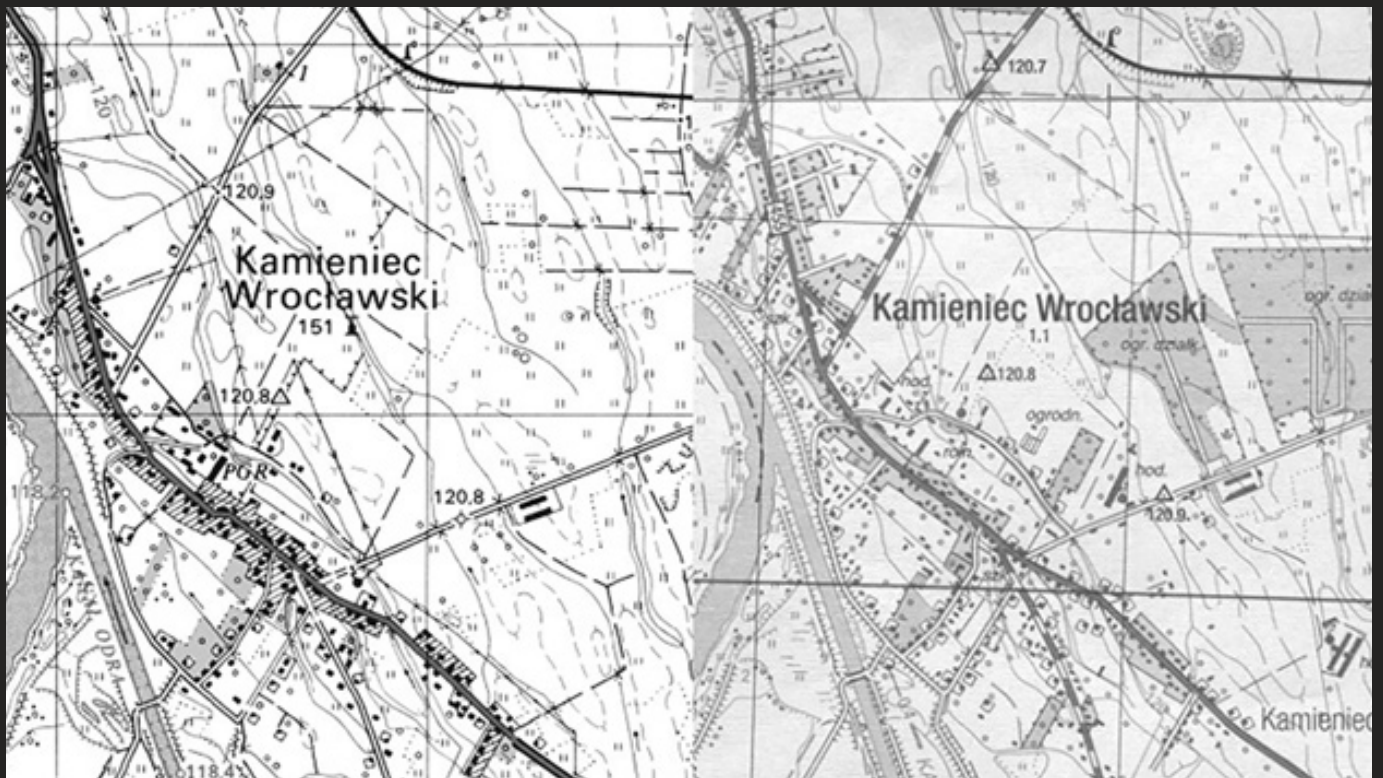


# On the Path to Urban Deconcentration

## *Housing Construction in the Hinterland Zone of Wrocław at the End of the 20<sup>th</sup> Century*

Robert Szmytkie

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Changes in the morphology of the  
village of Kamieniec Wrocławski  
(Czernica municipality), 1976–2002  
Source: Laboratory of History  
of Cartography at the  
University of Wrocław

The socialist period in Poland and other states in Central and Eastern Europe was associated with the country's planned industrialisation and urbanisation. The effect of such a policy was the progressive development of urban areas, especially large cities, and an increase in the concentration of population in their area. This growth was fostered by the location of new industrial plants within the cities, the influx of people from rural areas, and socialized housing construction, in which the leading role was played by the construction of prefabricated block housing estates in cities. In parallel, the development of cities occurred during this period at the expense of the deceleration of suburbanisation in their surroundings. However, the end of the socialist period and the beginning of the transition period witnessed the development of single-family housing in the hinterland zones of large Polish cities. In fact, the spread of the private car and the liberalisation of land prices triggered a second wave of suburbanisation processes in suburban areas. The purpose of this article was to identify the main trends in housing construction in the hinterland zone of Wrocław in the years 1971–2011 and to determine the spatial effects of these processes in relation to morphological changes in suburban villages. It was assumed that the beginning of the transformation period (1989–2002) was associated with a change in the locations of concentration of construction activity, moving away from the core city and its satellite towns at the end of the socialist period (1971–1988) toward the core city and the villages of the suburban zone in the modern period (2002–2011).

### *Introduction*

World War II and the changes of political system that followed in Poland and other Central and Eastern European countries significantly altered the conditions for urban development.<sup>1</sup> First, cities had to face the problem of rebuilding housing and industry after war damage. In many Polish cities, the scale of destruction was significant, far exceeding 50% of the built-up area.<sup>2</sup> Secondly, the altered political situation and the state management of space granted additional power to cities, especially large ones. The centrally planned economy, geared toward the progressive industrialization of the country, led to an increasing concentration of population in cities and a rise in the level of urbanisation, as most industrial investments were located in cities. The main factors in the population increase in cities during this period were the influx of people from rural areas and the relatively high birth rate, reinforced by the selective nature of migration.<sup>3</sup> Furthermore, numerous changes in the territorial division of the country promoted the expansion of the administrative boundaries of cities.<sup>4</sup> The development of cities during the socialist period, including the incorporation of suburban areas into their boundaries, basically slowed the processes of suburbanisation. However, once the change of the political system of the country in 1989 initiated significant social and economic transformations in basically every aspect of life, it also had a major impact on the spatial behaviour of the population, triggering suburbanisation processes, especially in the hinterlands of the largest cities.<sup>5</sup>

