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THE GREEN INFRASTRUCTURE IN PERI-URBAN LANDSCAPES.

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THE GREEN INFRASTRUCTURE IN PERI-URBAN LANDSCAPES.
Existing studies and new insights.

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Summary
The main aim of this article is to enhance the understanding of entity of green infrastructure (GI) in peri-urban conditions. The work is based on literature review and synthesis of recent European studies. This article explores in depth the main differences between urban and peri-urban GI. The study provides a detailed examination of “green” components of GI and describes the way they are functioning within urban and peri-urban conditions.

Extended Abstract
The on-going urban expansion in Europe changed a traditional division between urban and rural areas. Following the changes, transitional peri-urban landscapes became a new place for living, commuting, recreation and working (Ravetz, Fertner, Sick Nielsen, 2013.) From the environmental, social and spatial perspective, the peri-urban landscape is the site of the most dynamic changes and can have both the urban and rural values and challenges. The peri-urban area in Europe is growing rapidly, according to the recent studies (PLUREL 2011) it has already the same amount of built-up land as urban areas, but is only half as densely populated. Moreover, some areas in Europe almost lost their urban-rural interface and consist mainly on urban-“peri-urban” continuum (Caruso, 2001). Such dramatic land transformations affect the environmental, spatial and landscape quality, decrease the function of Ecosystem services (ES) and reduces the overall livability of the urban-“peri-urban” surface (Lafortezza, Davies, Sanesi, Konijnendijk, 2013). In this context, some recent studies regard GI as a tool to plan more sustainable urban growth. “GI will allow for more sophisticated and dynamic understandings of such spaces and to enable the identification and quantification of formerly underappreciated assets of the urban fringe, including newly identified economic benefits” (Thomas&Littlewood, 2010). Furthermore, some studies re-thinking the Green Belt solutions for managing peri-urban areas and embedding the GI strategy instead. “Green Belt is not a mechanism designed for the fringe. Rather, it is a means of diverting development pressure away from the edge of built-up areas, promoting urban regeneration and protecting ‘open’ countryside from sprawl” (Gallent et al., 2006, in Gallent&Shaw, 2007).

The GI concept is widely adopted by European Union, however there are still some gaps in understanding the deference between urban GI and peri-urban GI. For example, the recent GI research is produced by European Environmental Agency (EEA 2017b) and mainly focuses on UGI (Urban Green Infrastructure) typologies. Furthermore, it is not clear how to use the GI strategy in urban-“peri-urban” growth and how to manage the already existing peri-urban areas. This article is a first step in a formation of sustainable approach for European peri-urban landscapes by using the GI as a planning strategy. The main objective of the article is to clarify what is GI in peri-urban conditions; specifically, author aims to figure out how the peri-urban GI is different from urban GI. The work is based on literature review of existing studies about GI and peri-urban landscapes in general and GI in peri-urban landscapes in particular. The article consists of three parts, each of them studies the peri-urban GI from different perspectives.

The first part starts from introduction to common terminology based on recent studies about GI concept and peri-urban landscapes. Than author describes the differences between urban and peri-urban conditions by studying both their tangible and intangible features. For instance, author compares the land
use pattern, the spatial form, planning and management processes, the economical profits, socio-cultural values, landscape and environmental importance.

In the second part the study explores main differences between urban and peri-urban GI. According to recent studies (EEA 2011; EEA 2017a), the peri-urban landscape in Europe usually consists from a greater amount of green open spaces than urban areas. However, the quantity of green open spaces doesn’t necessary mean that the peri-urban GI is in a different state than urban GI. The study introduces the “green” components of GI and examines if there is a specific type of green open spaces for peri-urban landscapes. By the end of this part the author considers that the main difference between peri-urban and urban GI is not only in another kind of green spaces. The crucial distinction lays in the way those green spaces are interacting with surroundings.

The third part explores how the “green” components of GI are functioning in urban and peri-urban areas. The article observes “green” components through different tangible and intangible features of urban and peri-urban conditions, which were presented in the first part. By the end, author provides tables of comparison that explain the role of various “green” components in urban and peri-urban contexts.

To conclude, this article is based on the literature review of recent European studies and aims to clarify what is Green Infrastructure in peri-urban landscapes. In particular author examines the main differences between urban and peri-urban GI. The article has three parts each of them explores the various aspects of GI in peri-urban conditions and produces several results. The first part provides an overview of recent studies about GI in peri-urban landscapes. Also this chapter explains the main differences between urban and peri-urban conditions, by comparing their spatial, planning, economical, socio-cultural and environmental features. The second part systemises the “green” components of GI and compares their differences in urban and peri-urban landscapes. The third part is a combination of the produced materials from previous chapters. In this final part, author defines the role of “green” components in urban and peri-urban contexts, by using the characteristics of urban and peri-urban areas from the first part. The main contribution of the whole study can be regarded as a formation of a conceptual framework for peri-urban GI that might serve for further work with real peri-urban condition.

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