Off The Scale – Expansion or Development? A Small Town within a Metropolitan Zone as an Alternative Place of Residence

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Abstract. The goal of this paper is to point out the types of spatial changes that the small towns located in Krakow’s range of influence are currently undergoing, as well as what are the consequences of the various types of changes in these towns. The author asks the question whether the current changes seen in small towns that are under the influence of Krakow can be described as sustainable development – at the basis of which is the increasing of the quality of the functional and spatial structure of a town while preserving its qualities and character – or, on the contrary, that it is more appropriate to describe the changes in the spatial structure of towns as an expansion, which is related only to an increase in their surface area or an increase in the density of their built environment? An attempt has also been made to determine the cause of these changes. An analysis of a set of towns in terms of their accessibility in relation to Krakow, as well as the demographic changes in towns in recent years, has been carried out. This research was useful in determining the dynamic of urban changes or their stagnation. Afterwards, groups of towns with varying degrees of transformation (towns that have been intensively transformed, towns with a balanced degree of spatial changes and towns which remain on the side-lines) were established. In addition, various forms of changes were defined – ranging from cities which register an increase in attractiveness and the changes that it brings while preserving their qualities in accordance with the principles of sustainable development, to settlements which are losing their small-town character as a result of intensive change, at the same time undergoing unification both in terms of space and form of use. From among the groups of towns, example which most fully illustrate the varying degrees and character of the changes of small towns in the area of Krakow has been selected. Based on the research that has been conducted, we can state that small towns in the vicinity of Krakow are undergoing intensive changes and are an attractive alternative in terms of serving as a place of residence, for instance in comparison to the suburban zone of Krakow. However, it is necessary to channel the changes in small towns in a manner that would take advantage of the opportunities for spatial, social and economic development on the one hand, while at the same time causing the intensive changes in those areas to not lead to the loss of their uniqueness, identity and small-town character, as well as the qualities of both a given town and its surroundings on the other. The research that had been performed and the conclusions that were drawn from it can serve as comparative material for other types of small towns and for metropolitan areas.
1. Introduction
The spatial changes that were started in the beginning of the 1990's can be discussed in a number of ways.

One of the reference points can be the modern structure of small towns. In Poland, such centres constitute the majority of all municipalities. In 2008, towns with a population count of up to 20,000 constituted 75% of all municipalities [4], and according to latest demographic research, this amount has increased to 75.4% [6]. From among 685 small towns, nearly half (318 localities) are very small towns, with a population count that does not exceed 5,000. We can conclude that Poland is, to large degree, a country of small towns, which is why the specifics of their development are an important and current problem. The topic of the transformation of such localities and changes in their identity has been discussed in literature numerous times, both in relation to those centres that are located in metropolitan zones of intense change [2],[6],[11], as well as those that are in areas which are less susceptible to the influence of modern transformation [11],[3],[9].

Many of the small towns of Poland are structures of immense historical importance. Numerous towns which are now left sidetracked in terms of changes, once constituted important points along trade routes, being the site of customs chambers or royal summer residences. Their rank and scale against the backdrop of other European cities at the time can be seen in numerous attestations, historical writings or old maps. Many a town, for instance during the Medieval period, was equal in rank to the largest modern Polish cities. Localities like Wiślica and Biecz were equal to Krakow, Gdańsk or Wrocław in terms of their rank and degree of social and economic development. The greatest development of Polish cities is dated to the reign of Casimir the Great (the XIV century), during which cities were established on the basis of the Magdeburg charter rights, gaining numerous privileges, but also being subjected to duties [8]. The fall of Polish cities began due to the wars of the XVI century, followed by the subsequent partitions, which weakened the position of Polish cities in Europe both in economic terms, as well as in regard to their autonomy. Many cities lost nearly a half of their population, remaining on the sidelines of the changes that happened in Europe at the time.