Against the background of these general conditions for urban and suburban development in Poland, the case of Wrocław seems special. The primary factor here is that suburbanisation processes in the hinterland of Wrocław were initiated as early as the second half of the nineteenth century. However, the gradual expansion of the city borders resulted in the “consumption” of the suburban zone and its movement away from the medieval core of the city. Despite territorial expansion, the population density within the city limits grew, which was associated with very rapid population growth. In fact, the population of Wrocław (before 1945, Breslau) increased from 44,218 in 1799 to 526,200 in 1911. The overcrowded city (with a population density of more than 10,000 people per square kilometre) needed free land for new housing developments.<sup>6</sup> One outcome was the emergence of various concepts for increasing urban density, including the construction of suburban garden cities (Gartenstadt Carlowitz and Siedlung Breslau-Zimpel). In 1921, the competition of the Greater Wrocław (Groß-Breslau) development plan was also announced for urban deconcentration.<sup>7</sup> Based on the concepts proposed by urban planners, the boundaries of the city were expanded in 1928, incorporating two former towns and 30 suburban villages into the city, so that its area increased from 49.6 to 174.6 square kilometres and population density decreased to 3,500 people per square kilometre. New residential developments, mainly with single-family housing, were

located in outlying districts. Suburban villages also began to develop, especially along main railroads leading outward from the city.<sup>8</sup>

At the end of World War II, over 60% of the city had been destroyed, particularly affecting the central, most densely built part of the city.<sup>9</sup> Poland's border changes led to a population exchange, with the expelled German population giving way to an influx of repatriates from the so-called Eastern Borderlands lost by Poland after World War II.<sup>10</sup> In Wrocław, reconstruction from war damage progressed relatively slowly, and some urban plots lay fallow until the 1990s.<sup>11</sup> What is more, the influx of people from rural areas contributed to rapid population growth. Construction activity in Wrocław did not only involve filling the gaps in the urban fabric left by the destruction of World War II. New block housing estates were also located in the outer districts of the city, facilitated by successive expansions of the administrative boundaries in the 1950s and 1970s.<sup>12</sup> At that time, suburbanisation processes in the hinterland zone slowed significantly, being limited only to individual villages to which the population moved from the city.<sup>13</sup> What launched the second wave of suburbanisation processes in the urban hinterland was the social and economic transformation in the 1990s. Currently, the suburban zone of Wrocław is one of the most dynamically developing areas in Poland.<sup>14</sup>

The purpose of this article was to identify the main trends in housing construction in the hinterland zone of Wrocław in the years 1971–2011 and to determine the spatial effects of these processes in relation to morphological changes in suburban villages. For the purpose of the study, it was assumed that the beginning of the transformation period (1989–2002) would be associated with a change in the concentration areas of construction activity from the core city and its satellite towns at the end of the socialist period (1971–1988) to the core city and the villages of the suburban zone in the modern period (2002–2011). The main objective of the study is supplemented by three research questions:

- 1) How did the volume of construction activity in Wrocław and its suburban zone change between 1970 and 2011?
- 2) What spatial regularities are indicated by construction activity in the Wrocław agglomeration at the turn of the 20th and 21st centuries?
- 3) How did the morphology of suburban villages change in the wake of intensive construction activity in the analysed period?

### *Data and Methods*

For the purpose of the study, data were used from the National Censuses of 1970, 1978, 1988, 2002 and 2011 (Statistics Poland) on the number and structure of dwellings (new flats). These findings made it possible to determine the volume of construction activity in the intra-census periods, over a longtime horizon (from 1970 to 2011). The analysed period was divided into three sub-periods:



Division of the Wrocław agglomeration into zones,  
municipalities and statistical localities  
Localities: 1 - Smolec, 2 - Kielczów, 3 - Bielany Wrocławskie,  
4 - Radwanice, 5 - Kamieniec Wrocławski, 6 - Mirków,  
7 - Ciechów, 8 - Boguszyce  
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[1] 1971–1988 – the decline of the socialist period, [2] 1988–2002 – the period of systemic transformation, and [3] 2002–2011 – the beginning of the modern period. The differentiated subperiods are characterised by the diverging conditions of urban development mentioned in the introduction.

Statistical data was collected for Wrocław and its suburban zone, which in this study is understood as two rings of municipalities surrounding the core city. The study was conducted on three spatial scales: [1] in zones, dividing the agglomeration into four zones: core city, satellite towns and two rings of suburban municipalities; [2] in terms of municipalities, distinguishing urban, urban-rural and rural municipalities; and [3] in terms of statistical localities, excluding urban areas. Due to the limited scope of statistical data for the number of dwellings from the 2011 census, a full range of analyses was possible only for the first two spatial scales, and analyses with respect to statistical localities were conducted for the years 1971–2002.

The volume of construction activity was visualized using cartodiagrams and cartograms. At the same time, this finding was the starting point for more detailed spatial analysis, for which GIS tools were used. All analyses were performed in ArcMap 10.7.1 software. Zones of intensive construction traffic in the suburban zone were identified. In the first step, the Hot Spot Analysis tool was used. This tool calculates the Getis-Ord  $G_i^*$  statistic for each feature in a data set, so that the resultant z-scores and p-values indicate where features with either high or low values cluster spatially. This tool works by looking at each feature within the context of neighboring features.

A feature with a high value is interesting but may not be a statistically significant hot spot: statistical significance means that a feature will not only have a high value but additionally be surrounded by other features with high values as well. The local sum for a feature and its neighbors is compared proportionally to the sum of all features; when the local sum is very different from the expected local sum, and when that difference is too large to be the result of random chance, the result is a statistically significant z-score.<sup>15</sup> In the second step, the IDW (Spatial Analyst) tool was used. This tool interpolates a raster surface from points using an inverse distance weighted (IDW) technique.<sup>16</sup> The interpolation procedure was carried out using the z-score values generated during the Hot Spot Analysis.

Topographic maps were used to identify morphological changes in suburban villages. The initial morphology of the villages (for 1970s) was analyzed based on the Topographic Map of Poland (TMP) at a scale of 1:25000 in the 1965 System, while the final morphology (for the late 1990s and early 2000s) was analysed based on the Military Topographic Map (MTM) at a scale of 1:25000 in the UTM System. The research was carried out for the selected 8 villages with the highest growth in the number of new dwellings during the period under analysis. This group included six villages located in the first ring of suburban municipalities (Bielany Wrocławskie, Kamieniec Wrocławski, Kiełczów, Mirków, Radwanice and Smolec) and two located in the second ring of suburban municipalities (Boguszyce and Ciechów). Table 1 presents the list of villages analysed in the study and the map sheets used in the analysis of the morphological changes.

