

XXVIII International Seminar on Urban Form
ISUF2021: URBAN FORM AND THE SUSTAINABLE AND PROSPEROUS CITIES
29th June – 3rd July 2021, Glasgow

**Urban morphology and the sustainable development of cultural heritage in Serbia
– between wishful thinking and reality**

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Abstract

The formal planning system in Serbia has recently been upgraded with the introduction of new strategic documents. One of them is the Sustainable Urban Development Strategy of the Republic of Serbia until 2030 (2019) developed in accordance with the EU policies and UN Sustainable Development Goal 11. Multisectoral and territorial approaches have been proposed to improve the planning methodology. Several key topics were considered in the Strategy, where special attention was paid to cultural heritage. The resulting SWOT analysis showed great cultural potential of Serbia which relates to regional, European and world heritage. This potential has already been affirmed through Serbia's participation in international projects and programs, as well as through the proclamation of Novi Sad for the European Capital of Culture for 2021. However, the SWOT analysis also showed that at the national and local levels cultural potential has still not been adequately supported by current legislative which do not recognizes specific typologies of heritage (proposed by ICOMOS) such as urban and rural settlements, historic towns and villages. This leads to decline of these types of urban forms which are important landmarks of Serbia's cultural and historical past – especially smaller ones in underdeveloped areas. Furthermore, it leads to decline of valuable types of vernacular architecture and spatial entities. There are huge pressures for inadequate development even in the surroundings of the cultural assets. The approach proposed in the Strategy sought to bridge the gap between the regulatory framework of the cultural heritage protection in Serbia, which still supports a sectoral and object-oriented approach and modern conservation approaches that advocate a contextual and integrative approach. In these efforts, an active relationship between urban conservation and urban designing and planning is required where urban morphology can pave the way for making a common scientific and professional platform.

Keyword: urban morphology, sustainable development, heritage, planning, Serbia.

Introduction

Today, it is commonplace that cultural heritage is an inseparable part of natural heritage and that an integrative and territorial approach needs to be applied in spatial planning. This is also reflected in current charters and agendas. The Charter of Historic Landscape provides definitions of urban heritage and historic urban landscape as layered urban areas, as well as guidelines for the creation of innovative policies and tools, capacity building for conservation, and the planning and management of these areas within the wider framework of sustainable development. This has become the basis for introducing an integrative approach to the protection and planning of cultural heritage (UNESCO, 2011). The EU Territorial Agenda provides guidelines for a territorial approach to the protection and planning of cultural and natural heritage. It implicitly embraces a broader definition of heritage and indicates frequent discrepancies between administrative and morphologically homogeneous areas (COE, 2011). All recent documents, including the

two mentioned above, emphasize the importance of implementing information and communication technologies for capacity building and for the promotion of cultural heritage. Despite the good theoretical basis and guidelines for improving the institutional and legal framework, as well as the planning methodology, both developed and developing countries face the problem of linking protection and planning disciplines (Bienstman, 2011, Samuels, 2010). Although separately these systems function well and are legally covered, part of their connection identifies specific deficiencies that impede the achievement of the best effects of spatial interventions.

In this paper, the context of protection, planning, and the sustainable use of cultural heritage in Serbia is presented from two aspects: on one hand, the reality of the formal institutional and legal system and on the other, wishful thinking – the desired state expressed in informal documents. Improvements could be made in the field of planning methodology, where the introduction of innovative concepts could lead to the urban protection of space and valuable spatial units. Concepts, methods, and techniques of urban morphology (UM) could also make a special contribution.

