The problems of spatial development of Polish seaside resorts

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ABSTRACT

In order to understand the transformation processes which take place in settlement units located in the coastal zone of the Baltic Sea, the following should be taken into account, namely, the reasons for shaping urban space, as well as the tendencies and trends in urban spatial development. At present, the areas where the greatest transformations occur are: the city center, the industrial areas, the communication systems, the outskirts and areas of a typical, agricultural style. Services are fragmented and it is prohibited to locate modern large-sized shopping centers. At the same time, there is dynamic population growth which is connected with the formation of numerous estates of multi-family houses. Therefore, the factors which occur in one area cause changes in another. These include, among other things: migration, governance and policy carried out by district authorities, the applicable law (often diverse and contradictory), and urban planning trends and doctrines as well as other development factors. The present study is an attempt to classify and organize the factors affecting the changes in rural settlement units located in the coastal zone of the Baltic Sea. These factors have been divided into 4 categories: spatial factors, demographic and social factors, legal and administrative factors, as well as economic factors. Within each of these categories the factors have been further divided into endogenous and exogenous. The paper discusses the barriers which inhibit and sometimes prevent the analyzed settlement units from undergoing transformations. These include: demographic and social barriers, infrastructural barriers, natural barriers (due to the features of the natural environment), legal barriers, economic barriers, financial barriers, administrative barriers and spatial barriers.

ADDITIONAL INDEX WORDS: spatial development, development factors, barriers to development, coastal tourist resorts, Poland

INTRODUCTION
The process of transforming to a market economy and a local government system has caused significant changes in the functioning of settlement systems. These include changes in the principles and mechanisms of urban development, the dynamics, structure and efficiency criteria in urban management. Changes in the political situation, in the existing law as well as changes in the way of financing public investments have all lead to deep socio-economic and spatial transformation processes of urban centers.

This article aims to analyze and evaluate the spatial development of tourist resorts located in the Polish coastal area in the context of factors and barriers to development. The analysis includes both the urban centers located in the immediate vicinity of the Baltic Sea (Kolobrzeg, Leba, towns of the Hel Peninsula) as well as those located further away from the coast (Koszalin, Słupsk, Gdańsk). In order to attain the aim of the study analysis and estimation of urban transformation were carried out.

Changes in land use and spatial location function were analyzed and spatial development was evaluated. Elements organising the functional and spatial structure of settlement units was elaborated on as well as the the location and range of influence of services (in particular tourist services), areas of investment activities, transport network. The development, form and architecture changes of housing development was noted and dysfunctional areas, inapropriately developed and requiring modifications.

In addition, an analysis of the existing planning documents related to the process of shaping spatial order, attention was given to the factors and directions of spatial policies of local authorities, so as to obtain precise data. Due to the extensiveness of the issues, the conclusions drawn from the observations and analysis, are presented as a whole. Detailed analytical approach was depicted in the case study.

The paper consists of two main parts. After a short introduction, there is an outline of the factors influencing the spatial and structural transformations of the analyzed locations. The second part of the paper specifies barriers to development. Although both of these sections are similar in subject matter, their content does not include equivalent issues. The study ends with a conclusion.
DEVELOPMENT FACTORS

The factors influencing the development of settlement units located in the Polish coastal zone include: spatial factors, demographic and social factors, legal and administrative factors, as well as economic factors. Within each of these categories the factors have been further divided into endogenous and exogenous. (Table 1).

The first group of factors are those which have a direct influence on the shape of the area of settlement units. External factors arise from the decisions made by superior authorities, from the direction of state spatial policy, general trends in design, or location. District authorities frequently have to submit to regional and national authorities. Urban planning trends and doctrines appear to be less restrictive, as the way of shaping estates is the responsibility of the team of designers working on behalf of the authorities, positive impact on the consumers of that space. Clearly, this becomes an opportunity for development for a given developer.

The qualities of the natural environment are also a very important development factor as far as this group is concerned. The appropriate use of its resources may have a settlement unit. Among the most attractive coastal towns in terms of the location of housing estates are those which are located near, not as it would seem the sea, but those located near large forest areas, i.e. Wolin National Park (located in the western part of the Polish coastline), Sowiński National Park or the Coastal Landscape Park (at the Gulf of Gdansk). In recent years, there has been intensive housing development near major water bodies (Lake Kamienski, Lake Niechorze, Lake Jamno, Lake Bukowo, Lake Wicko, Lake Gardno, Lake Lebsko and Lake Sarbsko). A decisive factor when choosing investment locations or locations meant for economic activity is transportation accessibility. It is this factor which determines the way in which coastal settlement units are shaped.