<i>Village</i>	<i>Municipality</i>	<i>TMP</i>	<i>MTM</i>
Bielany Wrocławskie	Kobierzyce	463.11 Gniechowice	M-33-034-D-c,d Wrocław 5
Boguszyce	Oleśnica	453.23 Dobroszyce 453.41 Oleśnica	M-33-35-B-c,d Oleśnica
Ciechów	Środa Śląska	452.43 Ujazd Górny	M-33-34-C-a,b Środa Śląska
Kamieniec Wrocławski	Czernica	453.34 Wrocław	M-33-035-C-a,b Wrocław-4 M-33-035-C-c,d Wrocław-6
Kiełczów	Długołęka	453.34 Wrocław	M-33-035-C-a,b Wrocław-4
Mirków	Długołęka	453.42 Długołęka	M-33-035-A-c,d Wrocław-2 M-33-035-C-a,b Wrocław-4
Radwanice	Siechnice	463.12 Radwanice	M-33-035-C-c,d Wrocław-6
Smolec	Kąty Wrocławskie	453.33 Wrocław-Fabryczna	M-33-034-D-c,d Wrocław-5

Sections of Topographic Maps used  
for analyses of morphological changes  
in suburban villages  
Author: Robert Szymytkie

## Results

### 1. Construction Activity by Zones and Municipalities

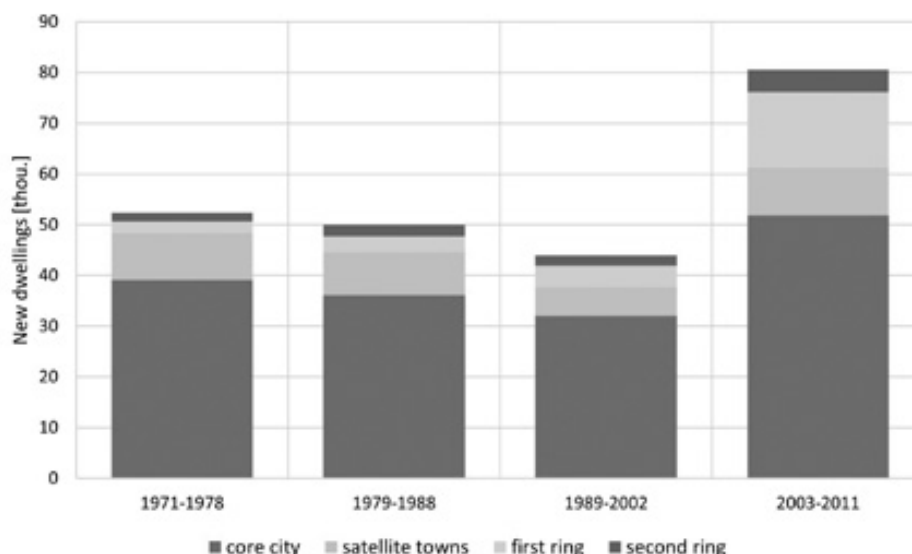
Between the years 1971–2011, 226,800 new dwellings were built in the Wrocław agglomeration, but the dynamics of construction activity in the analysed period varied. In 1971–1978, 6,500 dwellings per year were built, in 1979–1988 – 5,000 dwellings per year, in 1989–2002 – 3,100 dwellings per year and in 2003–2011 – nearly 9,000 dwellings per year.

The share of the zones distinguished within the agglomeration in total construction activity also changed. During the analysed period, the core city played the largest role, with an average share of 70.1% of new dwellings. It is noteworthy that the importance of Wrocław after 2002 clearly decreased from 72.8% in 1989–2002 to 64.4% in 2003–2011. It is also significant that throughout the period analysed, the importance of satellite towns in shaping the volume of construction traffic within the agglomeration decreased (from 17.7% in 1971–1978 to 11.7% in 2003–2011), while the importance of rural areas located in the first ring of municipalities surrounding the core city gradually increased (from 4.5% in 1971–1978 to 18.5% in 2003–2011). The importance of rural areas located in the second ring of suburban municipalities was marginal throughout the period under analysis (only 4.6% of new dwellings were built in this area).

The above-mentioned trends are confirmed by analysing the volume and dynamics of construction activity by municipality. In the years 1971–1978 and 1979–1988, the majority of dwellings in the hinterland of Wrocław were built in satellite towns, hence the higher volume and dynamics of construction activity in urban (Oława, Oleśnica) and urban-rural municipalities whose

seats were industrial centers (Jelcz-Laskowice, Brzeg Dolny). It is also worth noting that the dynamics of housing growth in satellite towns at the end of the socialist period (42.6% in 1971–1978 and 27.2% in 1979–1988) was even greater than in Wrocław itself (where it was 33.3% and 23.1%, respectively). In the case of rural areas, a higher rate of housing growth was evident in the municipalities of the first than in the second ring of suburban municipalities (respectively – 14.6% and 8.4% in 1971–1978, as well as 17.1% and 10.6% in 1979–1988). However, these values were clearly lower than those of the satellite towns. Furthermore, within the agglomeration, it is difficult to indicate clear spatial trends in the distribution of areas with a higher dynamic of construction activity.