Background

The theory of urban morphology emphasizes practical application in design and planning, as well as the development of interdisciplinary and international cooperation, and the application of concepts, methods, and techniques in different geographical environments (Whitehand, 2007, 2011, 2013). Some research has attempted to apply urbomorphological discourse to the specific context of Serbia (Niković et al., 2017,2016,2014). Other research deals directly with cultural heritage issues (Bienstman, 2011; Samuels, 2010; Niković and Roter Blagojević, 2018). However, the entire urbomorphological discourse is based on the knowledge and understanding of the existing built environment, its inherent forms, and their past development. The tendency for urban renewal and conservation has led to a new awareness of the importance of a systematic approach in planning and design, which includes analysis of the urban structure and resulting urban forms, although key concepts, methods, and techniques of urban morphology are not used (O'Connell, 2013). It has been stated that physical planning must be at the center of spatial planning, especially since sustainable development has become an inevitable goal of spatial policies (Hall, 2008,2013). There has been a growing awareness of the interconnectedness of all levels of intervention and decision-making, whereby each initiative and action at the local level has more or fewer implications at the global level, especially in the context of climate change protection. In addition, the physical structure is a significant factor of sustainable development, since it has higher resistance to change than land use, and therefore has a longer lifespan than development policies and documents (Hall, 2008,2013).

The practical application of UM concepts is considered based on urban plans. For example, the morphological dimension of planning documents for Belgrade was analyzed (Niković et al.2014) following Oliveira's methodology (Oliveira, 2006). The following UM concepts are relevant for the spatial plans:

- The concept of type and typological classification is a means of abstracting empirical reality (Nasser, 2013), which affirms urban morphology not only as a discipline that focuses on the existing situation and looks to the past, but also as a means of developing the concept of future development (Levy, 1999). The idea of the type and typological processes is recognized in urbomorphological discourse as one of the links that connect practice and theory (Gauthier, 2005).
- Typomorphology is a means of connecting the existing and planned state (Samuels, 2008, Samuels and Patacchini, 1997, Kropf, 2006); it is also a means of controlling development in the case of geographical environments where there is great pressure from foreign models and their uncritical adoption (He and Henwood, M., 2012) and it connects participants in planning procedures with the public (Chen, 2010).
- The idea of character, which is defined as a combined effect of all the characteristics that make a place recognizable including not only physical space but also the locality, wider context, human activities, and historical development. Karl Kropf, in his guide to designing the Stratford-upon-Avon area, points to the need to identify the character and local specificities as a starting point for the design, at different levels of scale: areas, land, settlement types and house types, building details, and materials. At the same time, attachment to the local and traditional is not an anachronism but an incentive for innovation (Kropf, 2011). The Character Assessment Manual should help people analyze the character of areas, spaces, and buildings in a consistent way (Oxford City Council).
- The notion of morphological region and definition of the border in accordance with the areas identified with homogeneous morphological characteristics (Larkham and Morton, 2011).
- The concept of understanding a place, its character, identity, and significance is considered as a basic interest of urban morphology (Bienstman, 2011; Samuels, 2010).

Formal and informal elements of the protection of cultural heritage in Serbia

The Republic of Serbia (RS) has developed a comprehensive formal system of spatial and urban planning based on the principles of vertical and horizontal coordination of planning documents covering the territory of RS (2014). Also, in the field of protection of cultural heritage, several generations of laws have been changed, concluding with the current one (1994). However, most planning and conservation documents adopted based on these laws demonstrate a sectoral, one-dimensional approach, and there is a lack of coordination of activities in implementation, which has visible consequences in spatial development. Although the plans deal with spatial areas, there is no holistic approach that would treat space as a complex phenomenon in an analogous way to the notion of urban form explained in urban morphology. The main shortcoming of the legal framework for the protection of cultural heritage is the inconsistency with international recommendations, conventions, and ratified charters (COE, 2005, 2000, 1992, 1985, UNESCO, 1972). Heritage is still classified into only 4 types: cultural monuments, spatial cultural-historical units,

archaeological sites, and landmarks. The wider range of categories that include urban and rural settlements, cultural landscapes, cultural routes, etc., as recommended by ICOMOS (2004), is not recognized by law. Processes for declaring cultural goods are slow, especially for those under prior protection.

