Elements of the semantic field	Descriptions applied in the photo-essays – "places in which development is to be seen"	Descriptions applied in the photo-essays – "places in which the crisis is to be seen"
Descriptions	modern, aesthetic, a place with potential, the heart (or the "calling card") of the city	abandoned, decaying, neglected, falling into ruin, slated for demolition, ugly, dirty, scruffy, shabby, littered, dangerous
Associations	big-city functions, seats of foreign firms, events, exhibitions, first nights, building sites, obstacles and disruption, major change, high technology, original architecture combined with greenspace, creative space, public space, development of the market for services	place forgotten by the authorities, representing the remnants of a bygone age, symbolising the collapse of the textile industry, inhabited by people living in extreme poverty, with trees growing out of the cracks and crevices, destroyed tenement houses, devastated shop windows, empty premises, standing empty, social problems and ills, a lack of greenery
Oppositions	collapse, crisis, falling walls, broken windows (through which young bir- ches peep), stagnation	once powerful or strong, develop- ment, splendour
Equivalents	progress, modernisation, rebuilding, makeover, remodelling, revitalisation, "the change from an ugly duckling into a beautiful swan", metamorphosis	forgetting, stagnation, regression, "left to its own devices"
Actions of the object	raises city's prestige, builds positive image, creates conditions for the development and functioning of firms, catches the attention of inhabitants and visitors, induces or arouses optimism, "makes or leaves an impression", adorns or beautifies the city, influences the development of the surroundings (vicinity)	evokes sadness or other negative emotions, is a manifestation of the city's decline, contaminates the city, an eyesore, annoying, offputting, attests to the poor condition of the city overall, does nothing to influence the city's good image, is gradually becoming just a pile of rubble, "is asking or crying out for urban renewal", "immediately suggests poverty"
Actions towards the object	media promotion, financial support, "keeping one's fingers crossed"	avoided/bypassed by tourists and lo- cals, nobody takes care of it, it needs attention, it needs some money spen- ding on it, it needs demolishing or at least far-reaching renovation.

Source: Author's own elaboration on the basis of the photographic essays

Table 2: The structure of semantic fields for concepts of "a place in which development is to be seen" as well as "places in which the crisis is to be seen"

The essay content makes it clear that "a place in which development is to be seen" is modern, aesthetically pleasing and represents some kind of "calling card" for the city. This is to be set against depictions of areas of urban dereliction, crisis and collapse, in which, as somebody wrote "young birch trees can be seen peeping out" from the windows or ruined buildings. For the authors of essays, synonyms of development or growth in urban space are progress, modernisation, rebuilding and revitalisation. Places come into being that are a decorative asset to the city, help raise its prestige and strengthen the positive image, while at the same time fostering the further development and activity of firms, attracting the attention of inhabitants and visitors alike and ultimately ensuring that a positive contribution is made to further development in the surroundings. This leaves the "places in which development is to be seen" as linked with the centre of the big city, the development of a market for services, the attraction of foreign firms which decide to locate, and the appearance of high quality public space in which entertainment events, exhibitions and other shows can take place. It is of course acknowledged that every place of growth or development starts off being associated with a building site that causes its own share of difficulties, but ends up yielding new, modern solutions and original architecture. As the answers received make clear, places of this kind need promoting.

The responses as regards the "place in which development is to be seen" offer confirmation characteristic for Łódź-related trends in contemporary spatial development, i.e., on the one hand, new buildings and space suitable for a modern post-industrial city, and on the other hand, care taken to preserve and utilise the surviving buildings representing the proud industrial heritage of the city in material form.

As of 2011, the buildings cited most often as "places in which development is to be seen" were the *Manufaktura* complex and the *Scheibler Lofts*. In operation for ten years now, *Manufaktura* has risen to achieve the status of a new symbol of today's Łódź, and it remained so up to 2015. Nevertheless, it needs to be stressed that, as time passed, essays were inclined to refer to a longer and longer list of buildings, especially of course those that have been revitalised or were still in the course of being built.

From 2013 onwards, the essays made ready came to be dominated – as regards places inhabitants identify with development – with the so-called *Nowe Centrum* area of the city, the part of which called *EC1* (as the first combined heat and power plant in Łódź) is now partially open. The content of photographic essays submitted over the last six years makes it clear that the area where the old Łódź-Fabryczna Station stood, as well as the upcoming *Nowe Centrum* represent examples of greatest dynamism and transformative power, associated with places once written off as ugly and symbolising decline, but now identified with development and hope for the future. This example shows how very sensitive to activity modifying space the people of Łódź really are. Naturally, they were also incomparably better than others in noting the scale of degradation afflicting their city.