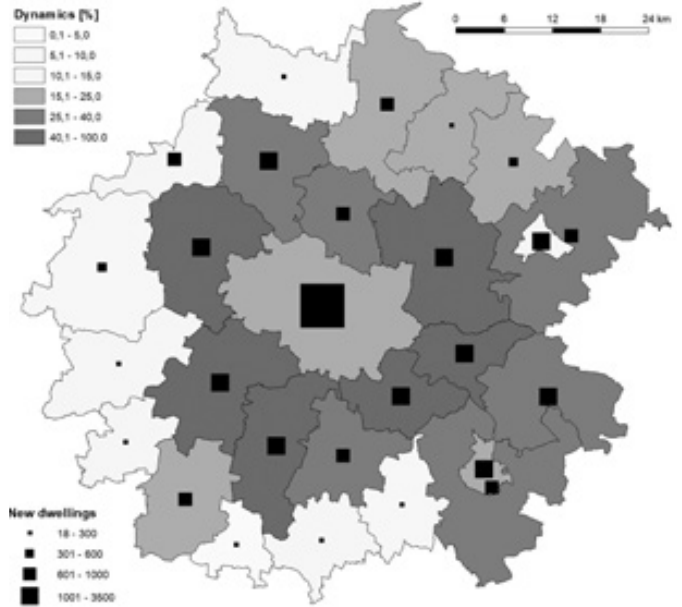
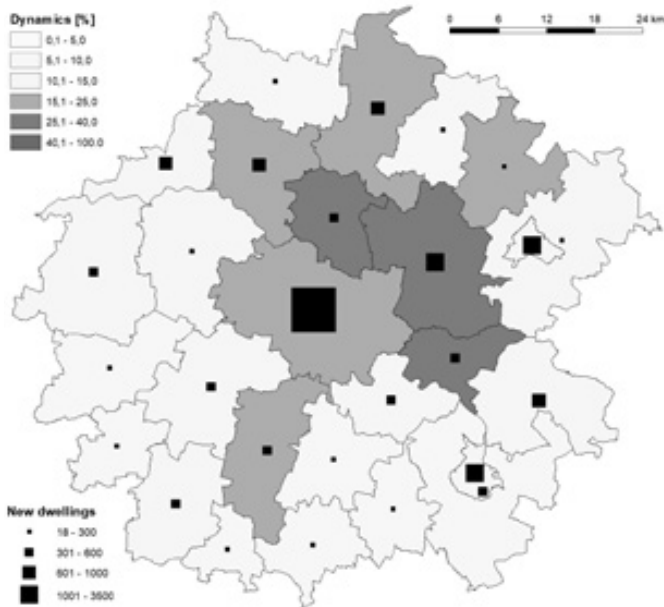
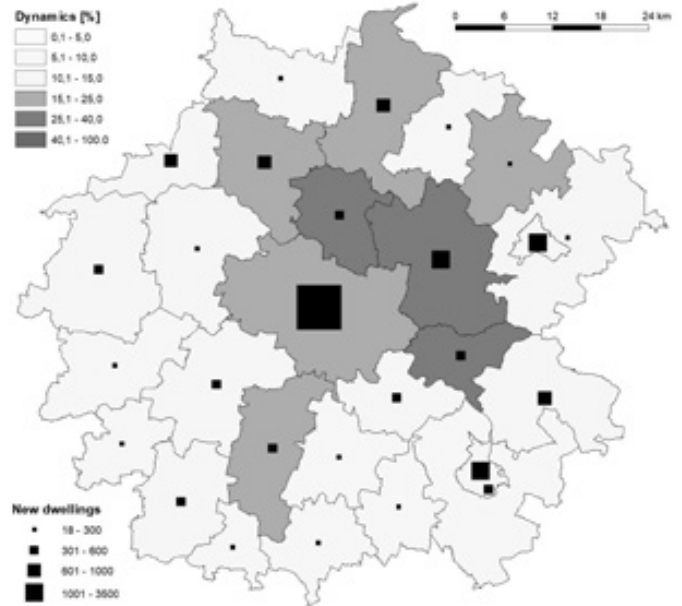
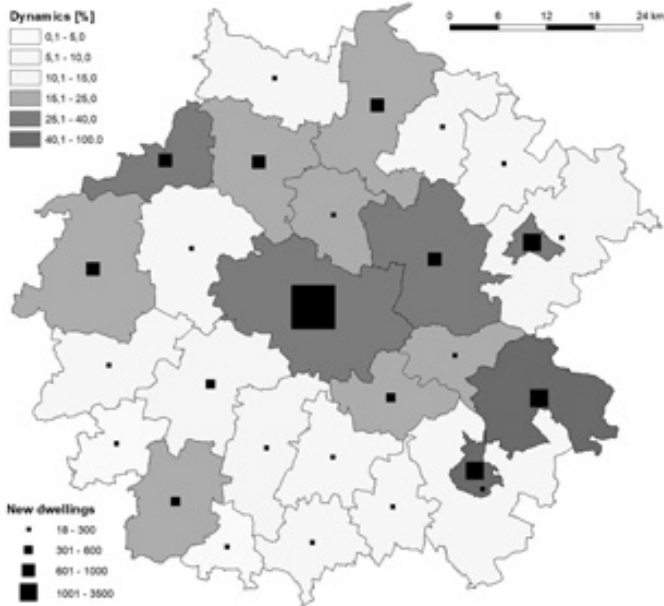
The transition period (1989–2002) was associated with a reduction in the overall volume of construction activity in the entire Wrocław agglomeration, as well as in individual municipalities. Only in the case of rural areas located in the first ring of suburban municipalities was there an increase in the dynamics of construction activity, although it was statistically insignificant (from 17.1% to 19.5%) and not associated with an increase in the average annual number of new dwellings (which amounted to 316 new dwellings in 1979–1988 and 303 dwellings in 1989–2002). At the same time, the marked decrease in the average annual number of new dwellings for satellite towns (from 843 new dwellings in 1979–1988 to 408 dwellings in 1989–2002) and the city of Wrocław (from 3611 to 2282 dwellings) was noted. The spatial diversification in the dynamics of the construction activity during this period was clearly zonal, with decreasing dynamics as one moved away from the core city.



Structure of construction activity in the Wrocław agglomeration in 1971–2011  
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Scale and dynamics of construction activity in the Wrocław agglomeration in 1971-1978 by municipality  
 Author: Robert Szmytkie

Scale and dynamics of construction activity in the Wrocław agglomeration in 1979-1988 by municipality  
 Author: Robert Szmytkie



Scale and dynamics of construction activity in the Wrocław agglomeration in 1989-2002 by municipality  
 Author: Robert Szmytkie

Scale and dynamics of construction activity in the Wrocław agglomeration in 2002-2011 by municipality  
 Author: Robert Szmytkie



New dwellings built in the Wrocław agglomeration in 1971-1978 by statistical localities  
Author: Robert Szmytkie



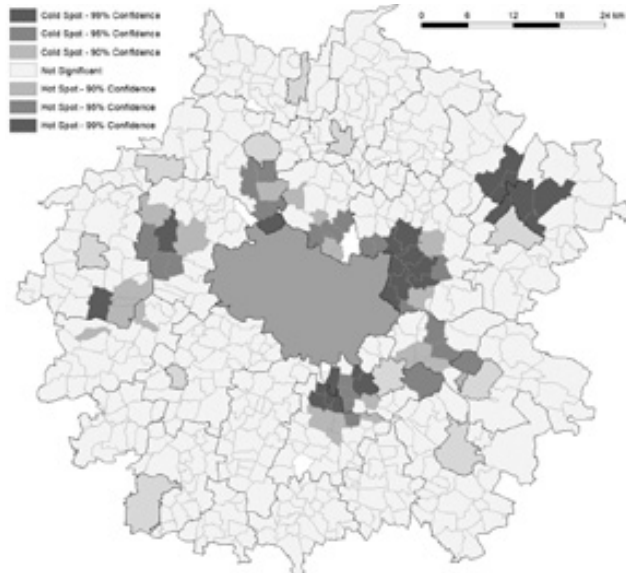
New dwellings built in the Wrocław agglomeration in 1979-1988 by statistical localities  
Author: Robert Szmytkie



