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# SPATIAL AND MORPHOLOGICAL EFFECTS OF TOURISM URBANISATION IN THE ŁÓDŹ METROPOLITAN AREA

Abstract: The article presents the effects of urbanisation that took place from 1979 to 2004, on the space of tourism areas in the rural-urban fringe of the Łódź Metropolitan Area. The study concerns morphological changes, i.e. land use, land plot development, as well as the technological and social infrastructure of 24 destinations.

Key words: urbanisation, tourism urbanisation, spatial aspect of the urbanisation process, metropolitan area, rural-urban fringe, tourism destinations.

## 1. INTRODUCTION

The aim of the article is to present the effects of the urbanisation process on the space of tourism destinations in the Łódź Metropolitan Area. The analysis concerned the forms of land use and ownership, the spatial and functional system of 24 destinations, the development of land plots, the morphology of built-up areas, as well as the technical and social infrastructure. Data collected in 2004 by M. MAKOWSKA-ISKIERKA (2009)<sup>1</sup> was compared to information from 1979 published by A. MATCZAK (1982).

Tourism urbanisation is an urbanisation stage. It may mean an individual, particular phenomenon, a sequence of processes, as well as a particular state or transformation of geographical space caused by these processes. It is complex, consisting of several stages and leading to a substantial transformation of rural into urban space due to tourism (DZIEGIEĆ 1995). Functional transformations are mainly caused by city inhabitants, who temporarily 'migrate' to areas outside the city for recreational purposes, thus contributing to a transfer of capital and models of social behaviour. Changes affecting individual villages and the whole settlement system are caused by phenomena directly related not only to tourism development, but also to modernization in a given society. Changes take place on different planes which are mutually dependent and interrelated. As regards space and morphology, the changes concern: forms of land use (intended for tourism use), recreational buildings (e.g. second homes) in areas outside the city, the development of spatial patterns in the countryside,

better supply of technical and social infrastructure in rural areas, household development, as well as the shape and size of residential houses. The effects of urbanisation listed above, at various stages of advancement, were observed in destinations situated in the Łódź Metropolitan Area.

A metropolitan area means a large city and neighbouring areas linked to it functionally. Its range is not the same as the rural-urban fringe (MARKOWSKI & MARSZAŁ 2006), understood as a 'back-up' area for the central city, with food supply, housing and tourismrecreational functions. However, in the case of a metropolitan tourism region, its area is often referred to as the rural-urban fringe (e.g. FARACIK 2011).

The shape and the potential boundaries of Łódź Metropolitan Area (LMA) were established as a result of an analysis of functional-spatial features, as well as a tendency towards the development of the metropolitan functions of communes (gminas) in this region (Plan... 2010). LMA covers 2,862.8 km<sup>2</sup> and consists of the city of Łódź and 35 communes (gminas). For the purposes of this article, the author closely studied 24 (tourism-recreational) destinations, covering a total of 101.26 km<sup>2</sup>, within 30 km from the administrative borders of Łódź (Fig. 1). It was possible to observe four main aspects of urbanisation: demographic-vocational, economic, cultural and spatial-morphological<sup>2</sup>. Multi-facetted urbanisation processes are best visible in landscape changes. As regards space, they lead to permanent transformations in the area's morphology. They are also evident in changes to land use.



Fig. 1. The location of the area studied relative to Łódź Metropolitan and Łódź voivodeship areas S o u r c e: author's compilation

### 2. LAND USE

How advanced urbanisation processes have become in the tourism-recreational areas studied can be seen from land use. The domination of forest over agricultural areas (Fig. 2), recorded in 2004, points to the non-agricultural character of the destinations. It is also shown by the relatively high percentage of urbanised areas (18.77%), including residential and transport.

A correlation was observed among individual types of land use. Areas built-up, urbanised and agricultural were inversely correlated to the area of forest. Pearson's correlation coefficient for built-up and forested areas was very high - 0.930. On the other hand, the ratio between the percentages of forest and agricultural areas was also very high but negative (r= -0.801), which means that where there were few agricultural areas, forest covered a large part of the total area of a given unit. This may also be related to when the destinations included in the study obtained their recreational function. The older an area, the more forested it was (correlation coefficient - 0.487). This comes from the fact that destinations founded before the Second World War were usually surrounded by extensive forest.