The development of industry in the XIX century provided a new opportunity for those localities which had found themselves along railroad routes. These centres were able to develop socially, spatially and economically thanks to the new mode of transport. At the same time, those towns which had found themselves out of reach of the major railroad lines remained on the sidelines of changes on the one hand, preserving their assets and qualities of an unchanged, small-town cultural, natural and landscape heritage, while on the other, they suffered economically and demographically, oftentimes losing some of their urban forms of use. The fall of Polish cities was deepened by the periods of the First and Second World Wars, despite attempts at rebuilding them during the period of the interbellum.

The ending of the Second World War marked the beginning of a period of the intense transformation of Polish cities, including small towns. These changes, however, were centrally directed due to the character of political transformation during the period of the People's Republic of Poland1. These changes, more often than not, did not take into account the individual character of urban centres, their extant values or local qualities. Service or residential buildings that were built in small cities had a character and form that were universal. This was associated with the intense transformation of towns - unfortunately, this transformation was not beneficial. Small towns were "given" - so to speak - new residential estates featuring multi- and single-family residential buildings by the central authorities, estates that were similar in form to each other, but completely different from small-scale town architecture. These structures were not matched with the character of the place in terms of scale, having unified forms and, in the general reception of a town, still look out of place, with practically no references to the area in which they are located. Service and industrial buildings were designed in the same manner - in the case of the latter, they were often mismatched to the

1 The period of the People's Republic of Poland began in the year 1952 and ended in 1989 with the Round Table Talks and a partially free election to the Sejm [9].
industrial or production capabilities of an area. The change of the socio-economic system after the year 1989 created both new opportunities and dangers for the development of small towns. One of the dangers was the continuation of the growth of a town, but not its development. Currently, some small towns remain on the sidelines of changes, preserving their small-town qualities, but failing in terms of the economy, while others, riding the wave of intense change, have transformed to such a degree that they have lost their small-town character, while still others are striving to find a balance between the pace of development and the preservation of the quality and distinctness of space.

2. Analysis of a set of small towns located within a metropolitan area - demography and accessibility

One particular example of small towns that face current changes are towns within the area of influence of larger urban centres - including those located within metropolitan zones. Such centres, apart from modern transformations that all small towns undergo, are also under the influence of a large city. This influence can be an element that facilitates an increase in the attractiveness of towns and their proper changes, which occur in accordance with the principles of sustainable development, but on the other hand, it can also lead to nothing but the spatial growth of a town, causing a devaluation of its extant small-town qualities, producing a unification of land use and space.

The Krakow Metropolitan Area is one of the ten metropolitan areas of Poland that were established in the Conceptual Plan of the Spatial Development of the Country [7]. The surface area of the Krakow Metropolitan Area is 406511 ha, while its population count is 1508948 [10]. The Krakow Metropolitan Area is composed of 17 centres that have an urban character. The largest of them is Krakow, which fulfills the role of a metropolitan city. Krakow's population count is 726448. It is the second largest city in Poland, with distinct cultural qualities. Chartered in the middle of the XIII century, it has a preserved urban layout that has been included in the UNESCO World Heritage Site List, as well as numerous historical buildings. Krakow is also an important academic centre. The remaining towns of the Krakow Metropolitan Area are Myślenice, Wadowice, Wieliczka, Skawina and Bochnia (cities with a population count between 15 000 and 30 000), as well as 11 urban centres (of up to 15 000 inhabitants). This group includes 9 towns (Nowe Brzesko, Świątniki Górne, Skala, Słomniki, Kalwaria Zebrzydowska, Proszowice, Dobczyce, Sulikowice, Krzeszowice, Niepolomice), as well as three localities which do not currently hold city rights, but that did hold them in the past, and that have preserved their small-town character in terms of space or land use. These include Koszyce, Lanckorona and Gdów.

In order to analyse the manner in which small towns that are located within Krakow's zone of influence transform themselves, a group of 14 small towns (or centres with an urban character) were selected. These are localities that have a population count that does not exceed 15 000\(^2\). Due to their functional and spatial urban character, the analysed group also includes those localities that have lost their town rights over the years. In order to determine which cities are under the greatest influence of Krakow, two types of analyses were performed: an analysis of the transport accessibility of a town - see table 1 - as well as an analysis of current demographic tendencies (table 2).