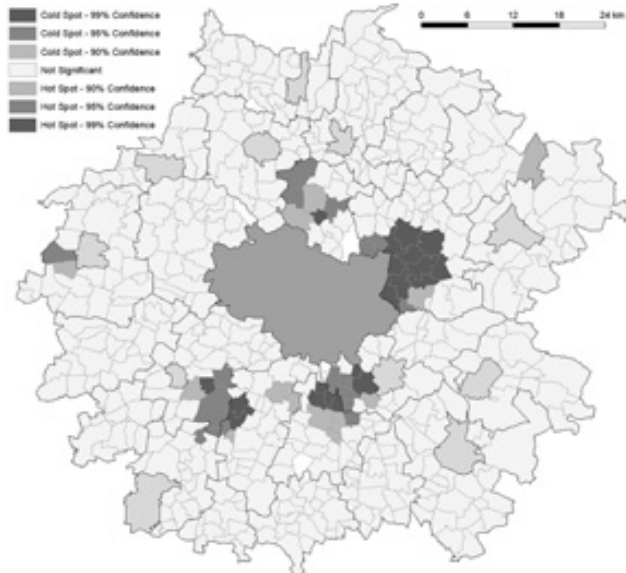
New dwellings built in the Wrocław agglomeration in 1989-2002 by statistical localities  
Author: Robert Szmytkie



Spatial distribution of similar and outlier values of the number of new housing units in the Wrocław agglomeration in 1971-1978  
 Author: Robert Szmytkie

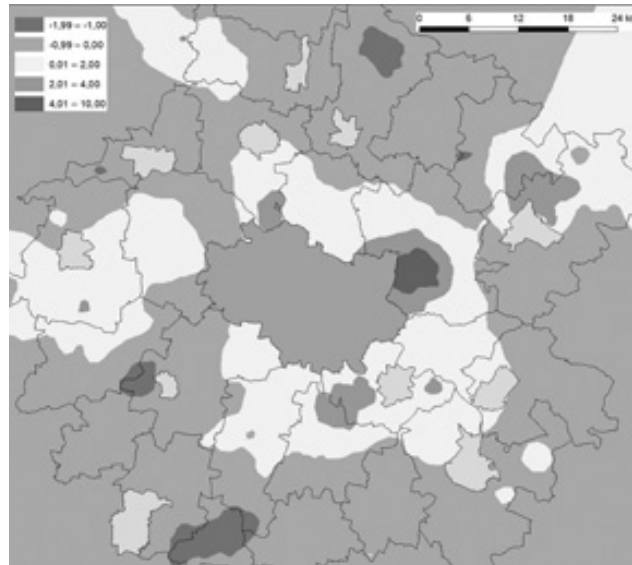


Spatial distribution of similar and outlier values of the number of new housing units in the Wrocław agglomeration in 1979-1988  
 Author: Robert Szmytkie

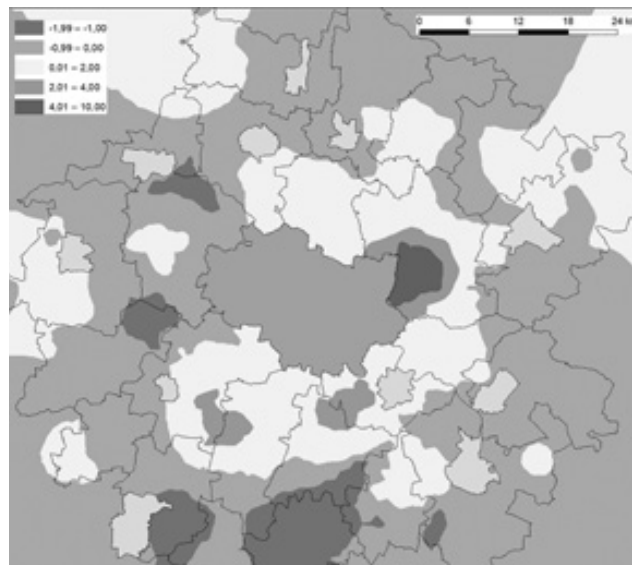


Spatial distribution of similar and outlier values of the number of new housing units in the Wrocław agglomeration in 1989-2002  
 Author: Robert Szmytkie

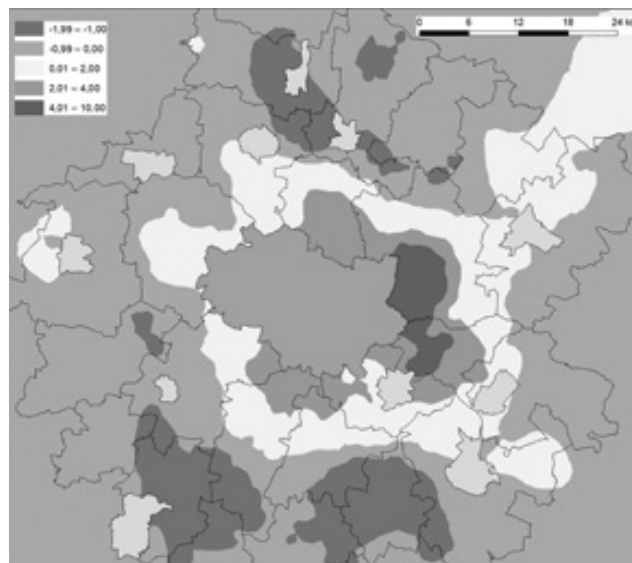




Interpolation of the dynamics of construction activity in the Wrocław agglomeration in 1971–1978  
Author: Robert Szmytkie



Interpolation of the dynamics of construction activity in the Wrocław agglomeration in 1979–1988  
Author: Robert Szmytkie



Interpolation of the dynamics of construction activity in the Wrocław agglomeration in 1989–2002  
Author: Robert Szmytkie

## 2. Construction Activity by Statistical Localities

Analysis of the volume of construction activity in relation to statistical localities confirmed the regularities identified in relation to the zonal and municipal scale. In 1971–1978, in only a few villages of the suburban zone did the average number of new dwellings exceed more than 10 per year. These were the villages of Boguszyce in the municipality of Oleśnica, Radwanice in the municipality of Siechnice, Rakoszyce in the municipality of Środa Śląska, Miękinia in the municipality of Miękinia, as well as Długołęka and Mirków in the municipality of Długołęka. Between 1979 and 1988, the number of villages with a similar amount of average number of new dwellings increased to nine. This group included the villages of Radwanice in the municipality of Siechnice, Długołęka, Mirków and Kiełczów in the municipality of Długołęka, Gniechowice in the municipality of Kąty Wrocławskie, Wierzbnio in the municipality of Domaniów, Ciechów in the municipality of Środa Śląska, Kobierzyce in the municipality of Kobierzyce and Dobroszyce in the municipality of Dobroszyce. In the distribution of the indicated villages, one should note a certain repetitiveness in the case of villages located in the first ring and a “variability” in the case of villages from the second ring of suburban municipalities. In the last analysed period (1989–2002), the list of villages with a high number of new dwellings already included only villages located in the first ring of the suburban zone, like Kiełczów, Długołęka and Mirków in the municipality of Długołęka, Bielany Wrocławskie and Wysoka in the municipality of Kobierzyce, as well as Kamieniec Wrocławski in the municipality of Czernica.

