

125. Sprawl

Definition and identification

In general, literature on urban sprawl refers to the excessive spatial growth of cities. From a North American perspective, Squires (2002, p. 2) defines sprawl as a 'low-density, automobile-dependent, exclusionary new development on the fringe of settled areas often surrounding a deteriorating city.' Sprawl is also mainly perceived as problematic because of negative economic effects in terms of long and expensive travelling, social disadvantages, most notably the loss of community life and environmental impact on biodiversity and the fragmentation of natural habitats.

Later, the issue of sprawl was also picked up by policy makers in European countries where the area of land that has been developed continues to grow at a far greater pace than the increase in population. In a recent report by the European Environmental Agency (EEA), the relation between sprawl and the growth of cities is addressed less explicitly than in the American definition: 'A landscape [is affected by urban sprawl] if it is permeated by urban development or solitary buildings and when land uptake per inhabitant or job is high' (Henning et al., 2016, p. 22). Urban sprawl is much more considered as an urbanisation process in situ of the land, bringing together two opposites (urban and rural) in one conception. Various scholars have tried to address it, naming it among for instance 'all city/all land,' 'patchwork metropolis,' 'Zwischenstadt' or 'horizontal metropolis.'

Different indices of sprawl have been produced and applied empirically, often in GIS applications, for cities all over the world. The indices mainly attempt to represent sprawl as an increase of the spatial scale and dispersion of the (monocentric) city and an increase of dispersion accompanied by a decrease in density. Jaeger et al. (2010, p. 400), for instance, relate urban sprawl to both the amount of land taken for urban use and the degree of dispersion of that urban land uptake: 'The more urban area present in a landscape and the more dispersed the urban patches, the higher the degree of urban sprawl.'

Qualitative research on causes and effects of sprawl

A lot of the drivers of urban sprawl that are addressed by scholars can be directly or indirectly related to three market failures that should be held responsible for excessive urban sprawl: the failure to take into account the social value of open space when land is converted to urban use, the failure of individual commuters to recognise the social costs of traffic congestion, and the failure of real estate developers to take into account all of the public infrastructure costs because of their development projects. But, also the lack of central ownership or planning and highly fragmented land use governance are defined as important political drivers of urban sprawl.

An extensive review of the literature on the effects of urban sprawl has been produced by Henning et al. (2016) as part of a report for the EEA on urban sprawl in Europe. The more than 60 effects mentioned illustrate the vast impact of urban sprawl on the daily functioning of societies all over the world: effects on hygiene, landscape and flora and fauna, economic aspects such as traffic congestion costs, public service costs and the loss of tourist and residential attractiveness, and finally, social and quality of life aspects, including segregation and health problems. Only a few scholars discern benefits of sprawl, such as more and cheaper housing and more job options.

Policy approaches to urban sprawl

Government agencies may foster or even (co-) produce urban sprawl, deliberately or unintentionally, through their specific policies (e.g., Moroni & Minola, 2019). Comparing the policy approach of urban sprawl in two neighbouring regions, the Netherlands and Flanders/Belgium, Buitelaar and Leinfelder (2020) recently made a more conceptual distinction between government discourses and government institutions. For the first, discourses or the 'specific ensembles of ideas, concepts and categorisations that are produced, reproduced and transformed in a particular set of practices and through which meaning is given to physical and social relations' (Hajer, 1995, p. 44), they recognised a continuum, with pro-dispersion on one end of the spectrum and pro-concentration on the

other. Although it is hard to precisely measure discourses according to this scale, clear differences in the ambitions of urban planning policy can be made based on literature and policy document reviews. For the second, institutions or the formal or informal rules (co)produced and reproduced by government agencies in order to guide society (and the market), Buitelaar and Leinfelder (2020) refer to the active, passive or persuasive position of governments when promoting or tackling urban sprawl: government provision of infrastructure or public goods or land for private goods; regulation of land use through location-specific or more generic rules; and persuasion through taxes or subsidies in order to incentivise land use.

The fact that policies contribute to and coproduce sprawl implies that they also own the key to urban containment. However, urban planning cannot work from scratch. There is no *tabula rasa*: there is an existing urban sprawl structure that has evolved over decades and centuries. It is arguably most effective and efficient to retrofit this sprawl and make it more sustainable than to try to replace it with a new structure altogether.

HANS LEINFELDER AND
EDWIN BUITELAAR

References

Buitelaar, E., & Leinfelder, H. (2020). Public design of urban sprawl: Governments and

the extension of the urban fabric in Flanders and the Netherlands. *Urban Planning*, 5(1), 46–57.

Hajer, M. A. (1995). *The politics of environmental discourse: Ecological modernization and the policy process*. Clarendon Press.

Henning, E., Jaeger, J., Soukup, T., Orlitová, E., Schwick, C., & Kienast, F. (2016). *Urban sprawl in Europe*. European Environment Agency.

Jaeger, J., Bertiller, R., Schwick, C., & Kienast, F. (2010). Suitability criteria for measures of urban sprawl. *Ecological Indicators*, 10(2), 397–406.

Moroni, S., & Minola, L. (2019). Unnatural sprawl: Reconsidering public responsibility of suburban development in Italy, and the desirability and possibility of changing the rules of the game. *Land Use Policy*, 86, 104–112.

Squires, G. (Ed.). (2002). *Urban sprawl, causes, consequences and policy responses*. The Urban Institute Press.

See also: shrinking cities, smart growth, institutions, regional planning, regional design, power in planning, power/knowledge, property, foresight and visioning, long-term perspectives, strategy, strategic navigation, milieu, dependencies

HANS LEINFELDER AND EDWIN BUITELAAR

Hans Leinfelder and Edwin Buitelaar - 9781800889002

Downloaded from <https://www.elgaronline.com/> at 12/21/2023 07:19:26AM by
hans.leinfelder@kuleuven.be
via Hans Leinfelder



Elgar Encyclopedia in Urban and Regional Planning and Design

Elgar Encyclopedias in the Social Sciences series

Raoul Beunen and Martijn Duineveld

Edited by Kristof Van Assche



Full access

This ground-breaking Encyclopedia provides a nuanced overview of the key concepts of urban and regional planning and design. Embracing a broad understanding of planning and design within and beyond the professions, it examines what planners and designers can do in and for a community.

Encyclopedia

Published: 01 Dec 2023

Print ISBN: 9781800888999

eISBN: 9781800889002

DOI: <https://doi.org/10.4337/9781800889002>

Pages: 448

Collection: [Geography, Planning and Tourism 2023](#)

Copyright: © Kristof Van Assche, Raoul Beunen and Martijn Duineveld 2023

