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Abstract. Poverty and social exclusion remain some of the biggest concerns in the face of obtaining social sustainability. In this respect, the continuing immense spatial differences between individual localities of seemingly similar characteristics have puzzled social scientists for decades. In quest for a better understanding, this article highlights the role of spatial heterogeneity as a factor conducive to the formation of functionally derelict areas, which in turn play a crucial role in the formation of spatial mismatch. Using two case studies from Poland, one from a big city and one from a small village, we explore the relationality between the phenomena of spatial heterogeneity, functional dereliction and spatial mismatch, whose mutual reinforcement seems to lead to a specific kind of deprivation in terms of scale and intensity. Special attention is paid to the role of spatial heterogeneity, which under certain conditions is capable of changing from being a developmental stimulant to becoming a destimulant. We argue that taking greater account of the intricate historical contexts responsible for the resistance of some pressing socio-economic problems is key to breaking the deadlock in the implementation of ineffective sustainability policies.

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1. Introduction

One of the key social problems of the contemporary world are the still evident socio-economic disproportions between states, regions, cities, urban neighbourhoods and rural areas. Accordingly, most political, strategic and planning activities try to combat poverty and social exclusion, with a particular focus on raising the standard of living in zones of poverty (Chambers, 1983; Walton, 1990; Atkinson, 2000; Daly, 2010; Barbieri, Cutuli 2015; Hermann, 2015; Koch, Panican, 2016). Attempts undertaken to level out socio-economic differences and inequalities, however, have encountered various obstacles, while the implemented solutions have not always worked out as planned (cf. Saltzman, 2013; Pennington, 2014). Apart from measurable economic and organisational losses, what still remains to be solved is, above all, those social problems aggravated by misguided attempts at eliminating them (Woodward, 1996; Shubin, 2007; Lawson et al., 2008; Dębski et al., 2010; Dymitrow, Brauer, 2014; Ramakrishnan, 2014; Dymitrow et al., 2017). Since these problems often go hand in hand with the trauma of all concerned stakeholders, particular attention should be paid to the causes responsible for creating zones of poverty, especially when previous remedial measures have failed (Sanandaji, 2012; Taleb, 2012; Dymitrow, Brauer, 2016) (1).

Causes of deprivation have often been attributed to phenomena such as intensified economic globalisation, increased demands on labour flexibility, the rampage of neoliberal capitalism, the restructuring of the European welfare model, racial tendencies, culturally conditioned fears or political myopia (cf. Brady, 2009; Ratcliffe, Krawczyk, 2011; Schierup, Ålund, 2011; Cassiers, Kesteloot, 2012; Holmertz, 2012; Bauman, 2013). Nevertheless, owing to the diversity of the phenomenon of urban, rural and regional development in the context of social deprivation, research focusing on its causes often calls for highlighting the more engrained historical and geographical contexts, which ought to serve as the basis for ensuant spatial analyses (Mahoney, 2000; Devicenti, Poggi, 2011; Saxonberg et al., 2013). This would make corrective policies more context-specific in the struggle to achieve sustainable development (Kriesi, 2004; Syed, 2008; Bennett, 2012). Taking into account the historical context as the fundamental cause of deprivation has in many cases helped overcome poverty and human suffering. This is particularly true of areas where deprivation exhibits characteristics aggregated through historically conditioned material, political and cultural changes (Ward, 1999; Allen, Thomas, 2000; May, Thrift, 2003).

Nevertheless, in some areas of this kind (i.e. where deprivation is explicitly historically contingent), existing social problems seem insoluble or at least significantly difficult to solve. To these belong so-called functionally derelict areas (Franz et al., 2006; Krzysztofik et al., 2011). This concept denotes settlements that are either formally urban or rural, and which functioned previously owing to their close interdependence on specific economic institutions located within them, with the latter now being strongly marginalised or having completely disappeared. Examples of such localities include post-industrial towns, former mining settlements, devolved state agricultural farms, defunct railway settlements, hibernated towns, etc. (Hall, 1997; Lorens, 2005; Gospodini, 2006; Ling et al.,
However, dereliction itself is not the greatest problem. The hardest cases to solve are those whose functional dereliction is associated with so-called spatial heterogeneity, i.e. a genetically determined distinctness of one space relative to its surroundings. In this case, corrective actions are most likely to encounter resistance from conditions resulting from the aforementioned existing historical determinants. At this point, a preliminary thesis can be put forward: the conjoining of the two attributes – dereliction and heterogeneity – creates areas with, comparatively speaking, the most difficult social situation and the greatest concentration of associated problems. The intensity of the problems in connection with their different origins (relative to the surrounding geographical space) creates areas which differ in terms of prospect for development. From another perspective, these areas also constitute the background to a number of established relationships conceptually referred to as spatial mismatch (Kain, 1968), i.e. the discrepancy between where low-income households reside and suitable job opportunities (Gobillon et al., 2007). Hence, the combination of three components – spatial heterogeneity, functional dereliction and spatial mismatch – creates a particularly difficult situation, which – if misdiagnosed – can lead to the implementation of failed policies. Interestingly, as these conditions apply to both large cities and small villages, it could be argued that the situation is not linked to the geographical differences, have one feature in common – they face severe difficulties for the implementation of policies set out to combat social problems and further sustainable development. Social problems there are so evident and – in retrospect – “insoluble” that an important reason for choosing them as case studies was motivated by the urgency of proper attention. The obvious reason for this is that the residents cannot afford any more major setbacks and disillusionment in the form of misdirected developmental endeavours (cf. Mormont, 1990).