The average area of the 24 destinations studied was 4.22 km<sup>2</sup> and was larger than the average area of villages in the Łódź voivodeship (3.34 km²). The largest villages (< 5 km<sup>2</sup>) were those with the longest (pre-war) recreational traditions, e.g. Rydzynki, Grotniki, Wiśniowa Góra, Sokolniki Las or Rosanów. Smaller destinations, with more agricultural than forested land, included larger transformed and urbanised areas (e.g. Janówka and Żabiczki). This means that large forest complexes, which are mostly state property, limit the possibilities of developing private building and infrastructure, which is justifiable if we consider the preservation of the natural assets of rural-urban fringe areas. It is worth pointing out that it is the forests with their special microclimate that are the main tourism asset of LMA, making it a particularly attractive area. They have contributed to the development of the recreational function of the destinations, and are encouraging city inhabitants to change their permanent place of residence.

Forests are the most important form of land use (they cover <sup>3</sup>/<sub>4</sub> of the total area of Ustronie, Grotniki, Rydzynki and Wiśniowa Góra). However, at many destinations their percentage has decreased – most rapidly in Dąbrowa, Starowa Góra and Sokolniki Las (by over a half compared to 1979). This was mostly connected with the expansion of built-up and urbanised areas rather than agricultural land. It is one of the consequences of urbanisation, which in extreme cases may lead to irreversible changes in these areas. A decrease in forested area may mean that the recreational function has disappeared and is replaced with other functions (e.g. residential).



Fig. 2. Land use in studied recreational areas: 2004 S o u r c e: author

Over a period of 25 years, the percentage of agricultural land decreased by nearly half (from 61.57% in 1979 to 35.45% in 2004). The growth rate differed from place to place but it was negative nearly everywhere (with the exceptions of Dąbrowa and Zofiówka). The biggest decreases in the percentage of agricultural land were recorded in Wiśniowa Góra - by 98.6%, Grotniki - 90.88% and Ustronie - 88.46%, and Janówka - by 52.33%. This points to rapid, substantial transformations in rural-urban fringe tourism areas. Differing percentages of agricultural land may be explained by the length of time over which they had a recreational function. It was proved that their correlation was largely negative (r = -0.571) which means that the destinations which had had recreational functions for a longer period had less agriculture, especially arable land (decrease from 51.59% in 1979 to 36.72% in 2004). The decrease for the benefit of other land uses (usually more intensive) seems to be a natural process,

especially in rural-urban fringe areas, and points to ongoing urbanisation processes there.

Built-up, residential, transport and other types of area may be treated as a measure of urbanisation, because they clearly point to how advanced this process is. Such land use types occupied a relatively large part (22% on average) of the area of each destination studied (more than one third of all the land in Starowa Góra, Justynów and Żabiczki, and over a half in Sokolniki Las and Janówka). Compared to earlier years, the percentage of urbanised area in the majority of the villages has increased. Since the 1970s, the growth rate has exceeded several hundred per cent (e.g. in Zabiczki, Rosanów, Janówka, Starowa Góra), and changes compared to other areas were the most rapid at that time. A greater built-up area was found in destinations inhabited by large numbers of people, and with a relatively small percentage of agricultural land at the same time (moderate correlation 0.4). It was proved that the length of time in which these destinations had recreational functions was not significant, but rather how developed they were, i.e. those with a more developed tourism function had a larger percentage of urbanised area (r = 0.481). Built-up and transport areas are expanding at the cost of other types of land, also forest, though it was the occurrence of the latter rather than distance from Łódź that determined the development of urbanisation in tourism areas.

