Young people’s perceptions and expectations of recreation in public spaces are different from those of adults. They need space for social interaction without the boundaries and restrictions usually experienced at school or at home.

In the research/education cooperation project I AM HERE! – Participative approaches to analyse the space behavior of adolescents in the city, spatial activity patterns and spatial demands of adolescents in Vienna are gathered and analyzed by implementing a participatory approach and using a comprehensive mix of recording devices like GPS, mobile phones and digital cameras. Students from three secondary schools in Vienna, Austria, are involved in the project work. For data analysis and visualization, web-mapping as well as virtual-globe technologies are used. By examining the structure, utilization and social meaning of public spaces we develop a typology of adolescent spaces. In a future workshop with the students we elaborate recommendations to improve the quality of public spaces for adolescents. The results will be discussed with local planning authorities.

**Thematic background**

Public spaces and recreational areas are often occupied by multiple demands, and hence spaces of conflicts and sometimes even violence. With the focus on social interaction, adolescents do not apply typical recreation criteria such as scenic beauty, thus shopping malls are often mentioned as preferred spaces – for meeting friends, getting seen and hanging around without compulsory consumption.

The socialization with peers and the values of peers are very important for young people while they oppose the attitudes and opinions of parents and other adults. Places are selected by the opportunity to meet friends and hang out unobserved (Duzenli et al., 2010; Fitzgerald et al., 1995).

Previous research has shown that preferred public spaces of adolescents are the city centers, street corners and shopping malls. The activities in these spaces include hanging out, listening to music, meeting friends and doing sports, though there are significant differences between boys and girls. Boys rather engage in physical activities (sports) whereas girls prefer more social activities such as meeting and chatting with friends (Duzenli et al., 2010; Fitzgerald et al., 1995). Adolescents frequently use the term “chilling” when they describe their favorite leisure activity. It implies diverse activities and atmospheres and is mainly used in the context of meeting with friends in a relaxed atmosphere. The most important factor is to do it with friends and not with parents (Vanderstede, 2011).

Results from Gearin and Kahle (2006) regarding the concerns of adolescents related to public spaces show that smog, dirt, waste and homeless or drunk people are the main disturbance aspects.

**Project description**

In a transdisciplinary cooperation with students from secondary schools in Vienna, Austria, we analyze spatial demands, behaviors and activity patterns of young people in the city to support the development of spatial planning strategies that consider specific needs and expectations of its adolescent inhabitants. Main research questions are how adolescents use public spaces, what spatial needs they exhibit, and which social relevance public spaces have for adolescents.

The involved students are researchers and test group at the same time. For recording and describing public spaces, we use GPS technology combined with visual recording techniques such as digital images and videos. This mix of media and technologies links directly to the communication devices and services that young people use and like (smart phones, tablets, social media services…). Web-based mapping technologies such as virtual globes and geo-browsers are used to create mobile applications together with some of the students for adding, exploring, analyzing, sharing and presenting data directly in a real life environment (Schauppenlehner et al. 2011). The GPS technology combined with new media and web applications is evaluated regarding how far these techniques are suitable to collect, analyze and visualize the spatial behavior of adolescents.

**Preliminary results**

The use of GPS devices for recording daily tracks and activities is a good starting point for analysis of their spatial patterns and preferred locations. Many students were surprised about their individual routes (e.g. route lengths and duration of stays) and that they have this recording technology in most of their smartphones. Regarding media like images and videos for qualitative description of public spaces, many students felt insure about what to record. They need very detailed instructions on what to keep in focus.

First analyses show, that the social interaction, especially meeting friends, is the main driver to use public spaces. The availability of time is a very important factor concerning the choice of spaces by adolescents as they have very little spare time due to school times, learning and parental control. They are not willing to spend a lot of their valuable leisure time in public transport to access recreational areas. Places in the neighborhood are preferred to hang out and meet friends.

Conflicts and violence seem to be a serious problem for adolescents in public space. Few of the participating female students experience threats and insecurity in several urban public spaces. Their male colleagues feel more insecure in the public space due to conflicts and fights with other male adolescents or gangs. As a possible solution for that, they
are willing to give up privacy by claiming for more security forces and surveillance cameras.

There are surprisingly different results depending on the location of the school within the urban fabric. While school students from the outer districts use a wide spectrum of recreational spaces (parks, forests, inner-city squares, shopping malls), students from the inner city seem to spend nearly all their leisure time in the immediate urban environment (shopping streets, small parks). Recreation planning for this group needs innovative approaches as their spectrum of space utilisation goes way beyond the responsibility of a parks department.

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Figure 1. The data processing model