The article consists of two parts – empirical and theoretical. The aim of the empirical part is to create a solid base for theoretical explanations of the relationship between spatial heterogeneity, functional dereliction and spatial mismatch. In the empirical part the following three methods were employed: (i) questionnaire survey, (ii) interviews with officials working in the social-service sector, and (iii) content analysis of strategic steering documents in order to define policy trends in the analysed areas. In the theoretical part, departing from the results obtained from the empirical part, we create a basis for understanding (and possible explanation) of the interrelated dependencies between the concepts of spatial heterogeneity, functional dereliction and spatial mismatch. The methodological aim of this part was to confirm the thesis that implementation of effective policies set out to combat social problems requires particularly insightful analyses of the contingent dynamic (historical) contexts. As evidenced by the examples deliberated in the article, but also by the results of other related studies, we identify the key to break the deadlock in the implementation of effective policies for sustainable development and for eliminating persistent zones of poverty and social exclusion. In other words, we provide an alternative spatial explanation.

The findings presented in this article constitute, we argue, a more coherent theoretical framework that captures all three deliberated components and their mutual augmentation, the latter likely to lead to a specific variant of deprivation in terms of scale, intensity and perseverance.
In terms of disposition, the article consists of seven chapters. In the next methodological chapter (2) key principles and research procedures are presented. The following theoretical chapters (3 and 4) go into significant detail to outline the problems of spatial heterogeneity, functional dereliction and spatial mismatch. The fifth, empirical chapter is dedicated to the two case studies. In the penultimate chapter (6) we discuss the most important findings, indicating, among others, some of the weaknesses of previous approaches set out to combat deprivation. An extensive conclusion (7) finalizes this paper.

2. Methodology

This study is based on findings from two poverty-stricken locations in Poland, which through the “universality” of their origins, structures, and systems of connections and dependencies are representative of their equivalents in most post-socialist countries in Central and Eastern Europe. The two areas represent different types of settlements in terms of functional origins. The estate in Toruń (Rolnicza) is related to services inherent of large cities, while Chotel is agricultural, and hence formally classified as rural. The first is a post-military estate located near the centre of a large city (203,000 inhabitants). The second is an estate (population c. 200) built for farm workers in a starkly agricultural area located away from major cities. The common element connecting the two settlements is that they were created in order to meet the housing needs of local communities whose economic life was based on extremely specialised functions – military and agricultural respectively.

In this context, the issues mentioned in the introduction to the article were examined in two aspects with regard to methodology – empirical and theoretical.

In the empirical part, we used primarily the survey method. Analyses of the two estates’ developmental trajectories were preceded by long-term direct observations, alongside gathering information about the communities. Due to their hermetic nature, the use of gatekeepers was indispensable. The gatekeepers helped gain access to the surveyed communities, but later took no direct part in the research. The survey was based on a non-random sample, which resulted largely from the fact that it was impossible to estimate the exact number of residents of the two settlements (some of those living there lack proof of residence). A total of 60 people (29 from the Rolnicza estate and 31 from Chotel) were surveyed, which, according to the estimates, equals one in four of those aged 15 and above. After the survey was completed, i.e. when the residents had become accustomed to the research situation and the collected material indicated which issues needed to be examined further, in-depth interviews were conducted (8 in Rolnicza and 10 in Chotel). Secondly, information obtained from respondents was supplemented by and confronted with the knowledge of officials of the local Social Welfare Centres in constant contact with the respondents. The interviews were conducted to deepen, disambiguate and contextualise the survey findings. All in all, six interviews were conducted: four in Toruń and two in Izbica Kujawska (the seat of the municipality to which Chotel belongs). Thirdly, steering documents were examined, particularly those outlining the directions of changes in the analysed areas, including: (i) the Toruń City Development Strategy for 2020 (2010); (ii) the Local Revitalisation Programme for 2007-2015. Resolution No. 903/14 of Toruń City Council from 2014-11-13, update; (iii) the Development Strategy of Izbica Kujawska for 2000-2015 (2000); and (iv) the Development Strategy of Kujawsko-Pomorskie for 2007-2020 (2005). Local plans and archival materials on the history of the settlements were also examined. Analyses of cartographic and archive materials dealing with the dynamics of the studied areas were also significant, especially in comparison with the neighbouring areas, which are seemingly very similar in terms of functional factors or in regard to the prevalence of zones of poverty and social exclusion. The aim of this method was to collect abundant source material, both for the settlements in question (functionally derelict towns), and for the surrounding geographical areas.

