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# HUMAN LIVING SPACE IN CRISIS

Shifting living conditions, environmental change, and population migrations are all necessitating changes in how we manage the space in which we live.  
 Does our living have a future?

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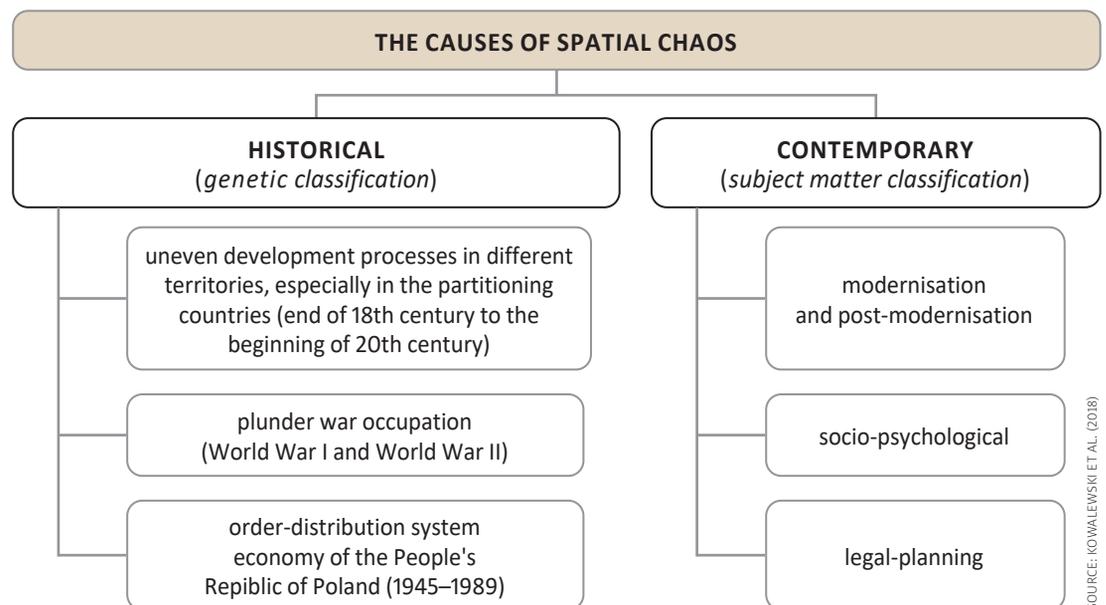
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flucting interests, the development and use of space requires regulation and supervision. In civilized, developed countries, spatial law – which for example regulates investments in various types of development and other infrastructure – is one of the most important types of law in socioeconomic terms. This is due to the fact that a rationally shaped space is efficient and facilitates the preservation of environmental values, thus improving the quality of human life.