It should be noted that the volume of construction activity in the villages of the suburban zone varied strongly throughout the analysed period (1971–2002). In some villages, even several hundred new dwellings were built (most in the villages of: Długołęka – 443, Radwanice – 419, Kiełczów – 404, Kamieniec Wrocławski – 357 and Mirków – 351), while in 33 other villages not a single new dwelling was built during this period (10 of these villages were located in the first ring of the suburban zone). Thus, in order to identify areas of intensive construction traffic in the hinterland of Wrocław during the analysed period, a hot spot analysis was carried out, followed by interpolation.

In the case of rural areas in the suburban zone of Wrocław, the hot spot analysis indicated the presence of areas of intense construction traffic, with their distribution varying in the sub-periods adopted. In all three cases, they included villages located in both the first and second ring of the suburban zone. More hot spots were identified in 1971–1978 than in 1979–1988, an evident result of the lower dynamics of construction activity at the end of the socialist period. These areas have a dispersed character, with some concentration of them in close proximity to the borders of the Wrocław city or its satellite towns (especially Oleśnica). The spatial distribution of the “construction hot spots” changed in

the subsequent period (1989–2002), concentrating their location in close proximity to the core city. Interestingly, for all subperiods the hot spot analysis never revealed any occurrence of cold spots, i.e. concentrations of localities with extremely low construction activity.

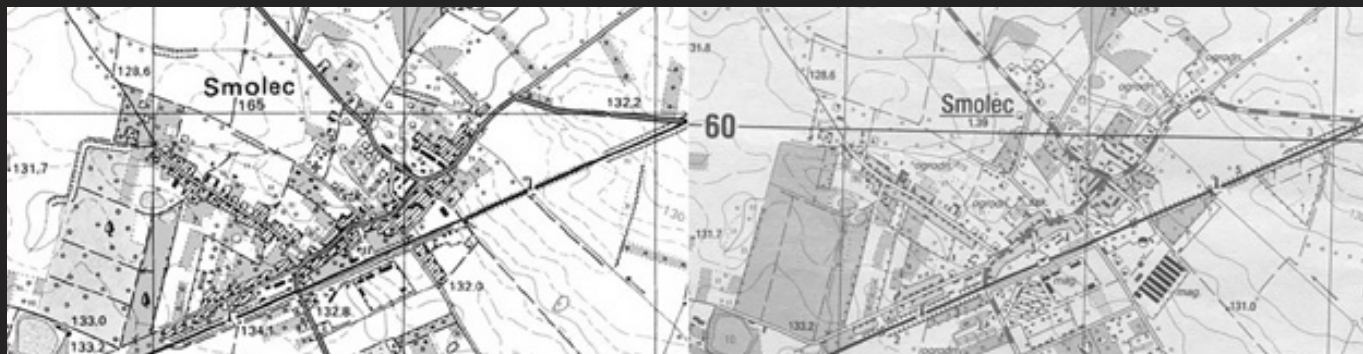
The formation of zones characterized by intense construction activity in the hinterland of Wrocław city is illustrated even better by an analysis using interpolation. In 1971–1978, one can identify a ring of moderate construction activity around Wrocław and island-like zones of intensive construction activity with a distinct “island” in the Długołęka municipality. In the following period, there was a gradual closing of the moderate construction activity zone around the core city and an enlargement of the “island of intensive construction activity” in the municipality of Długołęka. At the same time, the number or spatial extent of other “islands of intensive construction activity” decreased. During the last subperiod (the transition period), the moderate construction activity zone around Wrocław was completely closed. In contrast, the zone of intensive construction activity, sprawls into municipalities neighbouring the core city from the northeast and south, transforming from an insular into a semiring structure.

## 3. Changes in the Morphology of Suburban Villages

The identification of morphological changes was carried out for the villages where the largest number of new dwellings were built during the whole analysed period. The analysis showed quite significant differences in the specifics of construction activity for localities located in the first and second ring of the suburban zone. In the villages located in the immediate vicinity of the core city, mainly single-family buildings with a villa character were built. The large number of new dwellings also contributed to significant transformations in their morphology. Spatial layouts of these villages were transformed from simple (street villages, oval villages, row villages) or low-complexity forms (small multi-street villages) into complex or multiplexed layouts (large multi-street villages, double villages) typical for urban units, as a result of the growing volume of new single-family housing.

Good examples of spatial layout expansion under the influence of single-family construction are the villages of Smolec (Kąty Wrocławskie municipality), Kiełczów (Długołęka municipality) and Bielany Wrocławskie (Kobierzyce municipality). In the case of Smolec, a new development was being built to the northeast, in the direction of Wrocław. In the village of Kiełczów, the expansion of new housing proceeded along the roads leaving the village to the south and west. In the village of Bielany Wrocławskie, on the other hand, the expansion of new housing followed around the built-up area, significantly expanding it. In addition, in the mid-1990s, a large commercial and industrial center was built on the farmland north of the village.