The accessibility of small towns in relation to Krakow has been presented in table 1. The time it takes to arrive from a small town to Krakow by car using the shortest route was measured. The point of exit for distance measurements in Krakow was established within the area of the Main Train Station. It is located in the vicinity of the historical urban layout of Krakow; furthermore, this definition of the exit point allows the performing of an accessibility analysis using other modes of transport (for instance with the use of the train in the case of towns which allow for such an analysis). Temporal accessibility was measured during various days (both during workdays and during

\(^2\) In Polish conditions the majority of scholars accept the upper limit of the size of a small town at a population count of 20 000, however, due to the fact that we can observe significant spatial and functional differences between towns up to a population count of 15 000 and towns which exceed this population count, this is the number of inhabitants that has been chosen as the limit.
weekends), as well as during various times of day. The analysis was conducted during the period when the transport network has the lowest load, as well as during the period in which it is the highest (during weekdays these were the hours of the commute to Krakow from the industrial areas in the outer zones of the metropolitan city or outside of its limits). During the weekends, the hours of increased traffic were usually associated with the recreational habits of the inhabitants or accessing places of religious worship. In order to illustrate the dependencies between the temporal accessibility of a small town in relation to Krakow, table 1 also includes the distance over which the temporal accessibility was measured, provided in km.

Table 1. Accessibility of the small towns of the Krakow Metropolitan Area, original work, 2016

| Town; locality         | Distance/average travel time using a personal mode of transport | Possibility of travel using a train | Accessibility score |
|------------------------|---------------------------------------------------------------|-----------------------------------|-------------------|
| Koszyce*               | 50 km/60 min.                                                | -                                 | C                 |
| Nowe Brzesko           | 34 km/50 min.                                                | -                                 | C                 |
| Lanckorona*            | 38 km/45 min.                                                | -                                 | C                 |
| Świątniki Górné        | 20 km/30 min.                                                | -                                 | A                 |
| Nowy Wiśnicz           | 48 km/50min.                                                 | -                                 | C                 |
| Skała                  | 24 km/30min.                                                 | -                                 | A                 |
| Gdów*                  | 32 km/45 min.                                                | -                                 | B                 |
| Słomniki               | 27 km/40 min.                                                | +                                 | B/A               |
| Kalwaria Zebrzydowska  | 39 km/50min.                                                 | +                                 | C                 |
| Proszowice             | 31 km/45min.                                                 | -                                 | B                 |
| Dobczyce               | 31 km/45min.                                                 | -                                 | B                 |
| Sułkowice              | 34 km/40min.                                                 | -                                 | B                 |
| Krzeszowice            | 29 km/40min.                                                 | +                                 | B                 |
| Niepołomice            | 24 km/35min.                                                 | -                                 | A                 |

* towns that lost their town rights, but that have preserved the small-town character of their space and certain urban functions, +/- possibility/impossibility of travelling to a town by train, A/B/C - good/average/poor average accessibility

The values in table 1 take into account the accessibility of small towns by means of trains. Due to significant differences between towns in terms of travel time, only the possibility of access by this mode of transport was highlighted, without providing a value of temporal accessibility. The differences in travel time by train (despite short distances) are within a range of between tens of minutes to several hours. For this reason, providing average travel time for a town is in this case baseless and does not provide an illustration of the real, average travel time to a town using a train.