Following the lessons from international charters and recommendations, strategic documents have been developed primarily in the form of informal, i.e., legally non-binding, documents that have the character of recommendations, such as the Sustainable and Integrated Urban Development Strategy of the Republic of Serbia until 2030 (Trkulja et al., 2018)-SIUDSRS. The starting points for the SIUDSRS were the National Urban Agenda, the Sustainable Development Goal 11, and EU policies (Leipzig Charter (2007), the Marseille Statement (2008), Toledo Declaration (2010), EU Territorial Agenda 2020 (2011), Cities of Tomorrow report (2011), Commission Staff Working Document 'Results of Public Consultations on Key Characteristics of the Urban Agenda for the EU' (2015), Riga Declaration (2015) and the EU Urban Agenda - Amsterdam Pact (2016)). The SIUDSRS primarily emphasizes the spatial dimension and protection of space by identifying priority areas of intervention. It deals with several pillars of sustainable urban development. One of them is cultural heritage, which is observed as a resource of sustainable development. Its extended definition includes wider spatial units than isolated monuments, as well as a contextual approach to planning instead of the current object-oriented approach.

The SWOT analysis within the SIUDSRS (Niković and Manić, 2020) showed additional shortcomings in current approaches to the planning and preservation of Serbia's rich cultural heritage, which stem from the exclusion of some heritage categories from institutional/legal protection, and result in:

- The typology of physical and urban structure not being sufficiently recognized through planning documents;
- The decline of valuable examples of types of urban architecture (especially buildings and urban units from the second half of the 20th century and industrial heritage);
- The decline of urban settlements that are important reference points for the cultural and historical past of Serbia - especially smaller settlements in less economically developed parts of the country;
- Economic underdevelopment of areas with important cultural potential on the territory of RS;
- Insufficient recognition and differentiation of important characteristics of the urban structure that represent the elements of their identity and potential for development;
- New typologies that violate the identity of urban settlements due to the dominance of economic interests of investors, such as partial construction, illegal construction, etc.

At the same time, the SWOT analysis pointed out the significant development potential in Serbia:

- Representation of Serbia in programs and projects for the rehabilitation of architectural and archaeological heritage of Southeast Europe, under the auspices of the Council of Europe and the European Commission;
- International cultural cooperation - the proclamation of Novi Sad as the European Capital of Culture for 2021; participation of Belgrade, Novi Sad, Sremska Mitrovica, and Smederevo in the EU program for culture - Creative Europe;
- Developed awareness of the scientific and professional public about the importance of improving approaches to protecting cultural heritage;
- Implementation of projects in culture and heritage protection in individual and groups of urban settlements and their rural environment - projects in the Danube zone, wine routes, routes of Roman rulers, etc.
- Adoption of spatial plans for areas containing cultural assets.

Introducing the Strategy into the formal system- step forward

After its adoption, the SIUDSRS became part of the legal system according to the Law Construction and Planning (Sustainable Urban Development Strategy of the Republic of Serbia until 2030, 2019). It was initially conceived as an introduction to the development of the Spatial Plan of the Republic of Serbia for 2021-2035 (SPRS). Spatial plans define the goals and principles of the spatial development of wider spatial units. They have a strategic-developmental and general regulatory purpose. They specifically define the planning units of common spatial and development characteristics, which are further elaborated by more detailed spatial plans on a smaller scale. In doing so, they are based on the law and must have legally binding elements, but the law does not prescribe a planning methodology that can be improved independently of the legal framework. Like its predecessor, the Spatial Plan adopted in 2010, the SPRS promotes the goals of affirming cultural heritage as territorial capital and a resource for sustainable development. However, due to the out-of-date legal framework, none of the goals from 2010 have been achieved. The SPRS cannot prescribe the drafting of a new law, but it can suggest the integration of international recommendations into the planning methodology (for the purpose of urban protection of space) until the moment when they are officially incorporated into legislation.

The SPRS is intended to act as a platform for interdisciplinary cooperation. Its data are available to professionals involved in the production of space and can be used for improving planning methodology. Through the development of the plan, progress has been made in cooperation with the protection service.

The Republic Institute for the Protection of Cultural Monuments has prepared a study (2020) for the purpose of the spatial plan which is a comprehensive document that provides a list of cultural goods and their descriptions. Moreover, it also analyzes plans for areas containing cultural goods and points out problems in professional practice, primarily the marginalization of services for the protection of cultural goods in planning procedures. It highlights that immovable cultural goods are rarely the main reason for starting the preparation of planning documents and points out the general lack of registered spatial cultural-historical units and lack of manuals for access to areas with cultural assets. The key recommendation is that the typology and characterization of cultural landscapes be recommended for the territory of RS as one of the development goals of the SPRS.

