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Territorial categories

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Leibniz Association

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Territorial categories

Contents

Territorial categories, also known as spatial categories or spatial types, are used to classify spaces according to different demarcation criteria. They are used in a twofold manner: analytically as part of spatial observation and spatial research, and as core content pursuant to the Federal Spatial Planning Act (Raumordnungsgesetz, ROG) and spatial development plans.

1 Meaning of the term

Territorial categories, also known as spatial categories or spatial types, are used to structure and classify the federal territory and federal states in Germany according to various demarcation criteria. The term *Territorial category* is occasionally also used to paraphrase the potential specifications permitted under section 8(7) of the Federal Spatial Planning Act, such as ▷ *Priority area, reserve area and suitable area for development*. The latter use is, however, an exception in scholarly discussions and will not be further discussed here.

Territorial categories are in principle used in two different contexts:

- In ▷ *Spatial observation* and spatial research, territorial categories and/or spatial types are distinguished according to various criteria for analytical purposes. The resulting reduction of complexity in spatial development processes enables development trends and connections to be identified, correlated and made transparent.
- Spatial development plans distinguish territorial or spatial categories for programmatic purposes to serve as subdivisional backdrops for specific spatial planning objectives or to address and localise relevant spatial structural challenges in comparatively homogeneous territorial subdivisions. Pursuant to section 8(5) no. 1 of the Federal Spatial Planning Act, spatial categories are part of the core content of spatial development plans.

2 Functionally and analytically demarcated territorial categories or spatial types

Analytically demarcated spatial types are used in spatial observation and spatial research to serve different functions:

- Spatial types form the basis for identifying correlations and patterns of development.
- They allow for a comparison of development trends in different spaces, such as rural areas and agglomeration areas (▷ *Agglomeration, agglomeration area*) or urban regions (▷ *Urban region*).
- Scientific spatial analyses form an important basis for ▷ *Spatial planning (Raumordnung)* in the traditional sense of normative concepts for the supra-local and superordinate regulation and planning of space and its related processes and institutions as well as for ▷ *Spatial planning (Raumplanung)* in the broader sense as the intersectoral, integrative coordination of demands for the use of space.

The Federal Institute for Research on Building, Urban Affairs and Spatial Development *(Bundesinstitut für Bau-, Stadt- und Raumforschung)* in the Federal Office for Building and Regional Planning *(Bundesamt für Bauwesen und Raumordnung, BBSR)* has developed a series of different approaches for establishing spatial types for various tasks in federal spatial observation. A first distinction can be made, in principle, between spatial units based on administrative borders and those based on grid squares.

In the case of spatial units based on grid squares, an even grid (with an edge length of e.g. 250 x 250 m, 500 x 500 m or 1,000 x 1,000 m) is laid over a geographic space. With the help of geographic information systems *(GIS)*, different types of information can be spatially visualised in a very high resolution irrespective of the administrative units or changes in territorial status. As statistical data are so far not yet available in Germany on the basis of address coordinates, these types of analysis are so far not (yet) used systematically in spatial observation. These types of analysis have a disadvantage in that they do not result in an immediate call for action at a corresponding administrative level. Nevertheless, the *BBSR* used such spatial units in the 2005 Spatial Planning Report of the federation to depict types of spatial structure according to their access to urban centres and population density (cf. German Federal Parliament *[Deutscher Bundestag]* 2005) and, as a further development, as spatial types 2010 *(Raumtypen 2010)*, to depict their settlement structure characteristics and location type (cf. German Federal Parliament 2012). Using grid squares for spatial structure types, e.g. to represent settlements, enables a small-scale analysis of correlations with infrastructure costs or the determination of wind turbine locations.

Spatial units that are based on different administrative borders (e.g. municipal boundaries, district boundaries) are much more common and thus also more diverse. A key benefit is the presence of statistical data and of actors at the relevant levels. In this way, these spatial types serve to show disparities, discrepancies in development or to identify locations for infrastructure facilities. The district-based settlement structures of the *BBSR* are particularly common spatial types.

As the district level offers a broad variety of statistical data, many spatial developments can be analysed comparatively based on the existing classification. The initial settlement structure conditions continue to have a strong impact on various developments and show significant discrepancies for the corresponding indicators (cf. *BBSR* 2012: 50 et seq.).

3 Territorial categories and spatial categories in spatial development plans

Territorial or spatial categories are used to depict programmatic objectives in spatial planning.