Based on the research, conclusions were drawn regarding the evaluation of the accessibility of small towns in relation to Krakow. The towns were divided into three groups: "A" - towns with a very good accessibility, with a temporal isochrone of up to 35 minutes, group "B" includes towns with an average accessibility (35-45 minutes), while group "C" is a group of low transport accessibility, in which temporal accessibility from the centre of Krakow to the centre of the town exceeds 45 minutes. 3

3 Similar research regarding temporal accessibility was conducted by the author in 2007 as a part of one of the chapters of her doctoral dissertation; cf. [11].
During the analysis of the accessibility of small towns, the possibility of access by train was taken into account, acknowledging it as a potential possibility of increasing the accessibility of a town in the future (the possible increase in the frequency of train courses, the introduction of a metropolitan railway train, etc.).

The second topic that was analysed and which illustrates the intensity with which a town transforms, are its demographic changes. Table 2 contains a comparison of population counts for three periods: at the end of the period of the centrally steered economy in Poland (1988), after 10 years of intense change (2008), as well as the current population count (2016). In order to depict the intensity of the dynamic of changes in table 2, a population balance for the years 2008-2016 was calculated, as well as a balance of the number of inhabitants in the years 1988-2016 (in a scope that was allowed by the available information).

Table 2. Population count in the small towns of the Krakow Metropolitan Area in the period of modern changes, as well as demographic tendencies, original work, 2017

| Town; locality | Population count in the given year | Population balance for the years (1988-2016) |
|---------------|-----------------------------------|---------------------------------------------|
|               | 1988 | 2008 | 2016 | (1988-2008) | (2008-2016) | persons |
| Koszyce*      | -    | 1 700 | 1 667 | -33 |
| Nowe Brzesko  | -    | 2 100 | 2 066 | -34 |
| Lanckorona*   | -    | 2 125 | 2 400 | 275 |
| Świątniki Górne | -    | 2 751 | 2 776 | 25 |
| Nowy Wiśnicz | -    | 3 613 | 3 801 | (188) 144 |
| Skala         | 4 475 | 4 340 | 4 349 | (-126) 9 |
| Gdów*         | 4 706 | 4 288 | 4 620 | (-86) 332 |
| Słomniki      | 6 739 | 6 146 | 6 112 | (-627) -34 |
| Kalwaria Zebrzydowska | 5 055 | 6 171 | 6 469 | (1414) 298 |
| Sułkowice     | 5 540 | 6 362 | 6 552 | (1012) 190 |
| Krzeszowice   | 8 494 | 9 915 | 10 120 | (1626) 205 |
| Niepołomice   | 6 772 | 9 132 | 11 761 | (4989) 2629 |

* towns that lost their town rights, but that have preserved the small-town character of their space and certain urban functions

The accessibility of towns and population changes are some of the main elements that provide an image of the intensity of modern transformation. Even though a good transport accessibility of a town in and of itself is a motor of change, changes in the demographic structure can be treated as the result of urban transformation and an image of the attractiveness of a locality, for instance as a place of residence. Apart from the widely understood good transportation accessibility regarding the surrounding settlement centres, other factors also influence intense change and attractiveness, such as the preserved cultural heritage within a town, the natural qualities and values within its surroundings, as well as the beauty of the landscape [12]. The attractiveness and amount of the forms of use that appear within a town is also an important element. Apart from the qualities that determine urban
transformation that were mentioned above, a small town that is located in a metropolitan area is one that finds itself in a peculiar position. This is tied with the large influence of the metropolitan city - in this case, Krakow. The good accessibility of small towns in relation to Krakow is a particularly important element that determines the transformation of both structure and use. The special placement of small towns within a metropolitan area is, without a doubt, an additional motor of functional and spatial changes. Commuting from a small town is often faster and easier than commuting during rush hour from newly designed multi-family housing estates, where there is a lack of appropriately tailored circulation infrastructure that could absorb increase traffic. A small town near Krakow is also an attractive alternative in terms of a place of residence due to preserved natural and landscape qualities within its surroundings. At the same time, lower land prices and the ability to build one's own home - contrary to Krakow, due to finances, among other things - are additional advantages. The range of available forms of use is incomparably smaller than the amount and quality of forms of use within the metropolitan city, although good accessibility in relation to Krakow compensates for this lack. At the same time, we can observe the tendency of an increase in the quality of forms of use and their diversity within small towns under the influence of an increasing number of new residents. Even though the increase in the population count within a town affects the increase in the quality of those forms of use that are located within a town, two phenomena can be observed in terms of spatial changes: the phenomenon of the development of a town, or the phenomenon of expansion.