In the theoretical part, a deductive, modelling approach was applied, using historical deconstruction as the principle method (Munslow, 2006). Because the relationship between the three concepts – spatial heterogeneity, functional dereliction and spatial mismatch – is discussed here for the first
3. From heterogeneity to functional dereliction: Typology and models

Geographical space defined in functional terms can be considered from the point of view of its heterogeneity or homogeneity (cf. Buzzelli, Harris, 2006; Freeman, 2009). This can be done, for example, by answering the question to what extent the functions of a given city district are in accord with the functions of other districts, or to what extent a given village performs or fails to perform an agricultural function. What makes it diametrically different from its environment? However, developmental heterogeneity may also be evident in various social aspects (Schnell, Harpaz, 2005). An office district and a military district in an industrial town differ considerably in social terms. Equally clear in social terms are the differences emerging in formally rural areas. Different social structures should be characteristic of a village where family farming is predominant when compared to those where large-scale agriculture using hired workers or large-scale state (socialist) farming prevails (or have prevailed). The fact that settlements characterised by heterogeneity survive when surrounded by other villages forming a homogeneous environment is generally explained by the distinctly higher or lower level of ground rent. The scale of the contrast between a heterogeneous settlement and its environment is established by the specifics of its socio-economic structures and the type of barriers (spatial, mental, economic) that separate the two zones.

The issue of functional heterogeneity can also be seen in the context of scale, i.e. where the proportions (in regard to surface area and demographics) between the heterogeneous settlement and its surroundings (with which it has direct interactions or administrative relations) are of significance. For example, this can include a heterogeneous housing estate in a city and the city space as a whole, or a heterogeneous village or a small town and the territory of the whole district. Analyses of a number of case studies indicate the pertinence of this issue, both in research (Scott, 2005; Briggs, 2005; Agier, 2009; Havekes et al., 2013) and in local policy aimed at mitigating the negative effects of functional transformation.

A particular dimension in the context of derelict settlements regards the emerging social problems observed there. The issue of social problems in developmentally regressive or functionally derelict areas has been studied from the point of view of many aspects of research, including revitalisation (Rogatka, 2011; Thornton et al., 2011; Dymitrow, 2014; Rogatka et al., 2015; Krzysztofik et al., 2016), gentrification (Bailey, Robertson, 1997; Betancur, 2011), shrinking cities (Bernt et al., 2014; Stryjakiewicz, 2014) and social exclusion (Buck, 2001; Murie, Musterd, 2004; Dymitrow et al., 2017). Particular susceptibility to the accumulation of social problems in derelict settlements can be explained by several causes.

Firstly, the heterogeneity of an area in relation to its surroundings can lose its pro-development character and turn regressive. In view of the unfavourable factors, both exogenous and endogenous, elements of the socio-economic and spatial structure of such a regressive settlement then become vulnerable. A number of phenomena occur in succession, which can best be described by the model of cumulative causation (Batty, 2012). Ultimately, the social structure of a settlement mismatched to a new reality becomes extremely vulnerable to adverse impacts from the outside. For obvious reasons, it has the capacity not only to absorb new negative models of behaviour and social phenom-
ena, but, above all, it gains the ability to consolidate them.

Secondly, fundamental changes leading up to the ultimately negative character of a heterogeneous settlement usually occur very rapidly, often within a few months, a year or a few years. The existing arrangement and number of socio-economic connections basically stop functioning. Individual structures, including first and foremost the community, are forced to enter new external interactions. Income derived from work in the place of residence is replaced largely by external social and financial benefits. The possibility of earnings on the spot is replaced by the necessity of commuting to work in other places, although – more frequently – change moves in the direction of unemployment. In the end, a societal model based on market economy, commerce and consumerism is transformed into a societal model founded on conservative subvention politics (often with regressive results). A pro-development community then becomes a “survival community”. This, in turn, is the background to the increasing scale of alcoholism, substance dependence, depression, crime and loss of self-esteem, eventually leading to passivity and socio-economic withdrawal (Kronauer, 1993; Darity, Goldsmith, 1996; Gallie et al., 2001; Dymitrow et al., 2017).

Thirdly, social problems observed in heterogeneous derelict settlements are also the result of the inertia of local communities who cannot find their way in the new post-functional reality. Lack of bottom-up initiatives and activity intensifies disintegration, especially in the face of problematic situations (such as loss of basic development institutions), expressed in mutual dislike and even hostility.