The majority of the urbanised land (48.47%) was in residential areas, which made up 9.1% of the total area. However, if we include built-up agricultural and other areas it would take up 11.93% and as much as 63.52% of the urbanised area. Most of it belonged to Sokolniki Las (40%), Janówka and Żabiczki (over 35%), and Starowa Góra and Justynów (over 25%). Residential areas showed a considerable positive correlation with the development of the recreational function at individual destinations (r = 0.468) and the number of permanent residents (r = 0.436). They were strongly (r = 0.883) correlated with the percentage for transport and negatively correlated with the destination area (r = -0.258), the percentage for agriculture (r = -0.236)and forest (r = -0.375). They did not show any significant correlation with the period of recreational function (r = 0.131) or distance from Łódź (r = -0.099). Pearson's correlation coefficient for built-up agricultural land and distance from Łódź was moderately negative (r = -0.431). This means that most buildings could be found in agricultural areas near the city. On the other hand, forest dominated farther out and was not as heavily built-up.

In order to establish the main types of land use, Doi's method was used (1975), which serves the purpose of defining the main elements. Six groups were distinguished: three with an absolute domination (over 50%) of the agricultural area (R) – group I, forests (L) – group II, and urbanised areas (Z) – group III, as well as three mixed groups (40% domination): RL – group IV, ZR – group V, RLZ – group VI (MA-KOWSKA-ISKIERKA 2011). Also changes in the main types of land use were defined (Table 1) and between 1979 and 2004 their number increased by half. In most cases, predominating agricultural areas gave way to built-up, transport and forest, which is further proof of rapid urbanisation.

T a ble1. Changes in main land use types in some tourismrecreational destinations: 1979\*-2004 (Doi's method, 1957)

Change of group		Destination	
I – III	R – Z	Janówka	
I – V	R – ZR	Justynów	
I – II	R – L	Rydzynki	
I – VI	R – RLZ	Rąbień AB	
II – III	L – Z	Sokolniki Las	
x	LR – L	Wiśniowa Góra	
х	LR – R	Zofiówka	

\* Comparative data for Rydzynki and Zofiówka comes from 1988; R – agricultural, L – forest, Z – built up areas.

Source: author.

# 3. THE SPATIAL AND FUNCTIONAL PATTERN OF DESTINATIONS

Changes in land use result in morphological changes connected with the transformation of the spatial pattern of destinations, land plots and building morphology. Parcelling and infrastructure development were the result of establishing estates around Łódź. Those created 'from scratch', often in accordance with Howard's idea of 'garden-cities' (e.g. Grotniki, Sokolniki Las) usually had the regular spatial layout of a chess board, radial or park type (MATCZAK 1982). Destinations created in stages – usually after the Second World War – have multi-axial and mosaic layouts. Spatial planning was least affected by tourism development in the villages founded in the 1960s and 1970s.

Comparing plans from the early 21<sup>st</sup> c. to those from the 1980s, we notice that the majority of the recreation destinations had not changed their layout, but were filled in with plots of land and buildings in an irregular, dispersed way (Fig. 3). This was caused by the dynamic parcelling of agricultural and forested areas (especially those privately owned), as well as the development of construction (not only summer holiday houses). Over the period of 25 years, spatial transformations were connected with a more intensive use of land and its changing function. At that time, the secondary parcelling observed since the 1950s was intensified, easily done due to unrestrictive legal regulations. A result of the growing number of properties was the fragmentation of land and its more intense (condensed) development, including the number of streets, which is typical of urban areas (LISZEWSKI 1977).

Building density is a measure of urbanisation higher values point to intensity and signify an advance in urbanisation. In 2004, in the recreation destinations, building concentration was on average 92 houses per km<sup>2</sup>, but in one third of all areas this ratio was higher than average (e.g. over 271 in Justynów and Sokolniki Las). The number of residential buildings per 100 ha of agricultural land was 109, and values above average were recorded in nearly the same destinations. In this case we could also observe a correlation with the number of permanent inhabitants (r = 0.582), but a greater role (r = 0.401) was played by time of in a given village, because in destinations with longer tourism traditions there were generally fewer agricultural areas. The measure also depended on land use, especially the percentage of agricultural land (r = -446) and forest (r = 427).