3. Functional and spatial transformation of the towns of the Krakow Metropolitan Area

Based on analyses performed in table 1 and table 2, as well as field research regarding the transformation of the spatial structure of a town [11] [12] of the Krakow Metropolitan Area, the degree of their spatial and functional transformation was compared in table 3. The localities were divided into three groups.

Table 3. Evaluation of the degree of transformation of the small towns of the Krakow Metropolitan Area; original work, 2017

| Town; locality         | Degree of spatial changes | Degree of functional changes |
|------------------------|---------------------------|-----------------------------|
| Koszyce*               | C                         | C                           |
| Nowe Brzesko           | C                         | C                           |
| Lanckorona*            | C                         | A                           |
| Świątniki Górne        | A+                        | A+                          |
| Nowy Wiśnicz          | C                         | C                           |
| Skala                  | B                         | C                           |
| Gdów*                 | B                         | B                           |
| Słomniki               | B                         | B                           |
| Kalwaria Zebrzydowska  | B                         | A                           |
| Proszowice             | C                         | B                           |
| Dobczyce               | B                         | B                           |
| Sułkowice              | B                         | B+                          |
| Krzeszowice           | A+                        | A+                          |
| Niepołomice           | A+                        | A+                          |
The table includes those towns that have registered a high degree of spatial and functional changes after the year 1989 (group "A"), towns that have transformed their spaces and the forms of use within them to an average degree (group "B"), as well as those localities that have undergone modern changes to a small degree (group "C"). Table 3 contains only the degree of the intensity of the functional and spatial changes within towns, while not describing their type nor their influence on the quality of urban space. The table lists those localities, in which a new form of use or a new space is strictly associated with the development of new residential areas or those forms of use within a town that - to a significant degree - will generate new single or multi-family residential areas within the town in the foreseeable future. These localities were marked with a "+" sign placed by the grade of the degree of functional or spatial changes - depending on which type of changes is tied with residential forms of use.

4. Niepołomice – the town with the highest degree of changes

In order to illustrate the intensity of the spatial changes within the small towns of the Krakow Metropolitan Area, the following chapter provides a presentation of the case of a town which, according to table 1, has a particularly good accessibility (group "A") and that has, simultaneously, registered the most intense demographic jump after the year 1989 according to table 2 - something has been particularly evident during the last analysed period (2008-2016) - in addition to the fact that we can observe, on the basis of table 3, that this town is currently subject to significant functional and spatial changes ("A" grade), associated with residential use ("+" both in the case of functional as well as spatial changes).