In the Concepts and Strategies for Spatial Development in Germany (*MKRO* [Conference of Ministers for Spatial Planning] 2006), contrary to earlier descriptions in the Framework for Action in Spatial Planning Policy, the federal spatial planning level does not include territorial categories that closely match administrative borders. Instead, they opted for a cartographic depiction of different (problem-oriented) spatial types, developed based on the grid square analysis of the *BBSR*, which also mutually overlap in part (e.g. stabilisation spaces, growth spaces outside of closely integrated, more metropolitan interactional areas, landscapes with a special value for nature conservation). Spatial structures in the strict sense are differentiated only according to highly densified central spaces and densified in-between spaces. The guiding principles do not include a spatial category for ▷ *Rural areas*.

The ‘new’ Concepts and Strategies for Spatial Development in Germany adopted in 2016 (cf. *MKRO* 2016) likewise do not use boundary-based demarcations and are very similar in their cartographic depiction to the contents of the previous ones. As the maps in the guiding principles

only serve to illustrate the contents of the principles, the grid square-based depiction, which is not area-specific, provides a consensus-based means of visualisation and orientation, without creating the impression of being a formal specification.

Territorial or spatial categories are used in federal state spatial development plans to concretise normative contents in spatial terms. Pursuant to section 8(5) no. 1 of the Federal Spatial Planning Act, spatial categories represent the core content of spatial development plans. Most federal state spatial development plans of the non-city states reiterate this notion and generally depict these spatial categories for each territorial unit. The various spatial categories as well as the terminology used are differentiated along a broad spectrum. The following terms are used: spatial categories, spatial types, structural spaces, spatial structure types, spatial structure groups and territorial categories.

In most spatial development plans, a general distinction is made between densely populated/regulated areas on the one hand, and rural areas on the other; different specifications in the form of objectives and/or principles of spatial planning (▷ O*bjectives, principles and other requirements of spatial planning [Raumordnung]*) are assigned to these territorial categories. Both categories are, moreover, often further differentiated and supplemented by problem-oriented categories, each adapted to the relevant initial spatial conditions. In some plans, the territorial categories themselves are represented as objectives or principles of spatial planning. In addition, it was found that normative specifications in the form of objectives and principles of spatial planning in state-wide spatial development plans can only be made spatially specific by being linked with spatial categories (*BBSR* 2012: 157). Some of the more current federal state development plans contain diverse, problem-oriented differentiations of spatial structure types or territorial categories.

The territorial categories are based on analytical demarcation criteria, which are combined in highly varying ways by the federal state spatial planning authorities. The most frequently used criteria in this regard are the following:

- criteria related to settlement structure (e.g. population density, settlement density, ratio of settlement areas and public thoroughfares, trends in the use of settlement areas),
- demographic criteria (e.g. population figures, population trends, age structure),
- criteria related to the economic and labour market (e.g. employment density, the ratio of inhabitant density to employment density, unemployment),
- accessibility criteria (e.g. access to higher-order centres).

The examples listed in Table 1 show the diversity of the use of territorial categories and the programmatic contents that are assigned to them.

Table 1: Examples of territorial categories and of important objectives in selected state

development programmes or plans

Federal state	Territorial categories	Significant sectoral and material stipulations
Baden-Württemberg (*LEP* [Federal State Development Plan] 2002)	Densely populated areas (O)	● (O) Restriction of use of open spaces for settlement purposes (use of building land reserves) ● (O) Focus of settlement development on - development axes - settlement areas and settlement focal points - public transport systems - in peripheral areas: efficient connections to supra-local road system ● (O) Areas and energy-saving construction and development forms and a balanced mix of both types of use ● (O) Securing sufficient open spaces
	Peripheral areas around densely populated areas (O)	
	Densely populated areas in rural areas (O)	● (O) Securing sufficient open spaces ● (O) Rural area in the strict sense: Continuing development of agriculture and forestry as efficient economic sectors
	Rural area in the strict sense (O)	
Bavaria (*LEPro* [Federal State Development Programme] 2013)	Densely populated area (O)	● (O) Concentration of settlement development to locations with an efficient connection to public transport systems (in particular rail-based public transport)
	General rural area (O)	● (P) Securing and continuing the development of rural area as an independent living and working space ● (P) Creation and maintenance of an up-to-date information and communication infrastructure
	Rural areas with densification tendencies (O)	
	Territorial subdivisions with a particular need for action (O) (Stipulation in addition to and irrespective of the other territorial categories)	● (O) Priority development in the sense of creating equivalent living and working conditions in relation to - planning and measures for the provision of public services - the designation of spatial focal points for promotion - the allocation of funding