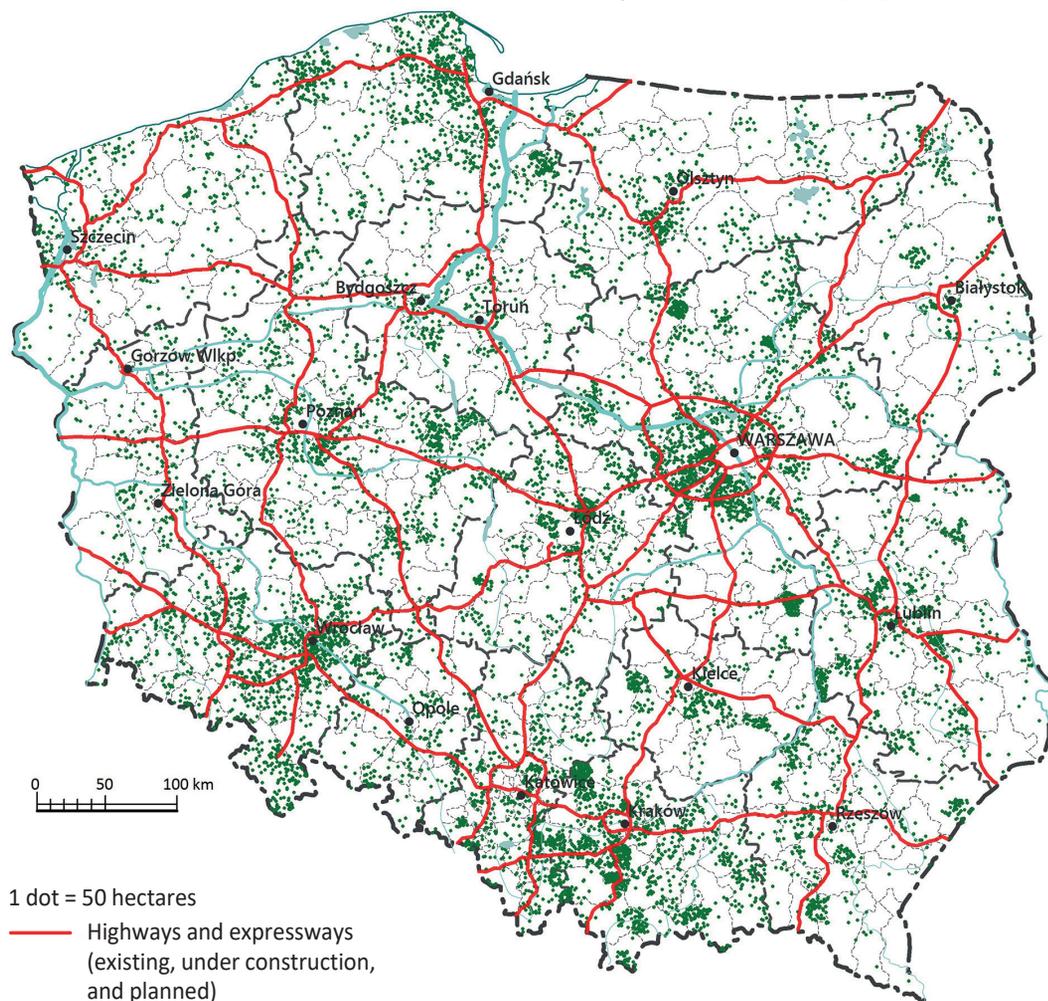
In Poland, unfortunately, there has been a crisis of space and spatial management for many decades. This manifests itself in the form of spatial chaos, which can be defined as the incorrect and suboptimal arrangement of developments and technical infrastructure (including housing) – it consists in an excessively scattered development pattern and a lack of coordination between the development of housing and the

**B**ecause space is a limited good, it is a point of constant competition among its various users: residents, entrepreneurs, owners, etc. Because these various actors often have different, even con-



SOURCE: KOWALEWSKI ET AL. (2018)

A classification of the various causes of spatial chaos



Agricultural land re-zoned for non-agricultural purposes in non-urban municipalities, as of the end of 2020

development of infrastructure (transportation routes, public service facilities, and sales and service outlets) serving the needs of residents.

There are both historical and contemporary reasons for this. The former include the political, legal-administrative and cultural dissimilarities between different parts of modern-day Poland, starting with the partitioning of the country in the eighteenth-nineteenth centuries, through the devastating wars of the twentieth century and the exploitive nature of the occupation economy, and finally the centrally controlled economy of communist-era Poland prior to 1989. The contemporary causes, in turn, include legal-planning, modernization-related and psychological-social issues – with the legal-planning circumstances, related to defective spatial law, being of particular importance.

Fierce criticism of the flawed spatial policies of the public authorities at various levels and documented social and economic losses mobilized the central authorities to undertake corrective measures. For a decade and a half, successive Polish governments, irrespective of their political orientation, pledged themselves to improve spatial management policies and strengthen spatial planning. They tried to do so by taking various measures, including:

- Resolution No. 239 of the Council of Ministers of 13 December 2011, which called for a thorough reform of spatial management in Poland, in accordance with the adopted “Concept for the

