Masterarbeit Herbert Neuhauser

Abstract

This master thesis deals with the evaluation of urban spaces in the context of child-friendly mobility in Vienna. Child-friendly urban spaces promote safe, independent and active mobility of children, which has a positive effect on their mental and physical development. The aim of this thesis is to investigate which factors have an influence on the quality of urban spaces in the context of child-friendly mobility and to what extent these factors can be assessed using geodata. This could lead to a better consideration of children's interests e.g. in urban planning.

For this purpose, indicators are researched and processed. An evaluation scheme with positive and negative evaluation limits for each indicator is developed. With the resulting catalogue of indicators, inventories are made by on-site inspections of three different road sections. Due to existing limitations, a reduction to a more suitable set of indicators is made. With this set, a road section is inventoried again manually and also digitally assessed. By comparing the results, the possibilities and limitations of a digital assessment of urban spaces in the context of child-friendly mobility are shown.

The processed indicators are suitable for the evaluation of the quality of urban spaces. Because of the different evaluation methods (manual/digital) there are only minor differences in the results. Due to a lack of data availability or quality, a (partially) automated digital evaluation is technically feasible, but many indicators have to be analysed or interpreted more closely, which contradicts an automated evaluation. In the future, an automated evaluation of the quality of urban spaces in the context of child-friendly mobility could be possible and therefore offer a need for further research.