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Guiding principles for urban development



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Guiding principles for urban planning establish an overarching orientation for urban structural development, which orients the work of most urban planners over a certain time period, as well as a local authority's coordinated set of urban development objectives.

1 Definition and function

The term *guiding principle* has been used since the second half of the 1950s to refer to normative, holistic orientation frameworks for \triangleright *Urban development* and \triangleright *Urban design*, in parallel to its equally wide use in other social sciences such as education and theology (Albers 1965). However, urban structural models and urban design guidelines began to be formulated long before this. Renaissance ideas of the ideal city and the cities that developed during the Baroque period can be considered historical forerunners of the notion (Eaton 2001). The genealogy of modern guiding principles of urban development, however, did not begin until the second half of the 19th century with the linear town (Fehl/Rodriguez-Lores 1997) and the garden city (Bollerey/Fehl/Hartmann 1992). In the first half of the 20th century, the garden city was followed by the satellite town and – particularly influentially – the functional town of the Athens Charter (Hilpert 1985), which impacted the theory and practice of \triangleright *Urban planning* to varying degrees.

The concept of a guiding principle is vague and open to new interpretations. It is not codified in law; however, the logic of the urban planning law which emerged in the 1960s (the Federal Building Law [Bundesbaugesetz] and Federal Land Utilisation Ordinance [Baunutzungsverordnung]) was significantly shaped by the guiding principle of the functional city. In this respect, guiding principles found their way into urban planning law by implication, for example the principle of the separation of functions in the first version of the Federal Land Utilisation Ordinance of 26 June 1962 (Federal Law Gazette [BGBl.] I, 429) or the guiding principle of sustainable settlement development (Sustainable settlement development) in the amendment of the Federal Building Code [Baugesetzbuch] (Section 1 of the Federal Building Code [BauGB]) in 1998 in accordance with the law to amend the Federal Building Code and revise the law on spatial planning (Federal Building and Spatial Planning Act [Bau- und Raumordnungsgesetz] 1998) of 18 August 1997 (Federal Law Gazette I, 2081).

2 Modern urban development and the changing orientation of guiding principles

Initially, guiding principles for urban structure were essentially technically defined models for the urban structure that provided normative information about the distribution of uses and \triangleright *Density* (cf. Fig. 1) (Spengelin 1983). These were always associated – explicitly or implicitly – with principles orienting the pattern of centres, open spaces, and the \triangleright *Provision of local public infrastructure* for transport. The town (\triangleright *City, town*) was viewed as a functional and spatial context, whose growth was to be structured and shaped by \triangleright *Planning*. Guiding principles for urban structure were particularly effective during this phase (from the second half of the 1950s to the end of the 1960s) in planning large urban expansions (\triangleright *Urban expansion*). The history of urban design in the post-war period is commonly described as a sequence of changing guiding principles for urban structure in relation to the urban landscape and the decentralised, structured city; urbanism through density; the rediscovery of the historical town, etc. (Müller-Raemisch 1990; Reinborn 1996).

SATELLITE SYSTEM AGGLOMERATION OF GRADUATED CENTRES (HARLOW) O ° 0 0 **SELECTIVE** COMPACT CITY CONCENTRIC CITY SCATTERING 000 WITH LINEAR 0 0 POINT CENTRAL ZONE LINE AREA **HOMOGENOUS AREA** LINEAR CITY **GRID** STAR LINEAR FORM WITH **ALIGNED GRID** PROMINENT LOCATIONS (BRASILIA)

Figure 1: Structural models of urban development

Source: Albers 1974: 15

In the short phase of \triangleright Integrated urban development from the end of the 1960s, which set high expectations for the rationalism of planning by using scientific methods to make forecasts (\triangleright Prognosis) and determine requirements, there was no longer room for picturesque models of towns. Guiding principles were discredited as an outdated relic of pre-scientific town planning. Overall, the notion of the guiding principle became irrelevant to professional debates about planning in the 1970s and 1980s. At the same time, subjective aspects were gradually creeping in. With growing competition for resources between municipalities (companies, residents, purchasing power, subsidies, and publicity), these were developed and used as policy instruments for profiling

towns and cities. Besides professional planning, there were cityscape campaigns, marketing strategies, and public image campaigns, for which guiding principles for urban development – albeit not always referred to as such – were drafted (Becker 1998).

Since the 1990s, a revival of guiding principles for the urban structure can be seen in municipal planning practice (Becker/Jessen/Sander 1998). This reflected the growing need for orientation, which arose from various intertwined factors: \triangleright *Globalisation* and its socio-spatial repercussions, the changed situation in Europe following the political upheaval in the socialist states of Central and Eastern Europe, the rapid expansion of new transport and communication technologies and, last but not least, the growing threat to and pollution of the environment from increasing mobility and land take impinging on natural landscapes. After years of strategic restraint, many local authorities felt compelled to again elaborate urban development strategies; there was hardly a town in the 1990s that did not establish a large new urban borough, build on extensive inner city brownfield sites, and seek to attract attention through large-scale projects. The global debate about the need for sustainable development found its way into urban policy and brought about so-called local agenda processes in many places.