Here it is made clear that the matter of what (early) stage work on a new development may have reached – and hence how much time to completion still remains – is not important. Rather what matters is that work is actually embarked upon after decades of neglect, with something, anything, in the city at last being made subject to change. Interpretation of the photographs placed in the essays makes it clear that the very fact of a site being fenced

off and having the first heavy plant introduced, represents a harbinger of development and improved functioning, as well as an upgraded image for the part of the city involved. In this case, successive editions of the photographic essays offer their own specific kind of documentation of progress with the development work.

The 2013 essays also began to make reference to modernisation work along *Piotrkowska Street*, as well as the renovations being carried out in the *Księży Mlyn* housing estate. Earlier, given the combination of the specific atmosphere and the fact that adjacent areas (like *The Lofts* and the *Textorial Park* development) had begun to be worked on, these areas were said to evoke a feeling of time having stood still. In turn, in the years 2011–2014, the attention started to be drawn to the utilisation and management of former factory sites within the Łódź Special Economic Zone (at the aforesaid *Textorial Park*). Modernisation of the East-West Route evoked associations in the years 2014–2016, with a particularly dominant feature being the *Piotrkowska Centrum* transit station. 2015 also saw attention paid to the impact of the *Miasto Kamienic* programme, which represented the city authorities' response to the problem of the ongoing decapitalisation of buildings in the city-centre area – the very same that essays had also emphasised in reference to "places in which a crisis is to be seen". Other (new) buildings identified with development included *W. Reymont Airport*, as well as hotels and office blocks; and hence elements associated with the post-industrial era of new development.

Unfortunately, throughout the research period, far more places were identified by essays as examples of crisis, as opposed to development. What is also striking here is the preponderance of objects located in the city-centre sensu stricto, very often close to places defined as ones in which development could be seen. This only serves to confirm the disparities to be noted in the Łódź cityspace, especially on the microscale (Tobiasz-Lis and Wójcik 2014). Places identified with crisis are diverse in character. Sometimes single buildings are cited, often of course in former mill or factory areas not subject to renewal. However, mention is also made of unnamed, abandoned or neglected tenement houses or yards, or else of whole streets or even quarters, in which any growth or development spatially would be unnoticeable against the overall background of decay and decapitalisation. However, what needs to be seen as positive is the way that this category of places is also subject to some change, given the dynamic nature of the cityspace.

Essay content reveals that the typical "place in which the crisis is to be seen" is abandoned and neglected, with the effect that it falls into ruin and only becomes fit for demolition. Such places are assessed as ugly, dirty, littered and dangerous. They are not necessarily contrasted with places now regarded as symbolising development, but are rather set against some past strength and power, making it clear how the city had developed in a bygone age. Essay authors thus identify the crisis with post-industrial sites, with individual tenement houses and even whole districts not considered to have much of technological, ecological or aesthetic value or indeed even social value. It is stressed that such places are basically eyesores of the city, attesting to the poor state it is in, and thus inclined to evoke sadness, negative feelings and annoyance, while definitely putting off potential new users. To employ an anthropomorphism from one of the essays, a tenement house come alive "begs, shouts out, cries out for renovation".

The "places in which the crisis is to be seen" need to have attention paid to them, with a firm decision taken as to whether they will be saved, or knocked down to allow new developments to go ahead sooner or later. The places deemed to typify the crisis are also perceived as linked to the city's past. This ensures that many write of the expectation that these forgotten and neglected buildings or quarters will be restored to their former glory.

The map included below (Fig. 5) plots the locations of places the photographic essays interpret as symbolising either development or crisis. This is in fact more in the nature of a review sketch, and all the more so given the presence of certain buildings in both categories, as a reflection of the dynamic affecting the cityspace over time. Places referred to in essays from the last three years are included.



Source: Author's own elaboration on the basis of photographic essays

Figure 5: Areas identified with development (green) and crisis (red) in the city over the 2014–2016 period

In not every case was it possible to locate precisely the objects described in essays. Generalisations were quite often applied, as with "old tenement houses and courtyards in the centre of Łódź", or with whole housing estates or residential districts being mentioned, such as *Stare Bahuty, Stare Polesie* or *Manhattan*. Nevertheless, there is a clearly visible tendency for places in the city-centre assessed both positively and negatively to be concentrated together, first and foremost within the confines of the circular railway that once delimited 19th-century Industrial Łódź. Away from the parks, the area of the planned *Nowe Centrum* ("New Centre"), as well as *Manhattan*, are associated, not with the housing estates there, but rather with the buildings providing service functions located along *J. Pilsudski Avenue*.