Federal state	Territorial categories	Significant sectoral and material stipulations
Saxony (*LEP* [Federal State Development Plan] 2013)	Densely populated areas	• (P) Reinforcement of existing potentials to mobilise innovation and growth - reduction of environmental impacts - efficient land use - intensified cooperation between cities and their surroundings of the central places - expansion of links to rural areas
	Densely populated areas in rural areas	• (P) Further development as settlement, economic and supply spaces to encourage development in rural areas • (P) Designing transport infrastructure to ensure the provision of local public infrastructure in the inner zone and accessibility of the densely populated areas
	Rural areas	• (P) Further development and strengthening as an attractive space for living conditions, economic and cultural activities and nature through - strengthening the functions of central places - safeguarding the accessibility of central places from their interactional areas - safeguarding public service provision through adaptation and countervailing strategies in demographic change - stronger interlinking of state, municipal and private action • (P) Development of endogenous potentials - strengthening and contemporary development of agriculture, forestry and fishing industry - expansion of the means of income for trade, crafts and services - strengthening as a leisure and recreational area - reinforcement of regional capabilities and responsibilities - promotion of involvement of the local population

Federal state	Territorial categories	Significant sectoral and material stipulations
Thuringia (*LEP* [Federal State Development Plan] 2025, 2014)	In the Federal State Development Plan of Thuringia depicted not as territorial or spatial categories, but instead as spatial structure groups (not fully coinciding with administrative territory)	
	Spaces with favourable conditions for development (P)	● Improvement of the location-oriented requirements for dynamic economic and employment development ● Securing and expanding connections to the national and international flow of goods and transport networks ● Providing land for trade and industry to a sufficient extent
	Spaces with balanced development potentials (P)	● Use of development conditions ● Overcoming development obstacles
	Spaces with special development tasks (P)	● Economic and demographic stabilisation (to be considered in particular in the case of choice of location decisions for infrastructure projects of supra-regional importance) ● Spatially-relevant management and adaptation measures to focus on the degree of involvement and support through growth initiatives

Source: The authors

The overview shows clearly that territorial categories are used in the federal states to formulate specifications for areas with different spatial structure characteristics. Problem-oriented and partly overlapping territorial categories are increasingly used; this illustrates the substantive focal points of these territorial subdivisions and the value of developing them.

4 Outlook

Analytical area types or spatial types obtained through grid square analyses offer numerous opportunities to visualise information on spatial and settlement developments on a small and highly differentiated scale. Small-scale visualisation has already been tried and tested in the field of forecast calculations for population trends in conjunction with accessibility models, which provide a material and objective basis for the discussion, particularly in rural areas, about impending challenges for facilities providing public services (cf. Schwarze/Spieckermann 2013: 12 et seq.). Due to the legal framework currently in force as well as statistical collection methods, this means of processing of data is still relatively complex.

The use of territorial or spatial categories in spatial development plans has become more diversified and problem-oriented in recent years as far as the number of categories used and the content they represent are concerned; this should be seen in the context of the diversification of spatial development trends and the possibilities of collecting, analysing and representing data through the use of geographical information systems and information and communication

technologies. Nevertheless, territorial categories in federal state development plans still make it possible to identify regulatory and development tasks for similarly structured territorial subdivisions characterised by similar developments.

References

BBSR – Federal Institute for Research on Building, Urban Affairs and Spatial Development (Ed.) (2012): Raumabgrenzungen und Raumtypen des BBSR. Bonn. = Analysen Bau.Stadt.Raum. Volume 6.

German Federal Parliament (Ed.) (2005): Raumordnungsbericht 2005. Document 15/5500. Berlin.

German Federal Parliament (Ed.) (2012): Raumordnungsbericht 2011. Document 17/8360. Berlin.

MKRO – Conference of Ministers for Spatial Planning (Ed.) (2006): Concepts and Strategies for Spatial Development in Germany. Declared by the Conference of Ministers for Spatial Planning on 30 June 2006. Berlin.

MKRO – Conference of Ministers for Spatial Planning (Ed.) (2016): Concepts and Strategies for Spatial Development in Germany. MKRO Resolution of 9 March 2016. Berlin.

Schwarze, B.; Spieckermann, K. (2013): Prognosemethodik und Erreichbarkeitsszenarien. In: MORO-Informationen 10/2, 12-1

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