Niepołomice is a town founded in the XIV century, having held charter rights since 1776. During the times when Krakow was the capital of Poland and the seat of kings, the castle in Niepołomice played the part of a royal summer residence, located near the Vistula river and surrounded by royal forests, the remnant of which is Niepołomice Forest, which constitutes one of the more important attractions in terms of the natural heritage of the area. Niepołomice, due to its close proximity to Krakow (around 25 km) and a very good accessibility (a travel time of 35 min from one centre to the other), as well as its preserved cultural (the royal castle, a typical small-town urban layout with a small scale and building structure, etc.), natural (the vast valley of the Vistula river from the northern side of the town and Niepołomice Forest from the south) and landscape heritage (perspective openings onto the Niepołomice meadows that surround the town, as well as on the wall of the forest, etc.), has undergone significant changes after the year 1989, becoming an attractive place of residence for the inhabitants of Krakow. The town currently has a population count of 11,761. Compared to data from the year 1988, the number of inhabitants has nearly doubled. At the same time, in the period of the last 8 years, Niepołomice has gained 2629 residents, which is a number that exceeds the demographic growth of the other towns of the Krakow Metropolitan Area by many times (an average demographic growth of 200-300 residents over the last 8 years is treated as high). The surface area of Niepołomice is 562 ha. 270 ha of the town's surface is taken up by residential areas, of which 10 ha feature apartment blocks both from the period of the People's Republic of Poland (to a small degree), as well as modern ones. We can see a clearly observable increase in the amount of single and multi-family buildings in the functional and spatial structure of the town, which is associated with the current search for a new place of residence by the inhabitants of Krakow. The second element that has intensely influenced the transformation of the space and function of Niepołomice is the Niepołomice Special Economic Zone that is being established in the western part of the town. The third element that is clearly visible in the structure of Niepołomice are big box stores. The increase in the number of these structures has been particularly evident in recent years. These are both big box retail buildings that chiefly offer groceries, specialty big box stores (construction or gardening markets), as well as so-called shopping galleries which combine a grocery supermarket and small individual or chain stores, mostly selling clothing and shoes. In the case of Niepołomice, the simultaneous development of the industrial zone, which - in terms of surface area - is comparable to the surface of the entire town, the intense development of single and multi-family residential buildings, often without the accompaniment of basic services,
well as the simultaneous development of areas that feature big box stores, in addition to the often chaotic redevelopment of the central zone, have led to a situation in which the town is losing its small-town quality and atmosphere due to such intense transformation in terms of function and space. Contrary to other towns of the Krakow Metropolitan Area [11], Niepolomice is registering spatial expansion in all possible directions. The scheme of the placement of new forms of use within the town and a representation of their proportions that allow us to decipher the scale of the transformation within the town was presented in figure 1.

![Figure 1](image-url)

**Figure 1.** Functional scheme of Niepolomice, illustrating the main modern spatial and functional tendencies of the town, original work, 2015

The introduction of new forms of use into a town is undoubtedly a situation that is beneficial to its residents (new jobs, new services that improve the quality of life of the residents, etc.). However, the functional underdevelopment of some, and the overdevelopment of other areas, as well as the introduction of forms of use that are mutually conflicting (for instance industry - residential areas), as well as forms of use that excessively unify the structure of a town and its space, are a negative phenomenon. This phenomenon can be linked to the spatial expansion of a town instead of its development, which has as its aim not only the introduction of new structures or forms of use, but chiefly the improvement of the quality of a small-town's space, underlining the unique qualities of a town and using these qualities in accordance with the principles of sustainable development.