Thus, the places considered to epitomise development have a point distribution and are in precisely-defined places, often in fact resembling *Manufaktura* or the *Old Town Park* in representing enclaves within, or areas immediately adjacent to, areas of crisis. The latter areas have in turn tended to assume linear form in recent years, given the reference to whole streets or sequences of streets located in the city-centre sensu stricto. Those photographing and writing about these streets emphasise the poor technical state in which they find themselves, the decapitalisation affecting the buildings, and the social problems. The counterweight to these is currently provided by *Piotrkowska Street*, *Pilsudskiego Avenue* and the oft-mentioned (as beautiful or magical), *Pierwszy Woonerf* (largely pedestrianised 6 Sierpnia Street).

6 Discussion and final remarks

The "post-modern urbanism" concept (see Dear and Flusty 1998; Dear 2003) continues, irrespective of different criticisms, to pay attention to the process by which space becomes fragmented as a result of, for example, a game played by global players entangled in relationships with regional or local political and business circles (Barnett 1997; Merrifield 1999; McNeill 1999; Gordon and Richardson 1999). The essence of the approach is to bring to prominence the spatial factor – as a specific way of looking at the generation of social and economic divisions across the space of a city. This way of thinking about space is of exceptional importance to a city like Łódź, which is often depicted in everyday discourse using terms like "mushroom city" or "American-style development", given that rapid expansion occurred under conditions of rampant capitalism, with a marked heterogeneity being the consequence.

In successive historical periods, this space experienced the shock of dramatic change due to warfare, especially World War II, as well as the forced introduction of the communist system, the social and economic transformations restoring a democratic and capitalist order, and current rapid change reflecting the opening-up of the country to European and global influences. The effect of these different dramatic transformations through history is the generation of a spatial unevenness that reflects overlayering, especially in the last 150-years period of big-city development. The changes being made today justify the description of the city as a "transition laboratory", in which experiments with socio-spatial makeovers are carried out time and time again. Lewis (1983)

described a mosaic form of urban landscape using the term "galactic metropolis", while DEAR and FLUSTY (1998) called it "keno capitalism", and KNOX (2008) named it "metrourbia".

The Łódź space arising through the linking-together of many mushrooming settlements, as well as industrial and residential complexes, always made it hard to define precisely where the centre of the city sensu stricto actually lay. The lack of a well developed historic core of relatively large area (in other cities in Poland, typically an Old Town area mainly founded in the Middle Ages) ensured that Łódź's cityspace was also characterised by a multi-centre nature when it came to places playing a city-centre role from both the functional and symbolic points of view. The contemporary ambition on the part of Łódź for metropolitan functions to develop in fact poses problems regarding the locating of these, and indeed the shaping of any kind of cohesive concept for a city-centre in which there would be a clear core area also related to suburban areas founded historically or in recent times. The material and social degradation of the city-centre zone is so advanced that planned makeover and revitalisation work in this area would inevitably prove a difficult and time-consuming process.

An interesting manifestation of the transformation process in the city-centre area is a discourse engaged in for more than ten years now. This concerns the city's revitalisation, as well as the programmes by which that goal is achieved. Revitalisation has in fact become a special kind of ideology for change in Łódź in the post-industrial era. This specific key word is used in many undertakings associated with the city's spatial and social makeover, not least the building of the aforementioned "New Centre", as part of a planned large-scale revitalisation of quarters brought under management and first utilised in the late 19th and early 20th centuries, in line with the "mia 100 kamienic" campaign. This in fact entails the renovation of several hundred tenement houses in the city-centre. Then there is the EC1 project, again entailing the "revitalisation" of the city's first combined heat and power plant.

Transformations of physical space in the city, as well as analysis of society's imaginings in relation to it allow for interpretation in terms of a "checkerboard". This is true, not only of the differentiation of material space (including via processes of fragmented development), but also of the "game" played by stakeholders whose outcome is interest in particular places at a given time, as followed by the reproduction of activity in other places. Notwithstanding the existence of a formally-defined physical development concept (first and foremost for the city-centre area) a sense of chaos is being engendered, within which the emerging result is a specific kind of wandering development achieved via a series of "frog-hops".