Fourthly and finally, the susceptibility of heterogeneous derelict settlements to social problems should be seen from the perspective of local policy. As is common knowledge, actions and initiatives at this level are not always sufficient, and, above all, not always of value to this type of settlements. This problem can be explained primarily by the velocity of the changes, for which the local governments and policymakers are not properly prepared in terms of adequate decisions (Fig. 1).

Fig. 1. Sosnowiec-Eastern Pogoń. Example of a spatially heterogeneous settlement where local social policy is inefficient

Source: R. Krzysztofik
In Poland and some other countries of Central and Eastern Europe, the structural problems of towns (and the disappearance of important actors with whom decision-making in local politics previously lay) means that local authorities are not able to evaluate certain solutions properly, and above all lack the strong local support that had existed in the past. As pointed out by Swianiewicz and Klimska (2003), urban policy in Poland is usually based on only one decision-making body – the local authorities, such as the mayor (*burmistrz*) or the municipal leader (*wójt*), meaning that the style of exercising authority is that of the bureaucratic model of governance. This fact is exacerbated in regressive, post-functional and shrinking cities (DiGaetano, Lawless, 1999), such as Bytom in Poland (Krzysztofik et al., 2012; Bernt et al., 2014).

4. Accursed or misdiagnosed?
On the nature of functionally derelict settlements

As a result of previous existence of heterogeneous structures, functionally derelict settlements can be located in both formally rural and urban areas. Taking into account the typology proposed in Fig. 2, we assume that the way forward for derelict settlements can be classified as desired (pro-developmental) or undesired (stagnating, regressive). From the point of view of geographical research it is also important to emphasise whether the settlement in question is an isolated but independent element of the overarching settlement structure (a village or a small town), or is part of another settlement (a city or a larger village). The term ‘functionally derelict’ refers equally to parts of cities, villages or small towns. Theoretically, a larger scale could also be used – a medium-sized or a large town in relation to the surrounding region. However, in this case, the description of the phenomena associated with dereliction overlaps consequentialy with the concepts of shrinking cities or post-functional towns (Martinez-Fernandez et al., 2012; Pallagst et al., 2013). It is worth noting that the distinction related to the degree of a settlement’s independence is not only purely theoretical, but also forms an important element determining the feasibility of relevant policies and various planning-related, strategic and financial tools.

![Fig. 2. Geographical typology of heterogeneous derelict settlements (including the position of the presented cases studies Chotel and Rolnicza)](image)

*Source: The authors*
4.1. Functionally derelict settlements in urban areas

One of the more important characteristics of functionally derelict settlements in heavily urbanised areas is that they represent only a part of a larger urban system, which exerts pressure on those areas. The difference in potential between a derelict estate and the areas surrounding it is significant. The scale of investment in space, the larger number of inhabitants and a significant population density all contribute to a kind of “pressure” placed on the functionally derelict space. This pressure is fostered by the fact that the existing socio-economic connections are broken, i.e. links which, characterised pro-development and heterogeneous estates in the past. In the event of regress of an estate or neighbourhood, new stakeholders appear with a potential interest in such areas – investors, developers, speculators, institutions interested in taking over the existing infrastructure, and, above all, municipal authorities and the entities which are the legal owners of land and property.

The second aspect is the image of the city. Regardless of the various interests in derelict settlements, urban policy usually involves elements of revitalisation and pro-development transformation of functionally derelict or degraded areas (cf. Dymitrow, 2013; Krzysztofik, Dymitrow, 2015). Regardless of whether the municipal authorities have a financial interest in the derelict area or not, they become involved in the process of structural renewal of every such neighbourhood. It is in the interest of the municipal authorities to overcome the problem on the one hand, and, on the other hand, to attempt prevent the formation of negative impacts on the areas surrounding derelict settlements. Opinions of residents of the latter are also important – parliamentary questions, various pressures, media-supported actions, protests by fencing-off, ostentatious highlighting of social divisions between “us and them”, or attempts to induce ghettoisation.