Urban morphology in bridging the gap between the desired state and reality

The UM concepts could be helpful in solving problems identified through the development of the SIUDSRS, later integrated into the SPRS:

1) The concept of type and typological classification; Identification of valuable types of architecture based on morphological criteria and means (using geometric shapes, dimensions, properties, and types):

It touches on the problem of valorising cultural heritage in various territorial institutions of heritage protection. Many buildings and wholes that are valuable built heritage are not included in the protection system. The strategy proposes to improve the valorization criteria, as well as to harmonize the assessment methodology of all territorial institutions. It also proposes the introduction of an instrument of urban protection in plans and strategies that would protect buildings and units that are not under institutional protection, but represent important references of cultural and historical development (vernacular, industrial, modernist architecture, etc.)

2) Typomorphology as a means of connecting the existing and planned state, a means of communication between all actors in the processes, and a means of filtering ideas:

Uncoordinated spatial activities, intensive urbanization, globalization, and mass tourism are major threats to territorial development not only in cities, but also in rural areas and in attractive natural areas such as mountains with popular ski resorts. Several mountainous areas, declared national parks due to their exceptional value, have been urbanized to such an extent that we can speak of the homogenization of the physical structure. Through typomorphological studies, it is possible to develop strategies for preserving the character of a place, based on the application of explicit building rules that would maintain a balance between economic pressures and the quality of the built environment, i.e., development and inherited values.

3) Idea of character; Analysis of areas with settlements of similar character:

Failure to recognize the typologies of urban and rural settlements through the law of planning documents has led to the decline of types of settlements that are important features of the cultural and historical past - especially smaller ones in underdeveloped parts of the country. The strategy proposes recognizing cultural diversity and specificity as an important part of identity and supporting the reconstruction and development of settlements and groups of settlements with common typological characteristics arising from their geographical position, complex history, and cultural sedimentation (planned settlements in Vojvodina, spontaneous settlements in mountainous areas, spa settlements, etc.).

4) The notion of morphological regions and defining the border in accordance with areas identified with homogeneous morphological characteristics:

Serbia is administratively divided into regions and administrative districts, which further consist of several municipalities. Spatial and urban plans are adopted for areas defined by administrative and cadastral boundaries. Urban plans are avoided if their adoption is the responsibility of several municipalities, because the procedure is more complex. In accordance with the recommendations for typological classification and characterization of areas, it is necessary to redefine the boundaries of planning areas and try to look at border areas in the context of development with neighbouring territories. This is of particular importance for the harmonization of protection, development, and national and international projects.

5) The concept of understanding place as an intrinsic concept of urban morphology:

The need for manuals to improve the planning methodology in protected areas is also expressed from the aspect of planners and conservators. In the practice of spatial and urban planning, the problem of inadequate treatment of cultural goods in planning documents can be recognized - as isolated entities without planned relations with the wider environment that makes up their context. This often leads to the disintegration of their environment, especially through illegal construction, which in the case of Serbia is an irreversible process with a long-term negative effect on the quality of the built environment. Manuals make it possible to introduce an interdisciplinary and contextual approach to individual locations. Also, the inclusion of an urban design instrument would encourage a broader understanding of planning solutions by the local community and thus contribute to more active public participation in the planning procedure.

Table 1. The relationship between the problems identified, proposals for their solution and possible solutions from urban morphology.

Problems identified in the practice of protecting, planning and the sustainable use of cultural heritage	Proposals for improving the planning methodology	Concepts from urban morphology
Decline in important types of buildings and groups of buildings that are not under institutional	Improving the valorization criteria; introducing an instrument of urban protection in plans and strategies	The concept of type and typological classification.