The internal factors connected with the way building and land development is carried out, are conditioned by the decisions made by local authorities, the possibilities inherent in the structure (local resources), as well as by the connection between the elements of the structure and the activity related to maintaining spatial order and sustainable development. The conditions of building and land development, the orders and prohibitions contained in existing plans, and permits issued by the competent administrative authority all play a vital role in the process of landscaping. Coastal housing estates are characterized by an urban building system. The intensiveness of investments has increased, the size of the lot has changed, as has the location of the building on the lot. There is no public space combined with recreational areas. An inappropriate location, an insufficient amount of services and poor quality of the transportation system (lack of sidewalks, unpaved streets) are problems which many “new coastal settlements” need to cope with.

The second group includes demographic and social factors. The results of the analysis, which includes migration, demographic transformations and social stratification, relate mostly to larger urban centers which have a higher population density at 1600-1800 person per square kilometer. From this it follows that the migration of people from cities to suburban areas is, on the one hand, the result of the increase in inhabitant income, and on the other hand – the result of the deteriorating technical condition and the progressing degradation of both, residential buildings set in old central parts of towns and of settlements built of prefabricated concrete on the outskirts of cities in the 60s and 70s (such trends are visible in Kolobrzeg, Gdansk, Gdynia). Residents of big cities are more and more willing to settle in suburban areas, due to the better quality of the natural environment, and to significantly lower land and housing prices (as compared to cities) (Kołodziejski J. (eds.), 1999), Sołtys, 2006). They usually acquire plots within the range of 30 km from city centers and of the area of no more than 600 - 1000 m². Houses of a floor surface up to 150 m² are usually built. However, on larger lots exceeding 2500 m² (and even 5000 m²) residences of a floor surface of at least 400 m² are built. These type of lots, of a residential character, are located in the most attractive suburban areas, i.e. in the vicinity of forest complexes. An essential factor in choosing a new place of residence or a location for a small business is the travel time, to and from work or home.

Table 1: Factors affecting the development of settlements.

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<th>Spatial Factors</th>
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<td>National spatial development policy</td>
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<td>Economic policy</td>
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<td>Regional development policy</td>
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<td>Urban doctrine</td>
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<th>Demographic and Social Factors</th>
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<th>Legal and Administrative Factors</th>
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<td>Domestic and foreign investments, national and international cooperation</td>
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<td>Competition</td>
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<td>Territorial marketing</td>
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<td>Cooperation with residents</td>
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The perception of space changes with the increase in motorization and the increase in the number of cars. What matters, is the commuting time and not the distance itself. The next category is made up of a group of legal and administrative factors. The Construction Law, the Law on Spatial Planning and Development, the Law on Environmental Protection and Nature Conservation, the Real Estate Management Act, the Farm and Forest Land Protection Act, the Act on public roads as well as the local land development plans are stimuli for shaping the area of the settlement units. Note, however, that the agent of spatial changes is the local government. The authorities are obliged to address the interests of the investors, and at the same time, to acknowledge the needs of the residents.

The economic and business factors are strictly related to the spatial policy of a commune, as the impact of the factors related to state policy (exogenous) is of marginal significance. The only matter which appears to be important in this group is the cooperation on carrying out domestic and foreign investments. Attracting investors is significant for the development of an individual or a group of settlement units. When locating investments in the vicinity of major cities, entrepreneurs often enjoy the conveniences of well-developed technical infrastructure, business sectors, increased market demand or a high quality of the labor market, while paying a much lower price for the land, lower rent and taxes and having access to an increased supply of vacant land for development. Territorial marketing is undoubtedly helpful in this endeavor, as it is a tool used in individual development management. In wishing to attract customers and investors, local authorities must take certain cognitive, analytical and operational action. These include: an analysis of the environment, the selection of key issues, skillful use of local resources, knowledge about customers, investors (and their requirements, preferences, needs), the use of tools to stimulate and maintain growth, proper assessment of the effects of development, setting targets and selecting an appropriate strategy, developing a plan to create a local image (image of an area), monitoring and evaluating the activities. These measures make up the spatial and socio-economic policy of a city/region/municipality which, through the activation of economic activity, results in the improvement of the living conditions of its inhabitants. (Kotler and Haider, 1993).