4.2. Functionally derelict settlements in rural areas

The transformation of former pro-development heterogeneous estates into derelict estates in rural areas is of a different kind. As with cities, one can distinguish two types of heterogeneous localities. Firstly, there are those characterised by functional distinctness (industrialised villages, villages that were extremely specialised in selected services). Secondly, there are those whose distinctness was characteristic in terms of the organisation or ownership of land and production, such as kolkhozes, sovkhozes, kibbutzim, negdels, UBPCs (Unidades Básicas de Producción Cooperativa), VEGs (Volkseigene Güter), and other variants of state agricultural farms in socialist countries. This distinctness should be seen, of course, only in those cases where social or state farming created a form of enclaves in regions dominated by family farming (Lerman, Schreinemachers, 2005). In Poland, the most common form of organisation of social farming was the PGR (Państwowe Gospodarstwo Rolne, a Polish rendition of the state agricultural farm). PGRs existed as a type of economic organisation of agriculture from the end of World War II until 1991. They occupied an area of a few dozen to several thousand km². Some of them, especially in central and southern Poland, were heterogeneous structures; in other regions of Poland (northern and western), they equalled with or even predominated over family farms. In contrast to private farmers, state farm workers were employed according to the rules which applied in socialist industrial plants. Therefore, these workers were not the owners of the land they cultivated or of the real estate they used; nor did they have to worry about the profitability of their ventures. This fact led to a lesser emotional attachment to the land (Wilkin, 1997).

The heterogeneity of social farms, such as the PGRs in Poland, was also evident in the spatial aspect. While private farmers usually lived in detached houses located within their farms, PGR workers generally lived in blocks of flats, or low-rise terraced houses near to the state farm. A characteristic feature of state farm housing estates, however, were the concentrations of 2–5 storey blocks, clearly demarcated in the morphological layout of the village.

5. Social problems in functionally derelict settlements

5.1. Introduction

In the context of the outlined theoretical frameworks, the selected case studies were chosen to
highlight the issue of social change, with particular emphasis on spatial mismatch. As mentioned earlier, the cases include: a former military housing estate in Toruń (Rolnicza) and a housing estate belonging to a former state agricultural farm (Chotel). The common features of both estates are: (i) the period when they were built – i.e. during the era of socialism, and (ii) the fact that they have been largely transformed into social housing. Undoubtedly, both also display an array of typical socio-economic changes taking place in functionally derelict settlements of Central and Eastern Europe. Both cases also highlight the phenomena of spatial heterogeneity (along with its continuation in new socio-economic conditions) and spatial mismatch (as a key consequence of heterogeneity).

5.2. The post-military estate of Rolnicza

One of the most significant features of social change in functionally derelict settlements in the major cities of Central and Eastern Europe is the problem of abandoned military areas (Jasak, 1999; Miszewska, 1999; Tujdowski, 2007; Jarczewski, 2009). To these belongs the post-military estate of Rolnicza, located in the northern part of the Polish city of Toruń.

Rolnicza was established in 1965 as a residential facility for a unit of the Northern Group of the Soviet Army – the Pontoon Battalion 902. The estate comprised 17 2–3 storey buildings, 3 shops and a few services. In 1990, 3,300 soldiers and members of their families lived there. The army finally left the site in 1991, and the land, with an area of 134 ha, was taken over by the municipal authorities.

Functionally, the estate was highly heterogeneous in two dimensions. The first was formal, that is, the estate constituted a functionally isolated enclave within the economic and social space of Toruń. Toruń’s socio-economic functions in this period were mainly industrial and tertiary. The military function was of a minor nature. At the same time, the occupational group of Soviet soldiers and their families formed a fairly enclosed social environment with limited contact with the other inhabitants. The estate was inhabited by fully employed persons and their family members. As such, unemployment was formally inexistent (stage A in Fig. 3).

The heterogeneity of the military estate was also evident in the informal dimension. This should be understood as the imposed isolation of a social group, placed in barracks, living in an area separated by a gate, walls and fences, and clearly cut off from the rest of the city. At the same time, the area, which at the time was in the hands of the Ministry of Defence, was uncharted territory in terms of possibilities for management at the municipal level. The municipal authorities had no decision-mak-
ing power regarding the direction of development for this site. With regard to the military range and the territory of the military unit, there was a kind of dual power in the hands of the municipal offices and the Ministry of Defence, represented by the commander of the unit.

A brief but crucial stage in the transformation of the estate took place in 1991-1994 (B in Fig. 3). After the Soviet troops left, there was a period of dereliction and, initially scarce, activities associated with the resettlement of the area. It was a turning point in the functioning of the estate. The success or failure of its redevelopment and resettlement depended on how the area was managed. In terms of the problem of dereliction considered in the article, a key question was whether Rolnicza would gain a new favourable network of socio-economic connections with the rest of Toruń, or become a post-functional space, with all the baggage of social, spatial and economic problems. Two developmental paths were possible during this period. The first was to demolish the existing, predominantly substandard, housing and attempt to introduce modern buildings. The second path – which was eventually chosen – was to enhance the technical and municipal conditions of the housing infrastructure in an evolutionary and limited way, and to symbolically improve the aesthetics of the area (Fig. 4). This was determined by the very poor state of the technical infrastructure of the housing, and, in some cases, even the lack of it (asbestos elements, destroyed and damaged electrical installations and sanitation, lack of access to gas and central heating, no bathrooms or toilets, occasionally no hot water, persistent fungus). These decisions obviously also had social consequences.