The distribution of buildings was uneven and related to the fact that they had been erected at different times. However, when comparing detailed plans of recreation destinations certain regularities become evident. In the late 1970s, the majority of summer holiday houses were located on the edges of some destinations (Swędów, Justynów, Rydzynki, Kwiatkowice) or in forest (especially older destinations, such as Sokolniki Las, Grotniki and Ustronie), as well as along major roads and directly near the administrative borders of Łódź. At present, due to the shortage of unoccupied forest, regarded as the most attractive, buildings are being erected on the remaining areas (often also agricultural), inside the destinations, infilling them and at the same time changing their morphology.

The functional layouts are difficult to describe. Most areas play mixed roles, therefore it is not possible to clearly define functional districts. However, in comparison to the late 1970s, we may observe substantial changes. Over a period of 25 years, residential areas greatly increased, often at the cost of the earlier predominant summer holiday accommodation areas. At the same time, forested and agricultural areas have decreased. Due to the economic and political transformation, the service sector developed, especially trade; new health service and cultural and entertainment institutions appeared. In many tourism destinations they are not dispersed, like before, but form complexes, usually on the main access roads.



Fig. 3. Plans for selected recreational destinations from 1979 and 2006: Sokolniki Las, Justynów, Janówka i Starowa Góra S o u r c e: M. MAKOWSKA-ISKIERKA (2009)

Urbanisation and modernization in some of the areas studied resulted in the withdrawal of recreational functions for the benefit of other, mainly residential ones. Further development of these may lead to the suppression and total transformation of the primary functions of these areas. We should consider here the popular trend to buy property in the tourism areas of the Łódź Metropolitan Area, despite the fact that the prices are extremely high and supply is often lower than demand. Many people decide to invest outside the borders, but close by, which triggers the process of 'spatial succession' from a recreational function (LISZEWSKI 1987). This refers to the model of the migration of second homes and destination expansion (LUNDGREN 1974, PEARCE 1989, DZIEGIEĆ 1995), described in detail by M. MAKOWSKA-ISKIERKA (2009, 2011).

#### 4. DESCRIPTION OF LAND PLOTS

In 1979, in the whole rural-urban fringe of Łódź there were 8919 summer plots (MATCZAK 1982), and in destinations subjected to a detailed comparative analysis – 4570. The following increase in the number of plots was observed: 2,446 in 1966, 2896 in 1970, and 3,778 in 1975 (MATCZAK 1982). It is difficult to estimate how many there were in 2004, because official registers do not divide property into functional types. Therefore, all 24,936 plots were taken into account, at least 20% of which had a recreational function (c. 5,500 had summer holiday houses). We must not forget, however, that some recreational plots are not built-up, and the buildings erected on others are 'second homes', used only seasonally.

The number of plots in individual tourism destinations did not strongly depend on distance from Łódź (r = -0.035), and only moderately (r = 0.353) on the length of time with a recreational function. More popular and fashionable destinations of longer tourism tradition, such as Sokolniki Las or Rosanów, had the largest number (2929 and 2339, respectively), while the younger, agricultural places had the fewest (e.g. Cesarka – 74, Dąbrowa – 83).

The intensity of change as regards the number of plots can be presented by the RT index, expressing the number of summer holiday plots per 100 registered plots. It defines the degree of rural settlement transformation due to tourism, as well as phases of this process. Therefore, it may be regarded as a measure of functional transformation, showing a new (tourism) function acquired by rural areas. In the studied case, identifying the number of summer holiday plots with plots with individual recreation buildings, the RT index did not exceed 75 at any of the destinations, which means that the number of plots with summer houses was much lower than the remaining registered plots. Taking into account that they had already undergone transformation due to tourism, values obtained were interpreted with the help of A. Ko-WALCZYK (1994). It meant that no destination had been fully transformed due to tourism alone. As many as 11 had RT < 20, which suggests that they were not at the initial, but rather at the final stage of transformation due to tourism. The substantial decrease in the percentage of summer plots among the remaining, points to the transformations that have taken place in the recreational areas of the rural-urban fringe of Łódź, as well as to the withdrawal of tourism functions and the introduction of new residential functions. This in turn demonstrates advancing urbanisation.



