CITIES IN A CHANGING WORLD:
QUESTIONS OF CULTURE, CLIMATE AND DESIGN

• Paper / Proposal Title:
User preferences for urban parks: stated choice experiments using simulated walks in immersive and non-immersive virtual environments.

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• Abstract (300 words):
Today’s population growth and urbanization pose challenges on the living environment of citizens and thus on their well-being. A way of addressing these challenges is greenifying the city, which has multiple positive impacts. Urban green spaces are not only important for biodiversity and mitigation of climate change, but also for citizens to restore from stress and engage in physical activity and social interaction.

Therefore, it is crucial that green spaces are designed in such a way that residents want to use them, feel safe and comfortable and have positive experiences there. However, little is known about citizens’ preferences and the specific park design attributes that influence these preferences.

The present study examines the importance of different park attributes on user preferences towards urban parks. Based on literature, seven park attributes were
selected and manipulated in simulated park environments: number and clustering of trees, biodiversity, number of paths, presence of litter, public furniture, play facilities.

Two stated-choice experiments are conducted to examine preferences towards these attributes. In both experiments, participants are exposed to sets of two animated virtual park variations and are asked to choose the park they would prefer to visit. In the immersive experiment, participants walk through the animated park using VR-equipment. In the non-immersive experiment, participants watch videos of a walk in the park. The outcomes of these two experiments are used to both examine the relative importance of the attributes using discrete choice models, and to investigate the difference between the use of immersive and non-immersive virtual environments.

The results of the current study can help municipalities and urban designers in both designing attractive urban parks and improving the existing parks. Moreover, the present study illustrates the applicability of simulated virtual environments for both immersive and non-immersive experiments in the field of urban planning and environmental psychology.

• Author(s) Biography (200 words each):

**Mayke van Dinter** is a senior researcher and lecturer at Eindhoven University of Technology. After obtaining a MSc in Urbanism at the TU/e faculty of Architecture and Building Technology in 1997 she started as a junior researcher at OTB (Research for the Built Environment) at the Technical University of Delft. After that, she worked as a urban planner and spatial advisor for several municipalities in the Netherlands. She focused her work on urban green spaces and the spatial consequences of climate change and the energy transition, both in policy and design. She also coordinates and teaches in the Dutch section of the ‘Cities on Water’ study abroad program of the University of Minnesota in the United States (Landscape Architecture). At the Municipality of Eindhoven, she is an advisor on green space and co-creation processes for the EU-project ‘UNaLab’, that is part of EU Horizon 2020 and focuses on nature based solutions for climate adaptation.