Fig. 4. The exterior of the housing estate of Rolnicza in Toruń
Source: E. Grzelak-Kostulska

Decisions taken in the 1990s ultimately moved the development of this neighbourhood in the direction of establishing a social housing estate. In 2014, nearly 200 people lived there, of whom about 40% were receiving support from the social services. Just over 80 people were of working age (children make up slightly more than half of the population) and about ¾ are without permanent employment. They rely on benefits, income support and casual informal work. In over a dozen families
signs of helplessness in matters of care and education were diagnosed. Several families had also received notice of eviction from municipal housing because of rent arrears.

The spatial and socio-economic characteristics of Rolnicza and its population clearly point to the changes taking place there being in line with the definition of a derelict settlement (stage C in Fig. 2). A settlement had been created whose socio-economic specificity does not correspond to the levels of the city of Toruń as a whole (with a relatively low rate of unemployment and social exclusion).

Our findings also indicate evidence of spatial mismatch. Social alienation is accentuated not only by structural unemployment and helplessness, but also by spatial distance from supporting social institutions on the one hand, and from larger clusters of potential jobs (e.g. in the manufacturing and service sectors)- on the other. The attribute of being a social enclave is further reinforced by the total absence of service-related, commercial or cultural institutions.

The social housing estate of Rolnicza continues to be one of the key problems for the development of the city of Toruń (cf. Toruń City Development Strategy 2020; Local Revitalisation Programme 2007-2015). Even though this area was earmarked for multi-faceted revitalisation in the current master plan, only limited positive effects of these measures can be expected. This is because its socio-economic problems are not only the result of the high concentration of socially excluded people; they are also intricately enmeshed in the original problem of the estate's dereliction, reinforced by the presence of spatial mismatch and heterogeneity.

5.3. The agricultural estate of Chotel

The suggested model approach to socio-economic transformation of derelict settlements can also be extended to agricultural settlements (Fig. 5), or, as, in this case, to organisational change and change of ownership within the same sector of the economy. Our second case, Chotel, was built in the 1970s-1980s in response to the housing needs of the nearby PGR, which had existed since 1949. Currently, the housing estate consists of two 2-storey blocks, three 3-storey blocks and a shop. The estate forms a spatially isolated part of the larger village of Kazanki. While in the case of Rolnicza dereliction resulted from functional change, in the case of Chotel it was the result of organisational change. It should be noted, however, that just as in the case of Rolnicza, two transformative stages can be discerned: before the formal closure of the state farm (A in Fig. 5) and after its closure (B in Fig. 5).

![Fig. 5. Model of the transformation of Chotel – a heterogeneous settlement (built as a housing estate for the nearby State Agricultural Farm – PGR) according to the criterion of organisational and ownership structure](image-url)

**Explanations:**
- **A** – developmental stage before the closure of the PGR;
- **B** – developmental stage after the closure of the PGR;
- **I** – commuters travelling to work in other towns;
- **II** – workers employed at family farms located around Chotel or in private agricultural enterprises and farms set up on former PGR land;
- **III** – workers employed in other economic sectors around Chotel.

**Source:** The authors
The Chotel estate, just as in the case of Rolnicza, was functionally highly heterogeneous. This heterogeneity in both formal and informal terms was evident in its isolation, both from the mother village of Kazanki (where family farming was dominant) and from other neighbouring villages. The buildings of Chotel were mainly blocks of flats (Fig. 6), while the village of Kazanki and other nearby villages consisted of detached buildings of the farm-house type. PGR workers’ families had relatively little contact with the families of the other typical agricultural villages. Moreover, Chotel experienced a relatively high turnover of workers from different backgrounds, often impoverished, with different customs, which meant that they felt no ties with their place of residence (cf. Borowski, 2013; Feltynowski et al., 2015).

While the importance of state-owned farms for the local labour market was not always determined by their economic efficiency (Wilkin 1997; cf. Maślanka, 2008), in the case of Chotel, the PGR was the main place of work for its residents. Moreover, importantly, it also provided both permanent and casual employment for smallholders and their families from the neighbouring villages. A significant element of the PGR in Chotel was also its provision of job stability (see. Figure 5), which did not always go hand in hand with its productivity. The formal closure of the PGR in Chotel in 1993 led to a dynamic increase in the number of unemployed people, and in the number of commuters (I in Fig. 5). Some residents found employment on family farms in the neighbouring villages or in private agricultural enterprises and farms set up on the land of the former PGR (II in Fig. 5). Some residents were re-trained, and found work at the Chotel estate, mainly in the basic services sector, or, more seldom, in the craft industry (III in Fig. 5).