The factors presented above are stimuli for the development of the mentioned tourist resorts. However, if they had coincided with each other, the right sequence of decision-making was maintained, when carrying out the spatial and developmental simulation parallel to a full analysis of the ongoing changes - the problems in the spatial development of these centers would most likely not have appeared.

**SPATIAL DEVELOPMENT OF COASTAL TOWNS - A CASE STUDY**

The coastal town of Kołobrzeg is an example of a functionally divided, incoherent and chaotic urban space. Its layout, architecture and functions have been fashioned and affected by multiple factors and barriers to development.

The center of Kołobrzeg (Figure 1) (Area 1) has retained much of its Medieval layout. It has followed a common municipal pattern of development with public utility buildings and estates of multi-family houses. The more recent pre-1985 precast-concrete buildings have wreaked havoc with the historic city center, blotting out its urban grid, introducing oversized urban interiors which fail to fit into the existing street grid and dwarfing the church building which used to tower over the town’s layout for centuries. Kołobrzeg center is the most architecturally incongruous part of this urban area. The clash between 11-storey residential high-rises of prefabricated concrete and the historic landscape has eroded the quality of this central district. The high-rises have disturbed the old town panorama isolating it from its surroundings.

![Figure 1. City of Kolobrzeg in the division into conflict areas](Image)

The Parsęta River cuts across the spa quarter separating it into a right-bank (Area 2) and a left-bank (Area 3) section. The right-bank part includes the showcase spa and recreational area featuring a beach and dune strip, a historic park area and a historic spa and resort district. These border on railway grounds on the south and on sparsely developed neglected areas on the east. The area has been threatened by suburban resorts which have been replacing traditional spa buildings as well as by deteriorating parks, overserviced shopping centers which dominate over neighborhood architecture, large buildings located ever nearer to the sea front and the railway grounds which cut the recreational areas off from the city center. The left-bank part is a strip of beaches and wooded dunes which until recently have been predominantly used to hold closed-off military grounds. Today, the space between the dunes and southern city limits is used for residential development and tourist resorts. The residential and tourist areas collide within a space degraded by substandard and overly dense development and by allowing large buildings ever closer to the sea front. As development lots consolidate, access to the sea front may be barred.

The fourth designated area is a complex of seaport facilities at the mouth of the Parsęta River within the administrative borders of the seaport and the Solna Island. The area includes a military port, a parcel of passenger, commercial and fishing port grounds, a yacht marina, local allotment gardens and a construction depot. For technical reasons, the port entry is a cap on local growth. The area’s buildings (e.g. a hotel) clash functionally with the seaport. As massive quantities of harmful substances and materials (unrelated to fishing) are being stored and handled in the port, its environment may well be contaminated. The island’s allotments also conflict with seaport operations.

Areas 1, 2 and 4 include old fortifications absorbed by the city in the 19th century as its limits expanded. The barracks and military ranges encircle the city as the fortifications once did. Unfortunately, while the area remained off limits, a number of single-family residential developments cropped up forming new suburbs completely isolated from the existing town. The barracks area, which to this day remains undeveloped, is the most neglected and degraded part of town.

Area 5, which is sparsely developed, features residential estates, former barracks, manufacturing and storage facilities and a vast expanse of marshy meadows. The land has deteriorated due to uncontrolled sparse development. The result are mixed zoning designations which contribute to functional confusion and
inconsistencies. Having development concentrated along existing roads has limited accessibility to back lots and prevented rational use of the land. Due to low quality development, which has gradually been accepted as the going standard, the city has been isolated from adjacent attractive rural areas and summer houses in the western part of the coastal strip.

Area 6 comprises multi-family apartment buildings, a military base, a former military range and special-purpose areas. The place has been overwhelmed by excessive shopping space (supermarkets) forcing out of business the types of smaller shops commonly seen in the old town and shore districts. The local development runs against the principles of protecting the adjacent deposits of therapeutic peat. The existing buildings fail to serve as an inviting entry gate or city showcase. To make things worse, 11-storey residential high-rises have been placed right next to recreational and spa areas.

A major issue can also be found in the housing development in the eastern part of town (Area 7), once an airport and military barracks. With the airport shut down, its hangars abandoned and the barracks turned into housing space, residential buildings and service facilities are out of place in the airport zone. The airport continues to deteriorate and depreciate, unable to expand due to the new development which stands in the way of revitalization. The area may turn out to have been contaminated by prior development.

