

Urban Design Research for Children's Mobility

The intersectoral research project on children's mobility with the use of social design tools aims to discover how to make urban mobility for children safer and more attractive through placemaking. The research tackles how social design might facilitate children's (age 8-13) physical and mental safety and visibility regarding the inclusivity of public places and mobility formats in order to mitigate traffic and along with the climate crisis. The research among others uses co-creational data collection, action and observatory research, and a design prototype as a tool to focus on the specific challenges raised by the target group.



The project established a partnership of different sectors aiming to tackle the needs of children (age group 8-13) in light of public transportation and active mobility, intensively focusing on the usage and opportunities of public places. Mobility has an undeniable role in the fight against climate change; however, raising contextual awareness is still needed to demonstrate the correlation between the two. Although children are a large user group, their urban challenges are not equally handled in the CEE region.

The research project was conducted in cooperation with the Institute for Human-Environment Transaction of ELTE PPK, Center for Budapest Transport, Municipality of the 7th district of Budapest and involved external experts on the topic.



III O III ≡ Innovation Center

The main research question was how design might facilitate children's physical and mental visibility and safety regarding the inclusivity of public places and mobility formats using placemaking to mitigate traffic through innovative research and co-creation-based design development process. To unfold the needs of the target group the research used process-based co-creational data collection, methodological tools of social design, action research, observatory research and interviews. Based on the collected data, a prototype was designed to tackle the challenges raised by the target group. Assessing the usability and impact of the tangible



prototype was the last methodological part of the research. This involved different observation methods such as narrative impact assessment among the target group and quantitative tools like speed measurements using a speedometer.

The created and installed prototype at a pilot location is a research tool which combines modular, alone-standing steel structures, asphalt painting and plantain. This research tool provides real-life opportunities to collect and analyse data, and start a conversation with different stakeholders (children, parents, teachers, neighbours) in a co-creational manner. The prototype which is an experimental small-scale installative intervention aims to react upon the insights coming from the children such as dedicated space to gather and wait, being visible, having a chance to experience place attachment and to have a more recognisable school area. Besides these aspects, the prototype also tests the utilisation of a scooter storage in order to respond to the emerging usage of different micro-mobility tools among children.



Another goal of this placemaking tool is to make the school more visible and affect the traffic surrounding it. The installative intervention's aim to cause traffic calming and to affect drivers' behaviour through visual stimulation.

Concluding the findings such as public place awareness, liminal spaces, traffic calming this research opens the argument of transferability and paradigm changes in the context of Budapest and has potential relevance in other big cities of the CEE region as well.



The next steps of the research is to extend the scope of traffic calming by placemaking by developing further the tested prototype and creating new, more ambitious small-scale placemaking interventions in cooperation with intersectoral actors from various fields in order to finalise ready-made products with scalable and transferable potential and to provide a set of options (installative and regulative) to Municipalities for alternative ways of traffic calming through placemaking in school areas.

CREDITS



Research managed by Moholy-Nagy University of Art and Design
Budapest, Innovation Center, Social Design Hub

Lead of the research project: Rita, Szerencsés - *researcher, social designer*

Research assistants: Luca, Wilson, Borbála, Marosán

Project manager: Kinga, Dér

Product Designer: Markus, Hermann

Architect: Renáta, Pomázi

Production control: Marcell Ágoston, Szodfridt - *architect*

Supervisor: Bori, Fehér DLA - *lead of MOME Social Design Hub*

Consultants

Éva, Beleznay - *Architect, planner, sustainability consultant*

Astrid, Kemperman - *Urban Planning & Quality of Life Associate
Professor, Eindhoven University of Technology*

Prof. Dr. Andrea, Dúll DSc - *environmental psychologist, professor,
director of ELTE PPK Institute of People–Environment Transaction*

Judit, Bényei PhD - *associate professor, Head of Design and Visual
Arts Teacher MA program*

Dr. Anikó, Illés - *psychologist, associate professor at MOME
Institute for Theoretical Studies*

Project partners

Center for Budapest Transport

Berta, Molnár - *Mobility Development, Associate*

Dénes, Válóczy - *Head of department Mobility Development,
Transport Safety*

Municipality of Erzsébetváros

Csaba, Tóth - *Head of Erzsébetváros Climate Cabinet*

Anna, Sipos - *Associate at Erzsébetváros Climate Cabinet*

ELTE PPK Institute of People–Environment Transaction

Iván Zsolt, Berze - *psychologist, assistant lecturer,
ELTE PPK Institute of People–Environment Transaction,
PhD-student, ELTE PPK Doctoral School of Psychology*

Prototype constructor - Fornell Kft.

Graphic design: Márk Levente, Gelley-Hager

Photo: Balázs, Turós and Máté, Lakos



Thanks to the Hintalovon Foundation, Mihály Minkó, the Fűvészkert (Péter Kiszél and László Papp), the Embassy of the Kingdom of the Netherlands, the Contemporary Architecture Center Budapest for their help and support.