**A GPS based survey of people's behavior and
movement patterns in a park in Denmark**

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Abstract:

GPS tracking and spatial analysis of people's behavior in parks is relative new but extremely promising research field. Due to the rapid developed of the GPS technology and falling price on the GPS units it is now possible, easy, and with low costs to track the location of people's behavior and movement patterns with great accuracy when they are using parks and other types of urban environments. The geographical precision of the data, and the combination of spatial relations and time use allows new types of analysis and inference for the improvement of site surveys and planning.

Very few GPS based dataset have been collected in parks worldwide, and maybe the first in Japan as late as 2005 (Yamamoto, Y et. al.,2005) and the paper therefore briefly gives a short historical overview covering other earlier survey methods developed and used to document people's behavior and movement patterns in parks etc. (Goličnika, B et. al, 2010)

Taking a point of departure in a unique dataset based on GPS registration and questionnaires from the Skanseparken survey in Aalborg, Denmark , autumn 2007 the paper present different types of GIS based analyses of the GPS data and discusses their application (Rendtlew et. al , 2007). The Skanseparken survey included all 298 people visiting the Skanseparken over tow days in 2007. 156 visitors answered the questionnaire based survey while 132 visitors carried a GPS device for registration of their itinerary and time spent during their visit to the park.

The survey and its analysis allows the researches and the city of Aalborg to answer question susch as - What are people doing in a public park like Skanseparken? Where are the people in the park? How long time do people use in the different areas of the park? - thus giving comprehensive geographically detailed evidence on park use for the majority as well as for subgroups – and allowing that a geographical component be included in the analysis of what makes a park attractive? and what makes people use the park the way they do? (Harder, et al. 2008)

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