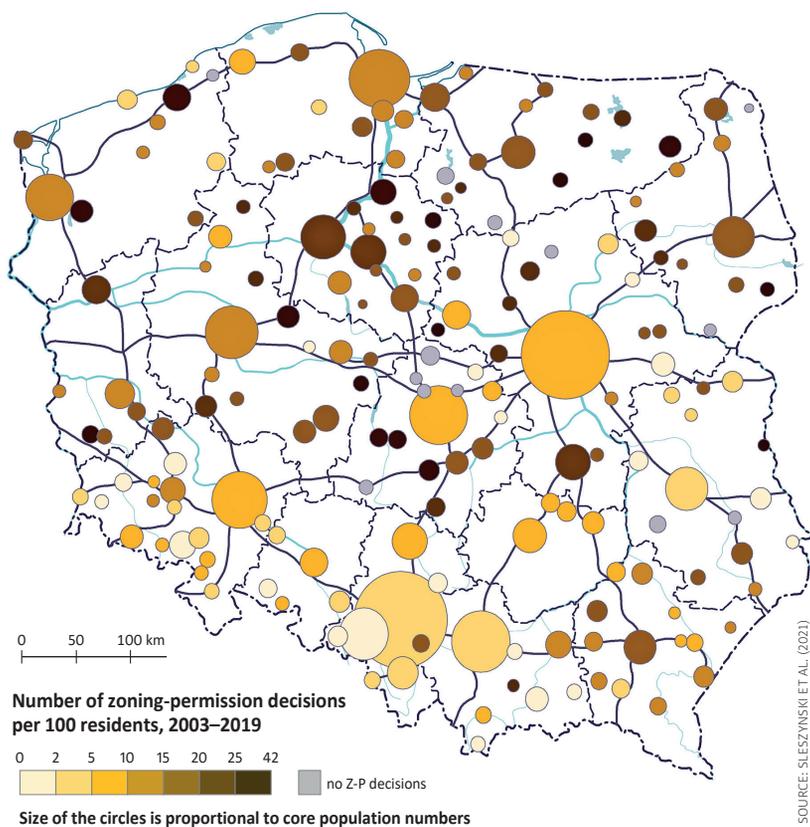
Spatial Management of Poland 2030.” The action plan for its implementation envisaged, among other measures: “(1) the introduction of an integrated (coherent and hierarchical) development planning system capable of coordinating the policies and actions of public entities; (2) the streamlining of regulations ensuring the efficiency and universality of the spatial planning system; (3) institutional and qualitative strengthening of spatial planning and the preparation of studies on the development of functional areas.”

- the establishment by the Council of Ministers, on 10 July 2012, of a *Commission for the Codification of Construction Law*, which in 2014 completed work on a draft Urban Planning and Construction Code and was dissolved in January 2016;
- the “Strategy for Responsible Development Through 2020 (with an Outlook Through 2030),” adopted in its final form on 14 February 2017. It makes numerous references to the aforementioned problems, including pointing out the need to “restore and consolidate spatial order” and “promote spatial order in rural areas, particularly within the sphere of influence of highly urbanized areas, among other things to prevent the disruption of the existing settlement network.”

The crisis of space has also been further magnified by certain administrative court rulings that contradict the principles of good urban planning, rather than

SOURCE: SLESZYŃSKI & KUROŃCOWICZ (2021)

## ACADEMIA FOCUS ON Geography



Number of zoning-permission decisions per 100 residents issued in suburban zones in 2003–2019

supporting them, and which actually exacerbate the spatial chaos. Over the past 10 years, the province-level (WSA) and top-level (NSA) administrative courts have issued a total of 28,000 rulings relating to the interpretation of four urbanist concepts: freedom of development, good neighborliness, continuity of function, and continuity of development. Notably, there are fundamental differences of opinion among the country's top legal authorities over how to delineate the boundaries of the so-called freedom of development – which only further adds to the confusion in municipalities' spatial planning.

In Poland, we have a three-tier system of spatial planning (national, regional, and local). At the latter level, the municipal governments are responsible for spatial order. Any new investment, such as a residential house, must comply with the local zoning plan – if there is one, because only 33 percent of the country's territory is covered by such documents. In the remaining part of the country, developments are based on the existing body of administrative zoning-permit decisions. In the general opinion of experts, due to their excessive discretion, these decisions are a major source of spatial chaos and development fragmentation.

Since 2003, more than 2.5 million zoning-permit decisions have been issued in Poland. The relative ease of obtaining them causes construction projects to arise in a spontaneous and unstructured manner. In addi-

tion, macro-scale investments, such as major highways, are being built on the basis of so-called “special parliamentary acts.”

## Speculative bubble

Each municipality (*gmina*) prepares its own “Study of Conditions and Directions of Spatial Development”; almost all local governments in Poland have one. However, such a study is not an act of local law and it most often designates land use in rather general terms. In fact, it has very limited influence on the spatial development of the municipality. Municipal studies and local land-use plans are not free of flaws, either. Both typically allocate an excessive amount of land for residential functions, including single-family houses. Municipal studies allocate about 12 percent of the country's land area for this purpose (compared to nearly 1 percent allocated for apartment buildings), and since 2003 (when the current Local Spatial Development Plan came into force), local plans have altered the designation of about 600,000–800,000 hectares of agricultural land, allocating them instead for non-agricultural purposes, which essentially means for residential construction.

This means that if only half of the agricultural land newly cleared for such development were to be developed, several million people could live in these areas. In total, the so-called demographic absorption in the local plans is estimated at nearly 60 million residents. This is, of course, much more than the actual investment needs, since about 600,000 people change their place of residence every year, and not all of them move into new apartments and houses. So these 600,000–800,000 hectares of reclassified agricultural entail a strong oversupply of plots cleared for development and therefore a kind of “speculative bubble.” At the same time, no mechanisms are being proposed that could somehow solve the problem of already overly fragmented development patterns – for instance, fiscal mechanisms.