This mixture of constraints and opportunities demanded new visions at local and regional level and triggered the formulation of guiding principles, which were intended to help control the pressure for growth, to take the need to protect the environment into account, and to rectify past mistakes and failures of urban design. Added to these since the turn of the millennium are challenges associated with the declining demographic trend (\triangleright Demographic change), the problem of \triangleright Shrinking cities, no longer avertable climate change (\triangleright Climate, climate change; \triangleright Climate change adaptation), and the spread of digital \triangleright Information and communication technology.

3 Current guiding principles for urban development

▷ Sustainability formed the overarching reference point for guiding principles of spatial development in the 1990s. The implementation of sustainability on a local level and its integration in spatial planning gathered momentum after the UN Conference in Rio de Janeiro in 1992. 'Sustainable settlement development' was the title of the 1996 Urban Development Report (Federal Institute for Regional Studies and Spatial Research [Bundesanstalt für Landeskunde und Raumforschung] 1996). In 1998, it was explicitly included in Section 1 of the Federal Building Code as part of the code's amendment.

At the level of ▷ Spatial planning and ▷ Regional development (▷ Guiding principles for spatial development), the superordinate principle of sustainability was initially reflected in policy in the guiding principle of Decentralised concentration, first anchored in Germany's Spatial Planning Policy Guidelines in 1993 (Federal Ministry of Spatial Planning, Construction and Urban Design [BMBau] 1993). In updating the 'Concepts and Strategies for Spatial Development in Germany' of 2006, the German federal and state ministries responsible for spatial planning adopted four strategic guiding principles in March 2016:

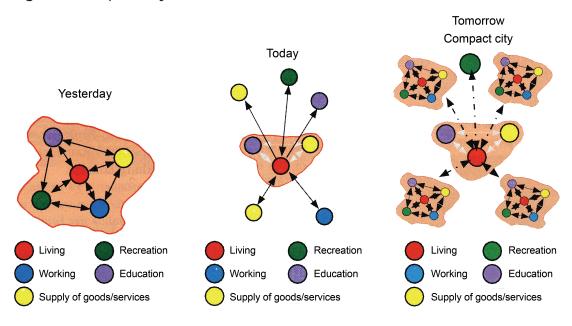
- · enhance competitiveness
- safeguard public service provision

- manage and sustainably develop the various uses of space
- limit climate change and shape the energy transition.

This resolution was preceded by a lengthy debate amongst policymakers and the professional public about the first draft of the guiding principles in 2013. The approaches set out in the four guiding principles aim to consolidate interdisciplinary policy affecting spatial structures at a federal and state level and to work towards common goals.

In urban planning and urban policy, the guiding principle of the compact city or town with mixed land use (*Compact city/town with mixed land use*) has been the most prevalent in the past two decades and has almost achieved official status (cf. Fig. 2) (Jessen 2000). For example, the Urban Development Report by the Federal Institute for Regional Studies and Spatial Research of 1996 posited that density, mixed use, and \triangleright *Polycentricity* were essential for sustainable urban development (Bundesanstalt für Landeskunde und Raumforschung 1996: 19). Surveys of towns and cities have confirmed that guiding principles in municipal planning practice are once again playing an important role and the guiding principle of the compact city with mixed land use, in one version or another, has taken on an almost hegemonic position in the urban development plans for major cities (Spiekermann 2001).

Figure 2: Compact city with mixed land use



Source: Federal Ministry of Spatial Planning, Construction and Urban Design 1996: 37 (edited)

The guiding principle of the compact city with mixed land use can be seen as the urban development and planning formulation of the overarching guiding principle of the \triangleright *European city*, which explicitly includes political, cultural, and social dimensions and is rooted in the history of the European city. The four central target elements of the compact city with mixed land use can be identified as follows:

- High building density: this represents the reversal in the trend from dispersed settlement
 development and uncontrolled ▷ Suburbanisation to the condensed city and thus the
 prioritisation of inner city development (▷ Inner development) and redensification, as well
 as particular densification at public transport stops; where new urban expansion is required,
 this should take a compact form for all uses (▷ Housing development, industry and commercial
 construction etc.).
- Mixed use: this represents a reversal in the trend from monofunctional structures to structures
 with functions that are as mixed and concentrated as possible new urban boroughs instead
 of settlements; preserving the existing functional mix; retrospectively enriching the uses of
 space in areas which were previously monofunctional in structure
- Public spaces: these support public life by way of busy zones at street level, streetscapes, and squares as a major component of approaches to urban space, as opposed to the tendency to privatise public spaces, a loss of function, and the erosion of opportunities for social contact and how that can undermine social cohesion and harmony
- Environmentally upgraded spaces: improving the quality of life in neighbourhoods to increase local leisure opportunities and services improved living environments, traffic reduction, courtyard gardens in apartment blocks, peri-urban open areas

These urban development objectives should be seen as closely related and should reinforce each other: mixed use without density is not sustainable. Density without mixed use merely reproduces the old monostructures. Density and mixed use without a high-quality living environment call into question the standards of provision achieved and the environmental specifications.