While metropolises in different parts of the world are all subject to the overall, universal trends characterising the spatial development of large cities in the era of global capitalism (see i.a. Tasan-Kok et al. 2013), each also has its specifics. In Poland's case, a major role continues to be played by the transition from state-socialism to capitalism, which – in the initial period of transition (especially in the 1990s) – was characterised by considerable "brutality", manifesting itself in the transfer of the costs of the transformation on to society, especially the social classes finding themselves in materially-worse situations (Suliborski and Wójcik 2014).

The identification of the kind of qualitative change that the post-industrial city is going through was made possible by bringing together two – objective and subjective – perspectives on unevenness in urban space. The changes in question comprise the following phenomena shaping urban space and capable of being dubbed postmodernist, i.e. a lack of balance and ad hoc nature characterising urban phenomena as a consequence of open or concealed relationships between groups able to exert an influence on the city's development, with the effect being a diversification of the urban landscape into a kind of "checkerboard" whose squares experience change characterised by various speeds and considerable qualitative differences.

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7 References

Barnes T. J., Curry M. R. (1992): Post-Modernism in Economic Geography: Metaphor and the Construction of Alterity. In: Environment and Planning D: Society and Space, 10, pp. 57–68

BARNETT C. (1997): Review of Thirdspace: Journeys to Los Angeles and Other Real and Imagined Places. In: Transactions of the Institute of British Geographers, 22, pp. 529–530.

BOURDIEU P. (1977): Outline of a Theory of Practice. Cambridge, Cambridge University Press.

CASTELLS M. (1977): The Urban Question. London, Edward Arnold.

Cresswell T. (2013): Geographic Thought. A Critical Introduction. Chichester, Wiley-Blackwell.

DEAR M. (2003): The Los Angeles School of Urbanism: An Intellectual History. In: Urban Geography, 24, pp. 493–509

DEAR M., FLUSTY S. (1998): Postmodern Urbanism. In: Annals of the Association of American Geographers, 88, pp. 50–72.

Dzieciuchowicz J. (2014): Ludność Łodzi – rozwój i przemiany strukturalne [The population of Łódź – demographic development and structural changes]. Łódź, Wydawnictwo Uniwersytetu Łódzkiego.

GORDON P., RICHARDSON H. W. (1999): Review Essay: Los Angeles, City of Angels? No City of Angles. In: Urban Studies, 36, 3, pp. 575–591.

Harvey D. (1990): The Condition of Postmodernity. An Enquiry into the Origins of Cultural Change. Oxford, Blackwell.

HARVEY D. (2005): A Brief History of Neoliberalism. New York, Oxford University Press.

JAMESON F. (1991): Postmodernism, or, The Cultural Logic of Late Capitalism. Durham, Duke University Press.

KAPLAN D. H., HOLLOWAY S. (2014): Urban Geography. Chichester, Wiley.

KNOX, P. L. (2008): Metroburbia, USA. New Brunswick, NJ, Rutgers University Press.

KNOX P. L., PINCH S. (2010): Urban Social Geography: An Introduction. Sixth edition, Prentice Hall, Pearson.