The Parsęta River Valley and the undeveloped grounds on both sides of B. Krzywoustego Street form Area 8. Highly valuable due to its natural landscape assets, the area has now seen its first development. It is not a conflict or a problem area. Rather, it is one threatened by poor spatial planning which may leave its environment degraded and its land vulnerable to flooding. One idea under consideration is to run a belt expressway across the land.

A similar function is performed by Area (9), covering a strip of beaches and dunes, a spa, unpainted peat deposits, outskirts farmland and the Mirowice peat bog. This waterlogged expanse with a small allotment gardens area, a park and a tourist resort is hardly accessible and largely undeveloped. It is, in fact, unfit for development. The only possible result is for the natural assets to deteriorate under unchecked human pressure (anthropopression).

One other designated area which functionally does not fit into the city expansion plans are the hills beyond the peat bog (Area 10). This vast undeveloped hilly area is being used as a military range in violation of the principles of peat deposit conservation.

Urban development in Kolobrzeg has created areas ridden by internal conflict as well as conflict with adjacent districts. Existing and future uses collide. Planners in charge of the densely developed city space need to choose between protection and growth. As it turns out, given the existing spatial layout, development jeopardizes reasonable urban growth and city life.

BARRIERS TO DEVELOPMENT

In most cases, the problems of spatial development arise from barriers. Among those which inhibit and sometimes prevent the coastal settlement units from undergoing transformations, are: demographic and social barriers, infrastructural barriers, natural barriers (due to the features of the natural environment), legal barriers, economic barriers, financial barriers, administrative barriers and spatial barriers.

The first group of barriers determines the possibilities and needs of economic and spatial development in coastal areas. There is a falling birth rate in analyzed cities (Frenkel, 2000). The more tourism is developed and the better infrastructure development of a town, the better the demographic situation in coastal areas.

It is essential to improve technical infrastructure, cultural infrastructure, tourism infrastructure as well as social infrastructure, so as to ensure the development of Polish tourism. Poorly developed technical infrastructure is one of the barriers which impedes the development of coastal tourist resorts. It limits the level of intensity and diversity of tourist services, increases the cost of living, discourages people from investing in these areas and lowers the standard of living of the local community (Kowalczyk and Deryk, 2010). Offering areas with good technical infrastructure to potential investors (including a plumbing system, a sewage treatment plant, gas networks, with good transport accessibility) is a means of attracting capital and economic activity and stimulating entrepreneurship, regardless of the business or ownership.

Tourist areas also lack services related to culture, art, education as well as specialized medical services. The inhabitants of such areas have to settle for local education centers, local health care, participating in local cultural and entertainment events organized by the local authorities. Only those who live or are on vacation in larger centers, or in their vicinity have access to non-local services. Therefore, infrastructural barriers do not only affect the economic activity (as mentioned previously), but also the standards of living and the living conditions of the local community.

The valuable qualities of the natural environment play a creative role in positively shaping the structures of the settlements. The proximity of forests and lakes, being in direct contact with the flora and fauna, the possibility of observing, acquiring, and resting, are "possibilities" which need to be protected. Thus, are there any barriers which result from the proximity of nature? Not numerous. Environmental features, the lie of the land, the location of protected areas and their extent, the distribution and size of land which has a higher grade of soil (I-III), all clearly affect the shape and distribution of urban structures. Not being able to build or develop the valuable agricultural land or forests often leads to the fragmentation of urban areas. It is a cumbersome and costly task for the authorities to supply technical infrastructure to remote rural settlements (gas and sewage systems). The longer the distance between towns the higher the cost of waste and sewage disposal.

The inhabitants of remote and under-invested tourist centers dispose of their waste in forests, and the sewage from leaking septic tanks contaminates soil and groundwater. It comes to this that local authorities in their decisions about the future development strategy of settlement units, interfere with, change, and often destroy valuable natural areas, only excluding previously protected agricultural or forested land from use. Investments connected with the development of tourism or recreation, often have an impact on the natural environment and cause significant changes. This degradation is extensive in character and manifests itself not only in the changes in plant cover, but also in soil and substratum (those changes are observed in Jastarnia, Hel). This, then leads to changes in the structure, the amount and the texture of soil. A further threat is the garbage thrown out into the forests. In determining the directions of spatial policy, the local authorities need to reconcile spatial order with sustainable development, which is not often easy, especially due to inconsistent Polish laws.