These overlapping guiding principles, often also tied to key objectives such as inner development before *outer development*, have also been reflected in urban development plans at citywide level. Their most concise formulation was expressed in the guiding principle of the Munich urban development plan: 'Compact, urban, green' (LHM 1995) (cf. Fig. 3). The guidelines of the urban development plans of many other cities since – from Hamburg and Saarbrucken to Stuttgart – may not have been as expressed as pointedly, but are similar in substance. Most cities, especially in East Germany, have held fast to the guiding principle of the compact city with mixed land use, even given the changed conditions of shrinking urban development (the trend towards a declining population and jobs) (Reuther 2003).

Its reflection in urban development in the narrower sense is evident in the urban boroughs that have emerged in the past 20 years in light of this guiding principle. One such example is the Kirchsteigfeld area in Potsdam – an area was planned and implemented in one fell swoop by a private development agency and the Tübingen-based 'South city/French quarter' project, whereby a mixed-function area was developed on land within a vacant site; private households, small businesses, and joint building ventures were the builder-owners here, rather than a major investor.

Figure 3: Urban development plan for the state capital of Munich 1996



Source: State Capital Munich, Department for Urban Planning and Building Regulations (Landeshauptstadt München, LHM) 1995

The surprisingly broad and now sustained acceptance of the guiding principle can be attributed to the fact that it captures the environmental, social, political, economical, and cultural needs of future urban development in a single familiar image and can thus be supported by many different disciplines and policy areas. It has a strong appeal for urban planners and architects because it is defined in categories that assign a key role to urban planning for implementation, while also embodying a vivid antithesis to the urban notions of functionalistic modernity which have since been discredited. It appeals to ecologists because it calls for a break from the logic of past urban development. It symbolises the reversal in trends and represents an environmentallygrounded alternative model to the criticised urban sprawl of the landscape, to the waste of resources, and to the incessant increase in traffic. Municipal policymakers can use it as orientation as it can represent a stimulating urban environment (> Milieu), which attracts and unleashes cultural, intellectual, and business potentials and can thus promote technological innovation and economic dynamism. At the same time it upholds the political traditions of municipal selfdetermination and local public life, and can serve as a counter-power to growing heteronomy as a result of globalisation and concentration processes. Finally, social policymakers can see their overarching objectives represented here inasmuch as the guiding principle of the compact city/town with mixed land use appeals to the socially inclusive power of local labour markets, social networks, and cultural diversity in urban contexts and is positioned against socio-spatial *▶* Segregation and its consequences.

That said, the guiding principle of the compact city is by no means without controversy: it has given rise to criticism and counter-concepts, which have challenged how realistic it is and its planning implications (e.g. Hatzfeld 1995; Sieverts 1997). For critics, the guiding principle of the compact city represents backwards-looking planning romanticism, for which they advance economic, urban structural, cultural, and political arguments. They claim the objective of the compact city is unrealistic because it has to be pushed through against the concentration and rationalisation processes that are virtually impervious to planning in all economic sectors, against a land market which divides land into different categories of use, and against the dead weight of existing settlements. They also consider that it narrows the focus to the inner city and ignores the much vaster peripheries. Furthermore, they claim that the guiding principle cannot reckon on sufficiently broad support in society. It conflicts with the dominant living preferences and growing sensibilities of the majority of the population who prefer a peaceful life (> Housing) in the country. Moreover, it is opposed to the local interests of most businesses, which fear mixed use areas, neighbourhood conflicts, and obstacles to expansion. Finally, they argue that much of the current planning and building law, administrative framework, and sectoral policy as well as existing ownership structures stand in the way of the implementation of the compact city with mixed land use, as they all developed under the notion of the separation of different functions and are still shaped by this today.

Even the most zealous advocates of a compact city with mixed land use admit that this objective cannot be achieved through spatial planning and urban design alone, but rather only in conjunction with overarching strategies of fiscal, transport, environmental, legal, and \triangleright *Housing policy*, which are steering in the same direction. Accordingly, more detailed justifications of the guiding principle usually require a bundle of interdependent measures at local and supralocal level, of which urban planning and urban design are just one component, albeit an important one.