protection (vernacular, industrial, military and modernist architecture etc.)	that would protect buildings and units that are not under institutional protection.	
Huge pressures for inadequate development – raising new typologies (in the surroundings of cultural assets, in natural protected areas, in settlements, investor’s urbanism etc.)	Studies based on balancing economic interests with development, and tourism with cultural heritage.	Typomorphology as a means of connecting the existing and planned state, a means of communication between all actors in the processes, and a means of filtering ideas.
No recognition of typologies of cultural heritage, especially those with spatial dimensions: urban and rural settlements of different types (mountain, spa settlements, planned settlements in Vojvodina etc.)	Support for the reconstruction and development of settlements and groups of settlements with common typological characteristics arising from their geographical position, complex history, and cultural sedimentation	Idea of character.
No recognition of morphological regions and areas with homogenous morphological characteristics.	Typological classification and characterization of areas.	The notion of morphological region and defining the plan’s boundary in accordance with areas identified with homogeneous morphological characteristics.
Over-generalized, object-oriented approach to planning specific locations, especially ones containing valuable buildings and ensembles.	Manuals to improve the planning methodology in protected areas, a contextual approach and inclusion of an urban design instrument.	The concept of understanding place as an intrinsic concept of urban morphology.

Conclusions

Serbia possesses rich cultural heritage and cultural diversity that includes urban settlements with specific typological characteristics and recognizable architectural typologies. However, due to the restrictions of the formal system of protection, these typologies have not been cultivated in an appropriate way. The typology of urban structures is not sufficiently recognized through planning documents.

This has led to the decline of urban settlements that represent important reference points of Serbia’s cultural and historical past, especially smaller ones in less economically developed parts of the country. In addition, some valuable examples of urban architecture types – especially buildings and urban units from the second half of the 20th century and industrial heritage – are in a state of decay.

One threat to achieving the goal of sustainable development of cultural heritage is the sectoral approach practiced in Serbia. There is insufficient cooperation between protection and planning institutions, and insufficient awareness of the need for modernizing protection and planning procedures.

Urban morphology can be especially helpful in recognizing and differentiating important features of urban structures that represent elements of their identity and potential for development, and also in

typomorphological and character analysis, which contribute to the contextual analysis and valuation of building stock and the spatial verification of individual sites.

References

1. Bienstman, H. (2011) 'Understanding place in the Netherlands', *Urban Morphology* 15, 74-75.
2. Chen, F. (2010) 'Typomorphology and public participation in China', *Urban Morphology* 14, 124-127.
3. Council of Europe (2011) *Territorial Agenda of the European Union 2020: Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions*, Gödöllő.
4. Council of Europe (2005) Council of Europe Framework Convention on the Value of Cultural Heritage for Society, Faro.
5. Council of Europe (2000) European Landscape Convention, Florence.
6. Council of Europe (1992) European Convention on the Protection of the Archaeological Heritage, Valetta
7. Council of Europe (1985) Convention for the Protection of the Architectural Heritage of Europe 1985, Granada 30.
8. Gauthier, P. (2005) 'Conceptualizing the social construction of urban and architectural forms through the typological process', *Urban Morphology* 9, 83-93.
9. Hall, T. (2013) 'The potential influence of urban morphology on planning practice', *Urban Morphology* 17, 54-55.
10. Hall, T. (2008) 'Bridging the gap: applying urban morphology to successful planning practice', *Urban Morphology* 12, 54-57.
11. He, J. W. and Henwood, M. (2012) 'Typomorphological ideas and the development of public places', *Urban Morphology* 16, 79-89.
12. ICOMOS (2004) *The World Heritage List: Filling the Gaps-an Action Plan for the Future*.
13. Kropf, K. (2006) 'Crisis in the typological process and the language of innovation and tradition', *Urban Morphology* 10, 70-73.
14. Kropf, K. (2011) *Stratford-on-Avon. District Design Guide* (Stratford-upon-Avon: Stratford-on-Avon District Council, UK).
15. Levy, A. (1999) 'Urban Morphology and the Problem of the Modern Urban Fabric: Some Question for Research', *Urban Morphology* 3, 79-85.
16. Larkham, P. J., Morton, N. (2011) 'Drawing lines on maps: morphological regions and planning practices', *Urban Morphology* 15, 133-151.
17. Nasser, N. (2013) 'The contemporary city: speaking the same language in design and theory', *Urban Morphology* 17, 50-52.
18. National Assembly of the Republic of Serbia (2019) *Strategija održivog urbanog razvoja Republike Srbije do 2030. godine [Sustainable Urban Development Strategy of the Republic of Serbia until 2030]* (Službeni glasnik RS (Official Gazette RS), No. 47/2019., Belgrade)
19. National Assembly of the Republic of Serbia (2014) *Zakon o planiranju i izgradnji [Law on planning and construction]*, (Službeni glasnik RS (Official Gazette RS) No. 72/09, 81/09, 64/10, 24/11, 121/12, 42/13, 50/13, 98/13, 132/14, 145/14., Belgrade)
20. National Assembly of the Republic of Serbia (1994) *Zakon o kulturnim dobrima [Cultural Property Law]*, (Službeni glasnik RS (Official Gazette RS), no. 71/94, Belgrade)
21. National Assembly of the Republic of Serbia (2010) *Zakon o prostornom planu Republike Srbije 2010 [Law on the Spatial Plan of the Republic of Serbia, 2010-2020]* (Službeni glasnik RS (Official Gazette RS), No. 88/2010., Belgrade).
22. Niković, A., Manić, B. (2020) 'Building a Common Platform: Integrative and Territorial Approach to Planning Cultural Heritage within the Framework of the Spatial Plan of the Republic of Serbia 2021-2035', *REAL CORP*