Fig. 4. Size of land plots in tourism-recreational areas in 2004 S o u r ce: author

Generally, in the compared periods, the number of plots increased at the cost of their mean area, which points to ongoing transformation. As a result of secondary parcelling, the originally large plots often did not retain even the suggested minimum of 1000 m<sup>2</sup>. The average area of all plots in the 24 recreational destinations in 2004 was 3,873.75 m<sup>2</sup>, but more than half were smaller. The size of plots is presented in Fig. 4. Plots of up to 2,000 m<sup>2</sup> ( $\frac{3}{4}$  of all plots) are defined as typically summer holiday plots, and land with over 10,000 m<sup>2</sup> – as agricultural (LISZEWSKI 1985). The majority of plots were small or medium-sized (up to 1,500 m<sup>2</sup>) making up 67% of the total area. The most

numerous, but at the same smallest were found in Sokolniki Las, Rosanów, Justynów, Starowa Góra, Rąbień AB, Janówek and Żabiczki (Fig. 3), that is in those destinations where urbanisation was most advanced and noticeable.

Advancing urbanisation is visible in the morphology of the plots. A. MATCZAK (1982) believes that recreational plots differ from rural ones in the small number or lack of farm buildings, that they are often forested or grassed, sometimes used for gardening and orchards (horticulture); they also include sheds and garages (c.  $\frac{1}{3}$  –  $\frac{1}{2}$  in 1980 in the rural-urban fringe of Łódź), sometimes sports facilities. In order to establish the situation, in 2004 and 2005, an inventory of 189 plots with summer houses and 211 with permanent (residential) houses was made. A larger mean area (nearly by half - 1497 m<sup>2</sup>) was recorded for the latter type (2,729 m<sup>2</sup> on average). As many as 40.5% of the plots were significantly transformed, i.e. had decorative plants typical of gardens, while plants typical of forests were found in 31.75% of summer plots but only in 18.48% of plots that could be inhabited all year round. Paths and drives of all kinds were found much more often around residential houses (over 50%) than recreational ones ( $< \frac{1}{3}$ ). About 40% of plots had utility buildings (sheds) and garages - again, more of them were found on plots with houses that could be inhabited all year round.

#### 5. BUILDING MORPHOLOGY

The urbanisation of the rural-urban fringe of a large city is also manifested in changes to the types of buildings (JAKÓBCZYK-GRYSZKIEWICZ 1991). A characteristic feature of rural-urban fringe recreational areas is the scarcity of farm buildings and the domination of summer houses (individual recreation). Advancing urbanisation results in the development of all-year residential buildings, though some of them play in fact a role of 'second homes'<sup>3</sup>.

In 2004, there were 9355 houses, 58.25% of which were summer houses (5449), and the remaining 41.75% were permanent (3906). In 1978, in the ruralurban fringe of Łódź, 2992 private summer houses were registered, which made up only 1% of the total number of residential buildings (MATCZAK 1986). Over 25 years the proportions of both types had become more balanced, because the number of buildings had considerably increased<sup>4</sup>. Despite the fact that this mainly concerned newly built houses inhabited all year round, the number of individual recreational buildings still remains high, which stresses the tourism character.

By 2004 the number of summer houses had nearly doubled (exceeding the previous value for the whole recreational area of the rural-urban fringe of Łódź by 45%). In the administrative system, the largest number (66% of the total) were found in three communes (gminas): Zgierz, Ozorków and Andrespol. For instance, in Sokolniki Las and Wrząca, the number built over the period of 25 years was larger than in 1978 (Table 2). At the same time, between 1999 and 2004, in Anielin Swędowski, Swędów and Cesarka (Sosnowiec) the number decreased by nearly half. This could have resulted from their transformation into all-year residential buildings or from the fact that they were replaced with new ones. Recreational building value in 2004 was strongly positively correlated with the length of recreational function at a given destination (r = 0.515). This should be explained by the growing correlation between number of summer houses and length of time. In villages of longer tourism tradition, there were more individual recreational houses, therefore the value of the built-up measure was higher. In 1978, it was location that was more significant.