In 2014, the population of Chotel was c. 120 people. At present, it consists primarily of former PGR employees and their families, but there are also – though to a lesser extent – new residents, who after 2000 were allocated social housing there by the municipal office. Lack of adequate human capital, low-skilled workers, and the relatively low mobility...
of the residents (so-called learned helplessness syndrome) (cf. Tarkowska, 2002; Karwacki, 2002) have meant that a large part of Chotel's population were unsuccessful in finding work, or only finding odd jobs (mostly seasonal ones, such as strawberry or cherry picking), but relying mostly on welfare. In many respects, Chotel exhibits a classic case of spatial mismatch caused by the rapidity of structural and organisational changes taking place in the rural areas of Poland. Moreover, exacerbated by the lack of opportunities for finding good jobs, as well as the declining incomes, the living conditions had worsen, while poverty and social exclusion have become the lot for the successive generations. The factors outlined above imply that Chotel is the most problematic area in line with the development policy of the municipality of Izbica Kujawska, (cf. Development Strategy of Izbica Kujawska 2000-2015).

The changes that took place in the 1990s also determined the continuation of Chotel's heterogeneity. Assimilation processes between Chotel and the village of Kazanki are very limited. There still exists a mental barrier between the village community and the community of the former PGR, which plays an important role in interpersonal relations and for opportunities for economic and social regeneration.

Limited opportunities for employment in agriculture at and around Chotel, as well as lack of preparation for work in the service and manufacturing sectors, have largely determined the extent of Chotel's spatial mismatch. Today, Chotel forms a social enclave relative to its immediate surroundings. As with Rolnicza, an important stabiliser preserving the estate's dereliction is its urban-type morphology (blocks of flats), standing out menacingly from the surrounding traditional rural landscape.

6. Detecting “trapping pits”: A discussion

Social problems in geographical space usually have rather diverse origins. In the case of Poland and the countries of Central and Eastern Europe, the two key aspects in the last 25 years fostering the evolution of social problems – functional and organisational – were triggered by the economic and political transformation of 1989. The systemic change was universal, but particularly marked in places characterised by heterogeneity with regard to their surroundings. The heterogeneity of geographical space means that the transformations that take place there happen with a magnified impact. The influx of new impulses has an inherent capacity to verify the utility of a given space. The impulses either trigger its further development or lead to distinct functional, structural or organisational transformations.

Most literature devoted to the effects (including the negative ones) of changes in Central and Eastern Europe focuses on the general resilience of specific structures – social, economic and spatial. The question arises whether functionally heterogeneous areas are, in this respect, special spaces. The answer is yes and no. The context of ground rent considered from the point of view of new conditions and opportunities for development is always significant. This means that functionally heterogeneous settlements are able both to become revitalised and remain permanently problematic. Yet this is also true of some functionally homogeneous areas. However, the experience of Poland and other Central European countries, especially after joining the EU, suggests that functionally homogeneous areas are in a relatively favourable position, particularly in rural areas (including EU policy for agricultural marketability mainly in regard to family farming). In urban areas, the ultimate effects of EU aid were an improvement in the economic and social condition of cities and, to a lesser extent, their excluded areas (and therefore structural rather than territorial actions). However, this format of local and regional policy driven by the neopositivist argument of economic benefits can perpetuate an asymmetry between the expected changes and the positive effects of transformation. As a result of this, we experience spatial, economic and social recovery in places where new economic investments were created, as well as regression where social issues remained unresolved. Model examples of such changes can be found in cities like Sosnowiec in Poland and Ostrava in the Czech Republic (Krzysztofik et al., 2012; Rumpel, Slach, 2013). There, the economic management of brownfield sites put in place new trajectories of inner-city development. Districts without investment stagnate and socially degrade, while districts that make use of the functionally derelict areas are in a relatively favourable position.
To illustrate this problem we use the metaphor of a “trapping pit”. Trapping pits are deep pits dug into the ground in order to trap animals. Camouflaged with branches and leaves to mimic the surrounding environment, these pits have steep sides lined with planks, making it impossible for the animal to escape once it had fallen in, eventually bleeding to death by sharpened sticks pointed upwards from the bottom of the pit. The metaphor refers to areas, which resemble the surrounding (homogeneous) environment but do so only apparently. In effect, they hide places, which in the future will most likely cause problems. Such places remain invisible at first sight, just as we cannot readily detect a trapping pit (Fig.6).

The question of spatial mismatch is a moot point. In Poland, the essence of the problem lies in the relatively small difference between the minimum salary and the average salary and between the minimum salary and of the rates of social security benefits for the unemployed and socially excluded. The result is that, depending on the situation of the family (age, number of children, illness), there is a fine line between people formally considered socially excluded (receiving significant material and social support) and people not formally considered excluded, but who nevertheless have a very low standard of living. This phenomenon correlates with the social structure of functionally derelict localities and estates, e.g. such as Rolnicza and Chotel. Some residents living there have a comparatively higher standard of living than residents of the neighbouring localities with pro-development features. This specific type of spatial mismatch can be seen from two sides:

— positive – some residents of derelict settlements are on the path towards social advancement and the possibility of moving to a new place of residence better suited to their situation and aspirations,
— negative – some long-term residents living in social housing estates and receiving municipal or regional support treat this existence as a way of living, making no active efforts to escape from the state of helplessness, complications and often pathology.