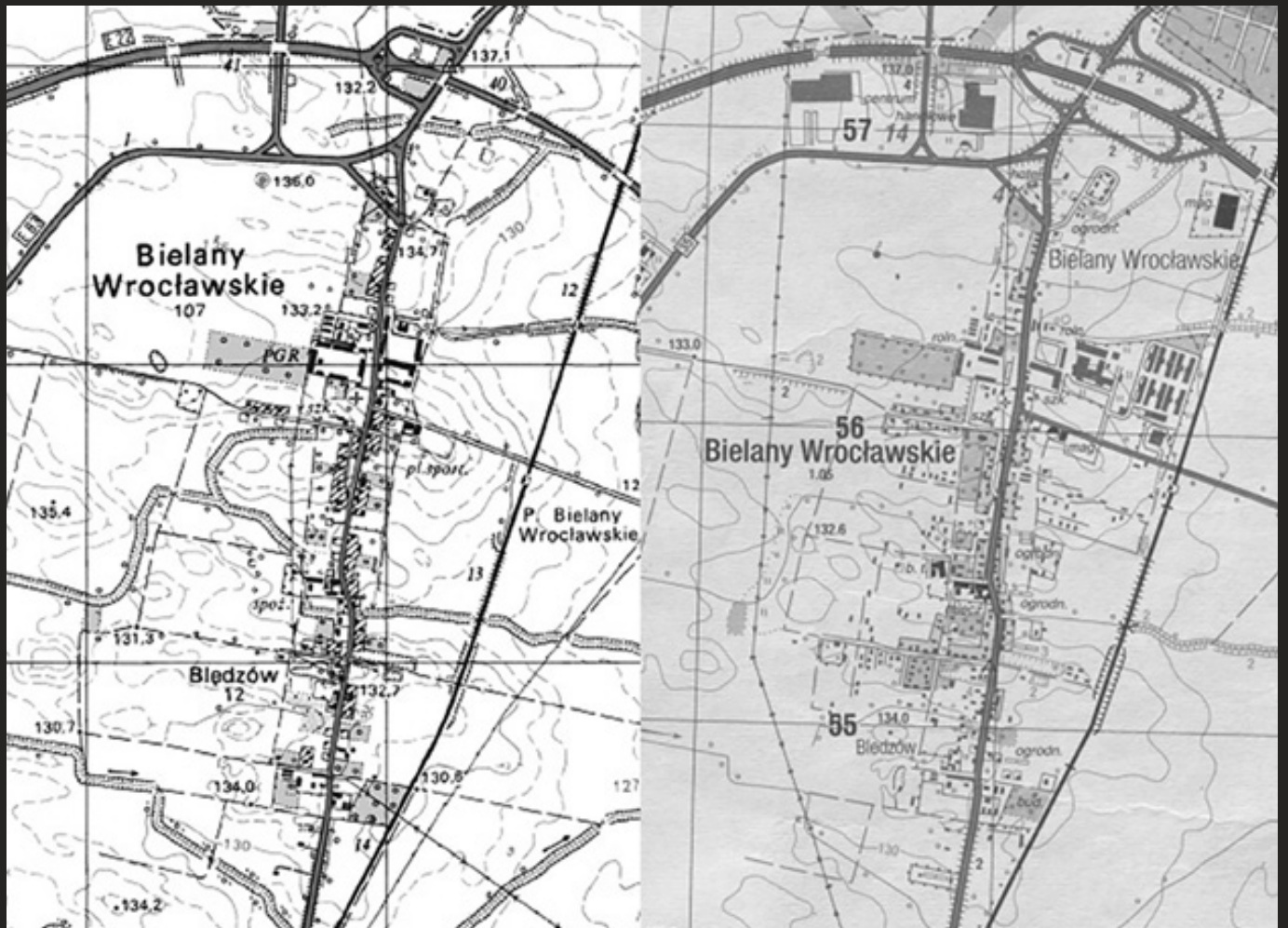


Changes in the morphology  
of the village of Smolec  
(Kąty Wrocławskie municipality),  
1975–2002  
Source: Laboratory of History  
of Cartography at the  
University of Wrocław

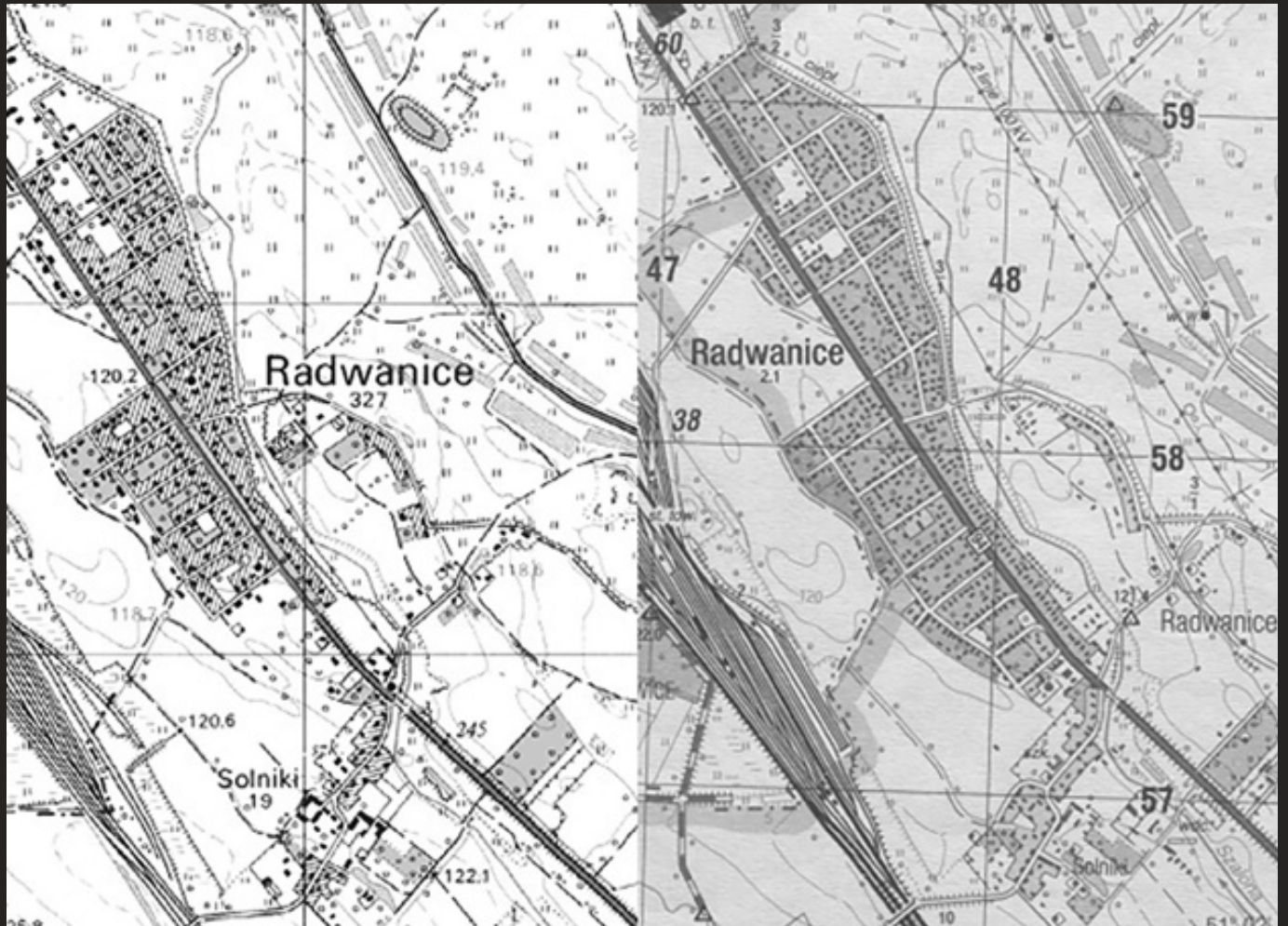
Changes in the morphology  
of the village of Kielczów  
(Długołęka municipality),  
1976–2000  
Source: Laboratory of History  
of Cartography at the  
University of Wrocław