The growing number of houses, especially those for permanent use, is not only a measure but also an obvious proof and consequence of advancing urbanisation. It leads to balancing or even reversing their proportions in relation to recreational buildings, which poses the question about whether a primary recreational function is possible at a destination. The excess of all-year houses suggests a residential function has developed, competitive to the tourism one. Such changes, however, seem to be a natural consequence of urbanisation in tourism-recreational areas. Their speed and direction will decide whether they will decrease one for the benefit of the other, or perhaps both functions will co-exist in some way.

T a ble 2. Changes in the number of summer houses in some destinations of the studied area in 1978, 1999 and 2004

Destination	1978	2004	Difference
Sokolniki Las	487	1 258	+ 771
Grotniki	231	251	+ 20
Justynów	365	396	+ 31
Wrząca	87	179	+ 92
Swędów	60	174	+ 114
Kwiatkowice	52	97	+ 45
	1999	2004	x
Anielin Swędowski	212	93	- 119
Swędów	315	174	- 141
Cesarka - Sosnowiec	50	26	- 24

S o u r c e: author's compilation based on A. MATCZAK (1982), A. NOWAKOWSKA (2000) and '*Rejestry wymiarowe podatku od nieruchomości*' ('Property/Real estate tax registers') from 2004.



Fig. 5. Examples of summer and residential buildings in the studied tourism-recreational region: photos 1, 2, 3, 4 – Sokolniki Las, 5 – Tuszyn Las, 6 – Rydzynki, 7 – Zofiówka, 8 – Żabiczki S o u r c e: author's photographs from 2005 and M. MAKOWSKA-ISKIERKA (2009)

In 2004, the total area of summer houses in the studied tourism-recreational region was 218,462.34  $m^2\!\!\!,$  and of residential houses 406,674.76  $m^2$  (nearly twice as much). Jointly, it was six times larger than the area of all the destinations, which points to the high density of buildings and the fact that the houses had more than one floor. The smaller total area of summer houses (despite the fact that their number was nearly twice as high) is connected with their average size recreational buildings are usually smaller than those used all year round (an average cubature of a summer house was 35 m<sup>2</sup>, and of a residential house - 95 m<sup>2</sup>). Only in six destinations (Rydzynki, Sokolniki Las, Zofiówka, Rąbień AB, Rosanów, Ustronie) was the total area of summer houses larger than that of residential, and in six others (Grotniki, Wrząca, Swędów, Zielona Góra, Anielin Swędowski, Jedlicze A), despite the larger number of recreational buildings, it was the all-year houses whose total area was larger. It was observed that the further from the city, the lower the percentage of the smallest recreational buildings (r = -0.713), which resulted from lower prices for land further from Łódź. At places where more people were registered, the population density was high and there were many plots; the number of allyear houses was also largest, especially the biggest (correlation at the 0.5 level).

Among the 400 houses where the inventory was made, nearly one half were one-storey buildings or those with a usable attic. The taller houses could be used all year round (the average number of storeys was 1.78 for residential buildings and 1.3 for recreational ones). They were 20 years old, on average. In recent years, larger houses have been built, both as regards area and number of storeys, which also means a larger number of rooms. This results from new trends and the growing affluence of society. The level of urbanisation measured with the number of rooms per building (residential - 5.42, recreational - 3.13) turned out to be significant and was higher than in 1978 (by 0.67 in the case of recreational houses). As regards the types of building, it was observed that typically rural farmsteads occurred very rarely, most houses were built using an industrial system and could be used all year round, and the small summer houses were often rebuilt or replaced with bigger ones. Every change of type of building is accompanied by a modification of their architectural style. Therefore, many older buildings were substantially transformed. More series-produced houses in the Podhale (Polish mountain) and Finnish styles appeared. The predominating type, however, were individually designed, high-standard rural-urban fringe buildings (Fig. 5). Architectonically, the buildings in recreational areas tended to have large windows, terraces and balconies (over 63% houses of both types). Most houses

were built of wood or brick and airbrick; they usually had pitched roofs, covered with tar paper or sheet metal.