This "ambiguity" is connected with a set of legal barriers. The Polish planning law lacks the aim of the European formula of spatial planning, namely, well-ordered spatial development. Our law guarantees a practically unlimited possibility to quickly build up an area which is yet undeveloped or located in the outskirts of a town, without paying much attention to the developmental interests of the whole area, spatial order in the broad sense, or the
environment. The investors benefit from the law and the spatial policy, due to the lack of integrated spatial planning, the ease of obtaining local plans, the ambiguity of land ownership laws and land development laws and the general lack of effective management tools in spatial development. Polish legal regulations, connected with shaping spatial policy, are often inconsistent, contradictory and chaotic. Previously presented Kołobrzeg is an example of a tourist town, in which spatial management, in the face of all the orders and prohibitions, is extremely cumbersome and complicated. The following laws are in effect in the city of Kołobrzeg: the Act of 17 June 1966 on Health Resorts and Spa Treatment; the Act of 28 September 1991 on Forests, the Act of 4 February 1994 - Geological and Mining Law; the Act of 20 December 1996 - the Ports and Harbors Law; the Act of 27 April 2001 - Environmental Protection Law; the Act of 27 March 2003 on Spatial Planning and Land Development; the Act of 18 December 2003 on Plant Protection and the Act of 16 April 2004 on Nature Conservation. Maintaining spatial order, in the face of so many laws which are often contradictory, is extremely difficult.

A modern tourist resort should not only serve tourists, but it should also develop and create new jobs for local citizens. Of course, a common barrier to taking up a tourist business activity which is not related to tourism, is insufficient income. This type of activity diversifies the functional structure of the area and improves the living conditions of its residents. The intensity, variety and location of the components of technical development, social development, cultural development and tourism development (i.e. infrastructure) are all indispensable for multifunctional economic development in these areas. The economic barriers are therefore associated with poverty and the lack of local capital funds for the development and building of modern infrastructure. It is vital for local authorities to obtain these funds, as they are essential for the development of these units. There are not many financial sources to choose from. The most important are still aid funds and European Union structural funds. Since now, only those communes which were able to properly fill in and justify their applications receive EU funds, not the most disadvantaged communes. This ability, or rather the organizational and administrative inability, may thus, become a barrier to the normal development and functioning of settlement units. Undoubtedly, the legal and administrative policies, whose result is visible in the form of planning documents required in order to carry out the investment plans while maintaining spatial order, have had an impact on the spatial and structural changes. Properly formulated objectives and tasks in the Municipal Development Strategy and the Local Development Program, updating the Study of the Conditions and Directions of Spatial Development, defining the building and land development regulations in the Local Land Use Plans are the basis of authority activity, and are also the basis of territorial marketing which is significantly connected with spatial, economic, and social development. The lack of documents or their irregularities (especially in the case of local plans) become administrative barriers to tourism development. It is highly visible in planning operations in all analyzed cities.

Spatial barriers arise from features (properties) of geographic space, that is, from its limitation and diversity. Restrictions in land use (inconsistent laws, unclear land ownership, natural conditions), the shortage of developed areas (having technical infrastructure), as well as the decrease in agricultural and recreation areas, have led to the fact that space has become scarce and, thus land should be saved. Some areas of land have become resistant to human activity. Less accessible areas, which require time and energy to get to, are less likely to undergo changes or become investment areas. Also, the location of towns in the direct impact zone of an area of great natural interest specifies the land development conditions in that area. There is limited spatial development in towns which are located near protected areas, areas of great natural interest, due to strict and rigorous regulations in land use (Staszewska and Wdowicka, 2005).

CONCLUSION

During the past 10 years, the towns located in the coastal zone have undergone vast changes, namely, there has been a significant increase in built-up areas, the structure of land use has changed (areas used for agricultural purposes have been significantly reduced, while urban investment areas have expanded), there has been a change in the of type of building developments, the average number of storeys has increased, which is reflected in the increasing amount of build-up areas. In homogeneous areas, characteristic of the post-war years, a central part began to develop, with pedestrian and service areas which have become very important. The network of streets and roads has been subject to dynamic development as well. The functional and spatial structure of the analyzed units, is currently made up of commercial and service areas and transport areas, in addition to the existing residential areas, sanatorium-health resorts and harbors.

Unfortunately, this way of spatial management, does not contribute to proper, harmonious development of Polish seaside resorts, as all the functions of city space are mixed, the transportation system is inefficient, residential development areas are heterogeneous and random, the location and number of service facilities is inappropriate and inadequate. This, most frequently, leads to conflicts and creates new barriers. The factors and barriers presented above, indicate that they may be, both developmental or they may pose problems.

REFERENCES


