

OUR COMMON FUTURE IN URBAN MORPHOLOGY (Vol 1)

ISUF

Editors

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The morphological dimension of planning documents: case study Belgrade, capital of Serbia

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The aim of this paper is to present one of the main issues and tasks of the ISUF – the importance of introducing concepts of urban morphology to professional practice, in a systematic and coherent way, to achieve a better built environment - in the specific context of Belgrade's designing and planning practice. A review of relevant up-to-date research topics and developed concepts found in the current theoretical discourse presented in the Urban Morphology Journal and ISUF, such as: morphological dimension of municipal plans (Oliveira, 2006, 2013), the issue of boundaries (Whitehand, 2007, 2013; Larkham, 2011; Morton), the question of scale and key concept – block or tissue (Kropf, 2006, 2011; Samuels, 2008; Hall, 2008a, 2008b) will be conducted. A number of major themes in the agenda of the morphological debate, will be examined to establish how existing morphological criteria in the Master plan of Belgrade and related planning documents correspond. It was determined that the morphological dimension of those criteria is questionable and that the real form-based approach in Belgrade's planning documents and procedures were absent which had a detrimental impact on the quality of physical and urban structure. It can be stated that there is a need, firstly, for a detailed theoretical elaboration of relevant concepts of urban morphology and then integrating them into planning documents and procedures in Belgrade and Serbia. The principal conclusion reached is that urban morphologists should have a key role in the prescription of future changes through coordination of design guidance, codes and plans at different scales.

Key words: Belgrade, urban morphology, urban form, planning, designing.

References:

- Hall, T. (2008a) 'Bridging the gap: applying urban morphology to successful planning practice', *Urban Morphology* 1, 54-57.
- Hall, T. (2008b) 'The form-based development plan: bridging the gap between theory and practice in urban morphology', *Urban Morphology* 2, 77-95.
- Kropf, K. (2006) 'Crisis in the typological process and the language of innovation and tradition', *Urban Morphology* 1, 70-73.
- Kropf, K. (2011) 'Urbanism, politics and language: the role of urban morphology', *Urban Morphology* 2, 157-162.
- Larkham, P. J. and Morton, N. (2011) 'Drawing lines on maps: morphological regions and planning practices', *Urban Morphology* 2, 133-151.
- Samuels, I. (2008) 'Typomorphology and urban design practice', *Urban Morphology* 1, 58-62.
- Oliveira, V. (2013) 'Morpho: a methodology for assessing urban form', *Urban Morphology* 1, 21-33.
- Oliveira, V. (2006) 'The morphological dimension of municipal plans', *Urban Morphology* 2, 79-89.
- Urban Planning Institute of Belgrade (2003) *Master Plan of Belgrade 2021* (Official Gazette of the City of Belgrade, Belgrade).
- Whitehand, J. (2013) 'Urban morphological research and practice', *Urban Morphology* 1, 79-85.
- Whitehand, J.W.R. (2007) 'Conzenian Urban Morphology and Urban Landscapes'. *6th International Space Syntax Symposium*. Istanbul, Turkey 12-15 June

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