Changes in the morphology  
of the village of Mirków  
(Długołęka municipality),  
1976–2000  
Source: Laboratory of History  
of Cartography at the  
University of Wrocław





Changes in the morphology of the village of Bielany Wrocławskie (Kobierzyce municipality), 1975-2002  
Source: Laboratory of History of Cartography at the University of Wrocław



Changes in the morphology  
of the village of Radwanice  
(Siechnice municipality), 1976–2002  
Source: Source: Laboratory of History  
of Cartography at the  
University of Wrocław





Changes in the morphology  
of the village of Ciechów  
(Środa Śląska municipality), 1977–2000  
Source: Laboratory of History  
of Cartography at the  
University of Wrocław

Changes in the morphology  
of the village of Boguszyce  
(Oleśnica municipality), 1977–2000  
Source: Laboratory of History  
of Cartography at the  
University of Wrocław

### *Discussion*

The turn of the 20<sup>th</sup> and 21<sup>st</sup> centuries in Central and Eastern Europe was historically paralleled the transition from socialism to capitalism, a process involving significant social and economic changes in virtually every aspect of life.<sup>17</sup> In terms of the wider conditions for spatial planning, it represented a shift from a centrally planned economy to a free market economy.<sup>18</sup> In the case of urbanisation processes, it was associated with the deceleration of urban development and the launch of suburbanisation processes in their surroundings.<sup>19</sup> This connection was especially true for suburban areas around large cities<sup>20</sup>, of which the Wrocław agglomeration is an example. However, it is necessary to emphasize the dynamism of urbanisation processes during the period of socialism<sup>21</sup>, and the spontaneity in the development of suburban zones today.<sup>22</sup> The above statement urges us to look at the period of transition as a time of very rapid socio-economic and spatial changes.

This view of the nature of the transformations occurring in the hinterland zones of large cities in Poland contributed to the formulation of the assumption made in this study. The hypothesis regards changes in the place of concentration of construction activity from the core city and its satellite towns at the end of the socialist period to the core city and the villages of the suburban zone in the modern period. The research carried out confirmed the adopted hypothesis. In the years 1971–1988, construction activity was concentrated in Wrocław and its satellite towns. Leetmaa and Tammaru<sup>23</sup>, analysing the development of suburbs around Tallinn, also pointed out that the suburban growth in this period concentrated either in satellite towns or centres of agricultural production where high-density multi-family housing construction prevailed. After 2002, the largest number of new dwellings were built in the core city and villages of the suburban zone, corresponding to the suburbanization processes observed in the whole CEE region.<sup>24</sup> In turn, the transition period was associated with a marked decrease in the volume of construction activity in the entire Wrocław agglomeration, especially in the satellite towns. Thus, treating construction traffic as a consequence of the spatial behaviour of the population, one should look at the years 1989–2002 as a period of reconstruction of the migration system within the agglomeration and a gradual transition from concentration to deconcentration processes. Referring to the model describing urban growth phases proposed by Van den Berg et al. (1982)<sup>25</sup>, it can be concluded that the period of transition in the case of Polish cities was a period of relative centralisation and relative decentralisation.

A separate issue remains the specifics of construction activity in suburban areas in the analysed period. The political and socio-economic transition initiated in Poland in 1989 certainly contributed to the intensification of suburbanisation processes in the hinterlands of large cities, as was shown in numerous studies from Poland<sup>26</sup> and other Central and Eastern European countries.<sup>27</sup> However,

analysing data on the volume of construction activity in the suburban zone of Wrocław in the years 1971–1988, it can be concluded that suburbanization processes also occurred in this area even during the socialist period. In the case of the Wrocław agglomeration, this phenomenon has already been described earlier by Miszewska (1985)<sup>28</sup> or Szmytkie and Nowak (2017)<sup>29</sup>, as well as other cities in the region, using the examples of Tallinn,<sup>30</sup> Budapest<sup>31</sup> or Prague<sup>32</sup>. However, the phenomenon of suburbanisation around socialist cities is still poorly covered in the literature.

Due to the restrictions on in-migration to most large cities, one of the specific features of suburban growth under central planning was, contrastingly, the concentration of industrial workers in the rural areas just outside of the major cities, i.e. rural urbanization<sup>33</sup>, also labelled diverted migration to extra-urban areas<sup>34</sup> or para-urbanization.<sup>35</sup> In the case of the Wrocław agglomeration, the zone of intensive construction activity was basically limited to single villages located in the immediate vicinity of the core city. Single-family villa developments were being built in some suburban villages, and the intensity of construction activity was so significant that it contributed to extensive transformations in their morphology. A large increase in the number of dwellings was also observed in single villages far from the city, but this growth was associated with the construction of isolated block housing estates, serving as housing facilities for industrial plants or large state farms.

### *Conclusion*

The intensity of construction activity in the suburban zones of large cities in Poland at the turn of the 20<sup>th</sup> and 21<sup>st</sup> centuries depended on the general situation in the entire region of Central and Eastern Europe. The end of the socialist period (1979–1988), in the case of the Wrocław agglomeration, was characterised by a marked deceleration of construction activity in the centre city and its hinterland relative to the preceding periods, especially the 1960s and 1970s. The political and socio-economic transition initiated in 1989 contributed to a transformation of the trends and trajectories in construction activity. Indeed, the period of transition saw a further decrease in the dynamics of construction activity in the whole agglomeration. On the other hand, the second wave of urbanisation was launched at that time. These processes were associated with the migration of the population from the core city to the suburban zone, which resulted in the development of housing in suburban villages. The trend of population outflow from the city intensified after 2002, contributing to a further increase in the dynamics of construction activity in the suburban zone. One of the most important conclusions of the study was the identification of suburbs developing in close proximity to the city during the socialist period. However, the extent of the zone of intensive residential construction in the mentioned period had an insular character, while during the transformation period it shifted into a semiring structure, surrounding the core of the agglomeration.



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