The crisis in spatial management has long been noted by the scientific and expert communities and a not inconsiderable number of policymakers. So far, three major reports on spatial chaos have been released: by the Foundation in Support of Local Democracy and the PAS Institute of Geography and Spatial Organization, by the PAS Committee for Spatial Economy and Regional Planning, and by the Polish Economic Institute. All these reports were written in view of the need to draw the attention of the public and decision-makers to the problem of the growing crisis of spatial management in Poland. That crisis is causing not only a deterioration in the quality of life (or maintaining this quality at an unsatisfactory, far from optimal level), but also an increase in the real cost of living.

## Costs of spatial chaos in Poland, estimated in the report of the PAS Committee for Spatial Economy and Regional Planning

Issue	Description of costs	Estimated amount (per year, billion PLN)	Comments
<b>Technical infrastructure</b>	Construction of infrastructure, coping with overly fragmented settlement patterns, negative balance of the spatial economy	20.5	A 10-year amortization period was assumed for multi-year costs. The amount does not include compensation claims
<b>Transportation and mobility</b>	Excessive commuting, traffic congestion, time loss, external costs	31.5	Where there were several differing estimates for the same phenomenon, the amounts were averaged. In the case of external costs, 20 percent of the total cost was assumed
<b>Agriculture</b>	Mechanization, transport, excessive exclusion of land from agricultural production, protection by afforestation	8.8	Data from municipalities and provinces were interpolated for typical rural municipalities in Poland
<b>Real estate market</b>	Land buyout, compensation claims, reduced property tax revenues	10.9	Not including the so-called speculative bubble and potential compensation costs associated with the possible repeal of local plans
<b>External costs in the natural environment</b>	Environmental protection costs, healthcare costs, disaster recovery measures	12.6	Minimum amount – for example, the WHO has estimated the cost of severe air pollution at \$102 billion
<b>Total</b>		84.3	

SOURCE: KOWALEWSKI ET AL., 2018

The costs of the spatial chaos in Poland have been estimated at PLN 84.3 billion per year. They arise in such socioeconomic areas as technical infrastructure (construction of infrastructure, dealing with excessively fragmented settlement patterns, the negative balance of the spatial economy), transportation and mobility (excessive commuting, traffic congestion, time losses, external costs), agriculture (mechanization, transport, excessive exclusion of land from agricultural production, protection by afforestation), the real estate market (land buyout, compensation claims, reduced property tax revenues), and external costs in the natural environment (environmental protection expenses, healthcare costs, disaster recovery measures). Such estimates are posited out of an assumption that concrete figures – especially specific amounts of monetary losses – are able to speak to people's sense of reason much better than even the most passionate descriptions of the specific causes, effects, and mechanisms of the devastation of Poland's space.

## Research for the future

The three reports on spatial chaos described above have contributed to the broad scientific and expert-level discussion of Poland's spatial management crisis, as well as providing empirical arguments in support of making various types of changes in planning law. For instance, a small amendment was made to the Local Spatial Development Plan in 2016 (land balancing rules were introduced to curb the oversupply of land) and more recently another amendment has been drawn up (in 2021–2022), still pending passage (a pro-

posal to introduce a general plan and urban planning standards). Research work studying the spatial chaos is also still important, such as:

- laying down strong conceptual-theoretical and methodological foundations for the study of spatial order and chaos, especially in relation to the various territorial dimensions (place, environment, region);
- the advancement of remote-sensing research methodology as the most effective method of recording phenomena out in the field;
- empirical studies of the costs of fragmented development and the economic effects of spatial chaos;
- research on models of public participation and evaluating their effectiveness;
- adapting spatial planning to better meet the challenges of major demographic changes (depopulation of peripheral areas, urban depopulation, suburbanization) and climate change, as well as changes in mobility and consumption styles;
- improving the reliability of statistics, especially for areas with highly dynamic investment processes.

Research should also help clarify the reasons for the failures of previous attempts to rectify the spatial management system and to improve spatial planning, as identifying the sources of these failures is a prerequisite for the success of any effective spatial management reform. New information tools are also needed to make decision-making elites at all territorial levels (municipalities, provinces, government) aware of the growing costs of spatial chaos. ■

### Further reading:

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Śleszyński P., Kukołowicz P., *Spoleczno-gospodarcze skutki chaosu przestrzennego* [Socio-economic Effects of Spatial Chaos], *Polski Instytut Ekonomiczny*, 2021.