5. Results and discussion

The small towns of the Krakow Metropolitan area are undergoing intense functional and spatial transformation. The key moment in the process of the transformation of small towns in Poland was the year 1989, when the abolishment of the system of the centrally planned economy made it possible for inhabitants to establish their own businesses, which has considerably influenced the current appearance and land use of the towns near Krakow. One of the elements that were analysed are demographic changes, which reflect the intensity of the processes that are occurring. When performing an analysis of the set of 14 towns that are under the intense influence of the developing city of Krakow, we can observe that only 4 towns have registered a decrease in terms of their demographics over a period of nearly 20 years. In the case of three towns (Nowe Brzesko, Proszowice, Gdów) this is undoubtedly a question of a lack of good accessibility, as well as the location of the localities on the sidelines of the currents of the modern transformations of the Krakow Metropolitan Area. At the same time, in the case of the fourth city - Lanckorona - the decrease in population is not linked a decrease in the attractiveness of the town. It is a town with truly distinct tourist qualities and the decrease in population should rather be linked with the purchase of historical houses that are treated as weekend homes by the residents of Krakow - who still declare their place of residence as Krakow. This
assumption is also confirmed by the increase in the quality and quantity of attractive forms of use associated with tourism and recreation within the town (table 3) and the simultaneous lack of intense spatial transformation (the preserving of the attractiveness of the small town, its character and atmosphere). Among the towns that register an increase in their population count, we can observe two groups of towns: towns that have a population increase ranging from a couple to several tens of persons (these are towns that often registered a demographic decrease during the first phase of socio-economic change) and the towns that have a population increase between 100-300 persons (these are towns that most often have a stable and quick population increase). Niepołomice deserves special attention here, as its population has increased disproportionately in relation to the remaining two groups of towns (an increase of over 2500 persons over the period of the last 8 years). We can observe that a population increase measured in the hundreds or thousands of persons within the group of towns of the KMA is registered by those localities which either have newly established industrial zones or that intensely develop their single and multi-family residential zones (which is associated with the deagglomeration of Krakow), or that meet both of these criteria. Transport accessibility is an equally important factor that influences the development (or expansion) of a small town. Among towns that have a particularly good transport accessibility (Świątniki Górne, Skala, Niepołomice and Słomniki), only Słomniki has registered a very slight population count increase. This is associated with the specifics of this town. It is a farming town, which has registered a significant population count decrease after the year 1989 (just like most of the towns within the farming areas of the KMA) and its population count has only recently started to increase - mainly due to the construction of new houses by persons searching for a different place of residence than Krakow, but that still work in Krakow. While analysing the data above, that has been listed in tables 1 and 2, as well as commenting on the results of field research contained in table 3, we can observe that the towns in the vicinity of Krakow are registering significant spatial and functional changes, especially those that have good transport accessibility or have a real perspective of increasing this accessibility (for instance accessibility by train). The small towns of the Krakow Metropolitan Area are becoming an alternative in terms of residence to inhabitants of Krakow. At the same time, we can observe that numerous urban centres, when faced with the appearance of potential new property developers in a town, are allowing any possible forms of construction in all possible directions, often losing in the process that which is most valuable for a town - its preserved landscape, cultural and natural heritage. Examples of such localities are Sułkowice, Krzeszowice or Niepołomice. The transformation of those towns in some of their parts can be compared to the spatial expansion of an urban organism, instead of its development. The placement of vast areas of single and multi-family residential or industrial buildings in areas that are valuable in terms of nature or the landscape (building within a viewing foreground, the degradation of the skylines of a town), the placement of forms of use which are conflicting with one another (residential and industrial buildings next to each other, etc.), as well as the building up of new areas in a manner which is not tied in with the small-town character or the local characteristics of an area, leads to the loss of the small-town qualities of a place, its uniqueness and atmosphere. The ordering of existing and new construction areas requires a consistent coordination of activities on the spatial, functional, economic and social plane, which would undoubtedly be a beneficial course of action for the intensely transforming towns near Krakow.

6. Conclusions and observations

Based on the research performed on the set of small towns located within the Krakow Metropolitan Area, the following conclusions and observations were formulated:

- Small towns have become a new, attractive alternative in terms of residence for the inhabitants of the metropolitan city in recent years. These towns are affected by the modern dynamic of change in varying degrees and forms. These changes apply not only to the spatial form of small urban centres, but also to their functional base and social elements.
• There is a direct relationship between the intensity of the transformation of the land use and space of a small town and such elements like its accessibility in relation to the metropolitan city or the individual qualities of a town (preserved cultural, natural and landscape heritage, a unique small-town atmosphere, etc.).

• A high attractiveness of a town and its accessibility lead to a situation in which towns with distinct qualities that are located within the metropolitan area are more susceptible to the loss of their small-town identity as a result of modern changes than other towns.

• In the face of modern changes, we need to differentiate the development of a small town, which improves the quality of its space and land use, in addition to underlining its small-town qualities and atmosphere, from its expansion, which is focused solely on increasing the amount of built-up area within a town's limits.

• In order for the development of a town not to turn into an expansion, it is important to, among other things, bring order to the built-up areas within small town, which requires the coordination of spatial, functional, economic and social actions. It is necessary to direct the transformation of small towns in such a way, so that they will make use of their potential and their qualities on the one hand, while not leading to the unification of space and land use on the other.

• Small towns located in metropolitan areas can aid in the effective crystallisation of the structure of a metropolitan area.

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