Time perception of active mode travelling

Problem description
Travel time is assumed to be an important mode choice factor. It represents the burden of travel between a given origin and destination. Consequently, the competitiveness of a travel mode can be influenced by changing travel times. However, a caveat to this logic is that time is not necessarily perceived in an objective manner. Research in the past has revealed that travel time by car and travel time by public transport are often perceived differently and that the perception depends on a variety of contextual factors. For example, a person that drives a car often perceives the same duration as shorter than when travelling by public transport. While this knowledge is important to estimate for example the effect of an infrastructural upgrade on mode choices, it is still incomplete. To our knowledge, the perception of travel time while travelling by active modes (walking or cycling) has not yet been explored.

Assignment
Study how travel time in commuting trips is perceived when people travel by active modes in comparison to “real” time and compared to car or public transport use.

This research entails the following steps:
• Studying time perception in literature with regard to factors that influence time perception
• Identifying survey methods that are used to collect data on time perception
• Designing and conducting a survey to collect data on time perception
• Therefore: Co-developing an app for data collection (GPS-tracking + survey as push-up message)
• Data processing of GPS data with Matlab
• Make a comparative analysis of time perceptions and revealed travel times across travel modes and identify factors that influence them
• Critical discussion of the findings and their implications

This Master thesis includes an internship at KIM (Ministry of Infrastructure and Water Management).

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