- Kowalska A., Kowalski G. (2002a): Atlas Miasta Łodzi, plansza XXVIII: Rozwój zabudowy miasta do końca XVIII wieku [Atlas of the City of Łódź, page XXVIII: Spatial development of the city by the end of the 18th century]. Łódź, Łódzkie Towarzystwo Naukowe (ŁTN), Urząd Miasta Łódźi (UMŁ) [Łódź Scientific Society, Office of the City of Łódź].
- KOWALSKA A., KOWALSKI G. (2002b): Atlas Miasta Łodzi, plansza XXX: Tereny zabudowy mieszkaniowej Łodzi [Atlas of the City of Łódź, page XXX: Residential areas in Łódź]. Łódź, Łódzkie Towarzystwo Naukowe (ŁTN), Urząd Miasta Łódźi (UMŁ) [Łódź Scientific Society, Office of the City of Łódź].
- Lefebvre H. (1991): The Production of Space. Oxford, Blackwell.
- Lewis P. (1983): The Galactic Metropolis. In: PLATT, R. H., MACINKO, G. (eds): Beyond the Urban Fringe: Land Use Issues in Nonmetropolitan America. Minneapolis, University of Minnesota Press, pp. 60–91.
- MINCA C. (2009): Postmodernism / Postmodern Geography. In: KITCHIN R., THRIFT N. (eds.): International Encyclopedia of Human Geography. Amsterdam, Elsevier, pp. 363–372.
- MASSO A., OPERMANN S., ELJAND V. (2014): Changes in Personal Social Space in a Transition Society. In: Social Space, 20, pp. 1–37.
- McNeill D. (1999): Globalization and the European City. In: Cities, 16, pp. 143–147.
- MERRIFIELD A. (1999): The Extraordinary Adventures of Edward Soja: Inside the 'Trialetics of Spatiality'. In: Annals of the Association of American Geographers, 89, pp. 345–348.
- PACIONE M. (2009): Urban Geography. A Global Perspective. London New York, Routledge.
- PANELLI R. (2009): Social Geography. In: KITCHIN R., THRIFT N. (eds.): International Encyclopedia of Human Geography. Amsterdam, Elsevier, pp. 185–194.
- REWERS E. (2005): Post-Polis. Wstęp do filozofii ponowoczesnego miasta [Post-Polis. Introduction to the philosophy of the post-modern city]. Kraków, Universitas.
- ROBIN R. (1980): Badanie pól semantycznych: Doświadczenia Ośrodka Leksykologii Politycznej w Saint-Cloud [The research on semantic fields: Experiences of the Political Lexicology Research]. In: GŁOWIŃSKI M. (ed.): Język i społeczeństwo [Language and the society]. Warszawa, Czytelnik, pp. 205–282.
- SMITH N., KATZ C. (1993): Grounding Metaphor: Towards a Spatialized Politics. In: KEITH M., PILE S. (eds.): Place and the Politics of Identity. London, Routledge, pp. 67–83.
- SOJA E. (1989): Postmodern Geographies: The Reassertion of Space in Critical Social Theory. London, Verso.
- SOJA E. (1992): Inside Exopolis: Scenes from Orange County. In: SORKIN M. (ed.): Variations on a Theme Park: The New American City and the End of Public Space. New York, Noonday Press, pp. 109–122.
- SOJA E. (1996): Thirdspace: Journeys to Los Angeles and Other Real and Imagined Space. Oxford, Blackwell
- SOJA E. (1999): Thirdspace: Expending the Scope of the Geographical Imagination. In: MASSEY D., ALLEN J., SARRE, P. (eds.): Human Geography Today. Cambridge, UK, Polity Press, pp. 260–278.
- SULIBORSKI A. (2010): Funkcjonalizm w polskiej geografii miast. Studia nad genezą i pojęciem funkcji [Functionalism in Polish urban geography. Studies on the genesis and the concept of function]. Łódź, Wydawnictwo Uniwersytetu Łódzkiego.
- Suliborski A., Dmochowska-Dudek K. (2014): Dysproporcje w zagospodarowaniu przestrzeni miejskiej Łodzi uwarunkowania genetyczno-funkcjonalne [Disparities in the spatial structure of the city of Łódź genetic and functional factors. In: Suliborski A., Wójcik M. (eds.): Dysproporcje społeczne i gospodarcze w przestrzeni Łodzi. Czynniki, mechanizmy, skutki [Socio-economic disparities in the urban space of Łódź. Determinants, mechanisms, and results]. Łódź, Wydawnictwo Uniwersytetu Łódzkiego, pp. 77–106.

- SULIBORSKI A., WÓJCIK M. (2014): Wstęp [Preface]. In: SULIBORSKI A., WÓJCIK M. (eds.): Dysproporcje społeczne i gospodarcze w przestrzeni Łodzi. Czynniki, mechanizmy, skutki [Socio-economic disparities in the urban space of Łódź. Determinants, mechanisms, and results]. Łódź, Wydawnictwo Uniwersytetu Łódzkiego, pp. 7–16.
- Tasan-Kok T., van Kempen R., Raco M., Bolt G. (2013): Towards Hyper-Diversified European Cities: A Critical Literature Review. Utrecht, Utrecht University, Faculty of Geosciences.
- Tobiasz-Lis P., Wójcik M. (2014): Ocena przestrzennych dysproporcji w Łodzi z perspektywy mieszkańców miasta [Assessment of spatial disparities in Łódź from the perspective of its residents]. In: Suliborski A., Wójcik M. (eds.): Dysproporcje społeczne i gospodarcze w przestrzeni Łodzi. Czynniki, mechanizmy, skutki [Socio-economic disparities in the urban space of Łódź. Determinants, mechanisms, and results]. Łódź, Wydawnictwo Uniwersytetu Łódzkiego, pp. 305–320.
- Vogt H. (2005): Between Utopia and Disillusionment: A Narrative of the Political Tranformation in Eastern Europe. New York Oxford, Berghahn Books.