2020: 25th International Conference on Urban & Regional Development and Spatial Planning in the Information Society, Vienna, 107-115.

23. Niković, A., Roter-Blagojević, M. (2018) 'Understanding place in Serbia', *Urban Morphology* 22, 78-79.
24. Niković, A. and B. Manić (2017) 'Morphological framework of the historical town: theory and practice of city-building', In: Đukanović, D. (Ed.) *Proceedings of the Third International Conference Preservation and Improvement of Historic Towns*, Novi Sad: Pokrajinski zavod za zaštitu spomenika kulture Petrovaradin, Opština Sremski Karlovci, 31-40.
25. Niković, A., Manić, B., Đokić, V. and M. Roter Blagojević (2016) 'Contemporary architectural and urban design practice in Belgrade and Serbia through the perspective of urban morphology approach' In: Nencini, D. (Ed.) *City as organism. New visions for urban life. Vol.2, 22nd International Seminar on Urban Form, Conference Proceedings*, Rome: Sapienza University of Rome, Faculty of Architecture, 1561-1566.
26. Niković, A., V. Đokić and B. Manić (2014) 'The morphological dimension of planning documents: case study Belgrade, capital of Serbia' In: Oliveira, V., Pinho, P., Batista, L., Patatas, T. and Monteiro, C. (Eds.), *Our common future in Urban Morphology. 21st International Seminar on Urban Form*, Porto: FEUP, Portugal, 1568-1577.
27. Prostorni plan Republike Srbije, 2021-2035 [Spatial Plan of the Republic of Serbia], not adopted yet.
28. Samuels, I. (2008) 'Typomorphology and urban design practice', *Urban Morphology* 12, 58-62.
29. Samuels, I. (2010) 'Understanding Place', *Urban Morphology* 14, 121-123.
30. Samuels, I., Pattacini, L. (1997) 'From description to prescription: reflections on the use of a morphological approach in design guidance', *Urban Design International* 2, 81-91.
31. Trkulja, S., Čolić, R., Maksin, M. Eds. (2018) *Sustainable and Integrated Urban Development Strategy of the Republic of Serbia until 2030* (Belgrade: Ministry of Construction, Transport and Infrastructure)
32. O'Connell, D. (2013) 'Morphology and design: the developing dialogue', *Urban Morphology* 17, pp. 52-53.
33. Republic Institute for the Protection of Cultural Monuments (2020) *Conditions for the Preservation, Maintenance and Use of Cultural Property and Protection Measures* (for the Drafting the Spatial Plan of the Republic of Serbia, no. 6-44 / 2020, Belgrade, July 1, 2020.)
34. UNESCO (2011) *Recommendation on the Historic Urban Landscape (HUL)*, Vienna.
35. Whitehand, J. (2013) 'Urban morphological research and practice', *Urban Morphology* 17, 79-85.
36. UNESCO (1972) Convention concerning the protection of the world cultural and natural heritage, Paris.