

an evaluation of these pictures. The results unveiled that highly intimate touches like handholding or touch to the face express more affection, immediacy, trust, composure, similarity and informality than the other forms of touch. The interview study should reveal whether these results can be replicated within HRI and if touch with robots is perceived as desirable. Since it can be suspected that the size of the robot may influence whether touch by a robot is desirable or not, robots of different sizes are chosen as stimulus material (e.g. Robosapien, Nao and iCub).

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An Analytical Framework for Place Research

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Spatial cognition research has recently become interested in the notion of place (Winter et al. 2009). Beside cognitive aspects place as a “meaning soaked entity” (Lynch 1960) also covers social processes. This interplay has been studied – with an emphasis on the social aspects – by place research, a field within human geography (Cresswell 2004) that methodologically complements spatial cognition. While the cognitive processes involved in the constitution and the use of places are best studied using spatial behavior data, social negotiation processes are examined best by qualitative content analysis. I argue that for a detailed analysis of place, both approaches should be combined. My talk presents two data sets, (1) movement tracks of tourists, and (2) narratives of a place tradition from which I derive requirements for an analytical framework for studying social and cognitive processes in the context of

place research. Prototypical software implementations for parts of the framework are discussed.

Due to a pervasive use of GPS-sensors there is now a rich basis of empirical data reflecting locomotion behavior. The data from Schlieder/Kremer 2011 covers motion patterns and images taken of day-trip first time visitors in the Old Town of Bamberg. Laube et al. (2007) provide a framework for a criteria-based extraction of features. Turning from behavior to action, geo-tagged image data indicate decisions taken and attention paid (Schlieder/Matyas 2008, Schlieder/Kremer 2011). Qualitative content analysis of places can be derived from image tags, diaries or interviews. The second data set covers narratives on the place tradition of Bamberg collected by guided interviews of people living for longer than 10 years in Bamberg. Common text mining approaches can reveal basic symbolic understanding. Social sciences have developed techniques to extract place based argumentation patterns (Christmann/Mahnken 2011).

Based on a first analysis of the two data sets, I propose a set of requirements that an analytical framework for place research has to meet. The most important are: (1) beside behavioral locomotion data, the framework has to support action sequences (e.g. image data) and text as input data. (2) The framework should allow place to be identified as locomotion pattern, action pattern and as argumentation pattern. (3) The association of all types of patterns should be supported. (4) Temporal analyses regarding change and connectivity of places have to be possible.

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