Changes in built-up area morphology may result in a change of the destination's morphology. It must be remembered that the growing number of inhabitants in recreational destinations, as well as their concentration in a small area, requires exceptional, usually intensive land development. This is connected with investment expenditure, resulting in buildings and facilities filling in space (LISZEWSKI 1977). Thus, the current state of development is the effect of many years of investment in a given area.

# 6. TECHNICAL AND SOCIAL INFRASTRUCTURE

An important spatial-morphological expression of urbanisation is to equip the destination with technical and social infrastructure facilities. Technical infrastructure is considered to be one of the characteristic features of urban areas providing necessary and essential services. The social infrastructure has a more complementary character. With time, the infrastructure in rural-urban fringe areas has developed and its quality improved. Along with growing standards of recreation and living, the attractiveness of tourism recreational destinations has increased, too.

In 2004, all villages included in the study had an electric supply, some of them even had their streets lit; they mostly had a water supply and sewage systems installed, and the problem of waste disposal was under control. Houses were much better furnished as regards technical-sanitary devices; many of them had a heating system installed. Recreational destinations also gained new social, economic and cultural services (e.g. gastronomic, entertainment, medical and educational facilities), which make life easier and offer more ways of spending free time. Moreover, there were 895 businesses, the large majority of which (79.55%) ran some kind of service, especially trading, and in that way influenced the nature of the settlement. Better equipped destinations developed faster than others, attracting more people who wanted to settle there. The majority of them were already similar to small urbanised towns.

#### 7. CONCLUSIONS

Modern urbanisation involves not only the development of cities, but also their growing influence on the rural environment, especially in the rural-urban fringe. Urbanisation can be seen in the growing number of large cities surrounded by settlement complexes, functionally linked to them. These patterns are characterized by a tendency to spatially expand and an increasing number of links with surrounding areas. The spatial range is growing due to the development of transport (public and private), the result of which is further urbanisation of areas situated outside the administrative city boundaries. As a consequence, it leads to the emergence of metropolitan settlement systems (KORCELLI, GAWRYSZEWSKI & POTRYKOWSKA 1992). Different authors present different classifications of urbanisation, according to how this process occurs. Sociologists, e.g. B. JAŁOWIECKI (1972) and J. ZIÓŁKOWSKI (1964), claim that individual forms of urbanisation have different significances, which increases, starting from the morphological, through the demographic and economic, to the social.

This article describes the effects of tourism urbanisation on recreational areas in the Łódź Metropolitan Area, on the spatial-morphological level. It has been demonstrated that one of its manifestations is the development of infrastructure and the change of type of residential building (to single-family houses of the rural-urban fringe type), connected with a change in architectonic style. Another effect confirming progressive urbanisation, and at the same time a measure of the rate of change and the advance of these processes, is a change in land use which involves reducing agricultural land and increasing built-up areas. It has been proved that the size of these areas, which express the scale of urbanisation, depends on the develop-ment of the recreational function of a given destination. The author has also presented change in the character of plots of land (expressed by number, average area and mode of development), which has taken place over a short period of time. Moreover, the author has shown modifications in the spatial and functional system and the type of building which determine the morphology of a tourism destination. All these elements prove that the urban life style, which is an expression of urbanisation, is becoming increasingly popular in rural areas. In the areas included in the study, the carriers of these processes are mostly tourists (mainly plot users), who are city inhabitants.

#### FOOTNOTES

<sup>1</sup> Based on the data from the quoted work, this article presents a lot of information that has not been published so far.

<sup>2</sup> These terms were used by E. DZIEGIEĆ (1995) with reference to tourist urbanisation.

<sup>3</sup> They are buildings used seasonally for recreational purposes by the owner and his family, often serving the purpose of holiday recreation. They are situated outside the city and outside the place permanently inhabited by the owners. In the legal sense, they are private property.

<sup>4</sup> The analysis does not include collective recreation facilities popular in the 1970s and 1980s, because many of them do not exist any more or have ceased to perform their primary functions.

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