Of course, these phenomena have a wider spatial and social dimension, but here we take the view that in functionally heterogeneous settlements their scale requires particular attention. This fact is the key justification for the special treatment of heterogeneous areas and settlements, not only in the analysis of the trajectory of their development. It is particularly important to acknowledge their specificity in local and regional policy, particularly in regard to the direction of socio-economic and spatial transformations.

**Fig. 7.** Visualization of problems inherent of local policy in functionally heterogeneous areas, using the “trapping pit” as a metaphor

Explanations: 1 – decline of settlement; 2 – (re-)development of settlement

*Source: The authors*
7. Conclusion

This article focuses on a number of important issues related to the social transformation of certain type of spatialities in Poland, howbeit not only representative of Central and Eastern Europe. The aim was to elaborate on the yet still unrecognised role of the relationship between the spatial heterogeneity, functional dereliction and spatial mismatch, which we see as an alternative explanation to problems standing in the way of achieving sustainable development and erasing social inequalities. From another perspective, we also highlight the potential of more thorough historical and geographical investigations into the causes of deprivation in view of contemporary development plans for so-called ‘problem areas’.

The most important of findings is that functional spatial heterogeneity is often an impulse for the subsequent opportunities of transformation of areas in which it had occurred. This particular feature of geographical space determines to a considerable extent the development trajectories of places, which have lost their previous economic base. At the same time, these places also form spatial enclaves relative to their surroundings in terms of the permanence of existing socio-economic structures. This, in turn, has a significant impact on the need to redefine the principles of policies and strategies for problem areas that are functionally heterogeneous. Treating them as only one part of the city may not be sufficient for the adopted principles to perform well and achieve the set goals. This can be seen clearly in the case studies used for the article, especially that of the Rolnicza estate in Toruń, where marginalisation, or at least the weak involvement of the local government in matters of solving local social problems, only reinforces the problems. This can be expressed as spatial mismatch being replaced by perpetuating social problems. Another unfavourable example is the Chotel estate, which is one of many examples of settlements exhibiting spatial mismatch in formally rural areas of Poland and Central and Eastern Europe. Here, in turn, policy was aimed at solving the problems of the countryside, with disregard to its deep-seated specificity, particularly in regard to the clearly visible socio-economic heterogeneity in regard to agriculture.

The problem of heterogeneity relates directly to the phenomenon of dereliction, and thus to the stage of transformation in geographical space which particularly emphasises the need for intervention at various levels of the implemented policies, both at the strategic and planning levels. This assertion has its own special justification. Based on previous observations, we argue that potential changes in functionally heterogeneous areas which have created derelict settlements would result in significantly different effects from those occurring in a homogeneous environment. Therefore, understanding the nature of these transformations, and bearing in mind the equal focus on problem areas in both cities and villages globally, we point to the need for improvement in line with our explanatory suggestions.

The two analysed case studies make it clear that the implementation of development policies without taking into account the historical context of these places is doomed to fail. As a result, instead of solving the problems of heterogeneous derelict estates and settlements, current development policies are likely to perpetuate these problems, and even reinforce them. In development strategies, particularly those implemented at the local level, the historical context – we argue – should be an obligatory element of key importance, ensuring effective, not deceptive, aid.

From the point of view of the discussion on the social dimension of derelict settlements, we have also focused on the problem of spatial mismatch. Our results suggest that this phenomenon encounters specific conditions for taking root in the analysed areas, especially when there is no breakage from the existing sharp socio-economic differences when compared to the surrounding environments. The perpetuation of these inequalities and differences creates a new type of spatial alienation, particularly visible in the analysed case studies.

Spatially heterogeneous settlements characterised by functional dereliction are an anticipated object of study and analysis (including studies on former State Agricultural Farms, post-industrial areas and social exclusion in urban areas). In this article, we highlight that this matter should be seen in a broader sense, i.e. as trajectories of development, not only from the point of view of functional changes, but also of the context of the geographical environment.
We therefore postulate that each case of multifaceted deprivation should be best understood as a particular stage of that trajectory (functional dereliction) and as a special case of the geographical location within socio-economic space (spatial heterogeneity). Understanding this interrelation will in itself not solve the problems of social deprivation. Nevertheless, it may make us think one more time before conventional politics is once again thrown into the game.

Note

(1) What we refer to as causes should not be limited to the simple statement that the previous functions of the space under discussion have disappeared.

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