The guiding principle of a compact city with mixed land use (Compact city with mixed land use) was expanded and 'canonised' in subsequent years to include the political and social implications of the guiding principle of the European city (European city). This is represented in the Leipzig Charter on Sustainable European Cities, which was adopted in 2007 by the ministers of the 27 member states of the EU (> European Union) responsible for urban development. It is also apparent in the many urban development plans that are still in effect that follow this guiding principle, and not least in the orientation of the basic teaching on urban design at most German schools of architecture. The guiding principle is less ubiquitous than it was, especially and undoubtedly because the wave of urban expansion of the early 1990s has ebbed away and most of the major projects are complete.

For several years, the objective of resilience (▷ Resilience/robustness) has been discussed in connection with urban development strategies for adapting to climate change as another environmental guiding principle alongside sustainable urban development. This refers to the need for cities to prepare for the inevitable consequences of climate change (rise in average temperatures, greater temperature fluctuations during the year, the increasing number and severity of extreme weather conditions such as storms, hail, rain, heatwaves). Not only do local authorities need to confront the causes of climate change, they also have to adapt the settlement and infrastructure (▷ Settlement/settlement structure; ▷ Infrastructure) more consistently to its expected consequences, in particular through open space policy and ▷ Flood protection. It is in this context that the guiding principle of a resilient city has been advanced, especially through climate and environmental research as well as through funding and research programmes at EU and federal level. As a guiding principle, a resilient city is a city that is robust and resistant to disasters and unexpected, severe fluctuations in environmental conditions. Hardly any cities now do not advocate adapting to climate change, and justify the measures they take with the appropriate arguments backed by the necessary relevant funding. However, at present the concept of resilience as a 'figure of thought for good urban development' (cf. Jakubowski 2013) still seems alien to most of those in charge of municipal policy and planning administration. Time will tell whether resilience as a concept will be as successful as sustainability.

Besides the environmental guiding principle of the resilient city, the technology-centred guiding principle of the Smart City has found its way into the debate since the turn of the millennium, in addition to the compact city with mixed land use. Vague as it is, advocates of the concept promote using the new information and communication technologies, which have penetrated society and the economy in the past two decades, more intensively and systematically for sustainable urban development by applying them intelligently. The digitalisation of everyday urban life has reached a new dimension with mobile internet, whose long term effects on the functioning of the city can only be predicted to a limited extent, for example the consequences of e-commerce on urban ▷ Retail trade. The main areas of potential currently look to be in digital urban transport services such as carsharing, car and bicycle hire systems, and so on. As with the resilient city, the impetus for this guiding principle does not come from the cities themselves, but rather has hitherto been primarily articulated by other bodies, for example through research and funding initiatives by the federal government and the EU, by global corporations such as Deutsche Telekom, Siemens and IBM, which invest significant capital to tap into new markets (Hatzelhoffer/Humboldt/Lobeck et al. 2012), as well as by urban blogging activists and small IT startups, who develop applications in both everyday urban life and in policymaking and planning

(Streich 2014; Höffken 2015). In this respect, it is not yet possible to speak of a guiding principle for urban development that local authorities have widely adopted, or at least not in Germany. Nonetheless, it is not bold to predict that the future key objectives of urban development will reflect to a greater extent the new possibilities of the new information and communication technologies for organising urban infrastructure and for new forms of decision-making. In this regard, the criticisms of the digital pervasion of everyday urban life will have to be addressed, such as the acceleration of everyday implementation, the risk posed to privacy by the monitoring of public space, and the unequal access to public services and so on (digital divide).

4 Conclusions

The fact that different plausible guiding principles for urban development co-exist reflects the conflicting demands faced by spatial planners today. For example, urban planning is confronted with the irresolvable aporia of not being able to plan without guiding principles on the one hand, and of knowing that guiding principles cannot be comprehensive and consistent at the same time on the other. This reflects the basic conflict in urban development, which will continue to escalate given the limited funds and, in particular, shrinking urban development: how can there be a livelihood, housing, and security for everyone in the cities? How can as many people as possible enjoy the benefits of urban living, such as individual freedom, (> Mobility), diversity and independence? How can natural resources be permanently safeguarded as a foundation of urban development? All of this requires guiding principles, but at the same time one must remain mindful of the fact that these can only provide a temporary orientation for a given locale.

The ever resurgent professional and political debate about the pros and cons of urban structural guiding principles – as history has shown – is ultimately pointless. Guiding principles, concepts, plans, or whatever one might call them are not only necessary, they are unavoidable. Not only do they provide project-specific orientation, coordination, motivation, and success monitoring, they also form the method by which the discipline of urban design as a whole adopts new content, concepts, and processes (Jessen 2006). Moreover, in recent years the ongoing debate about guiding principles has increasingly expanded from a discussion amongst professionals to a public dialogue.

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