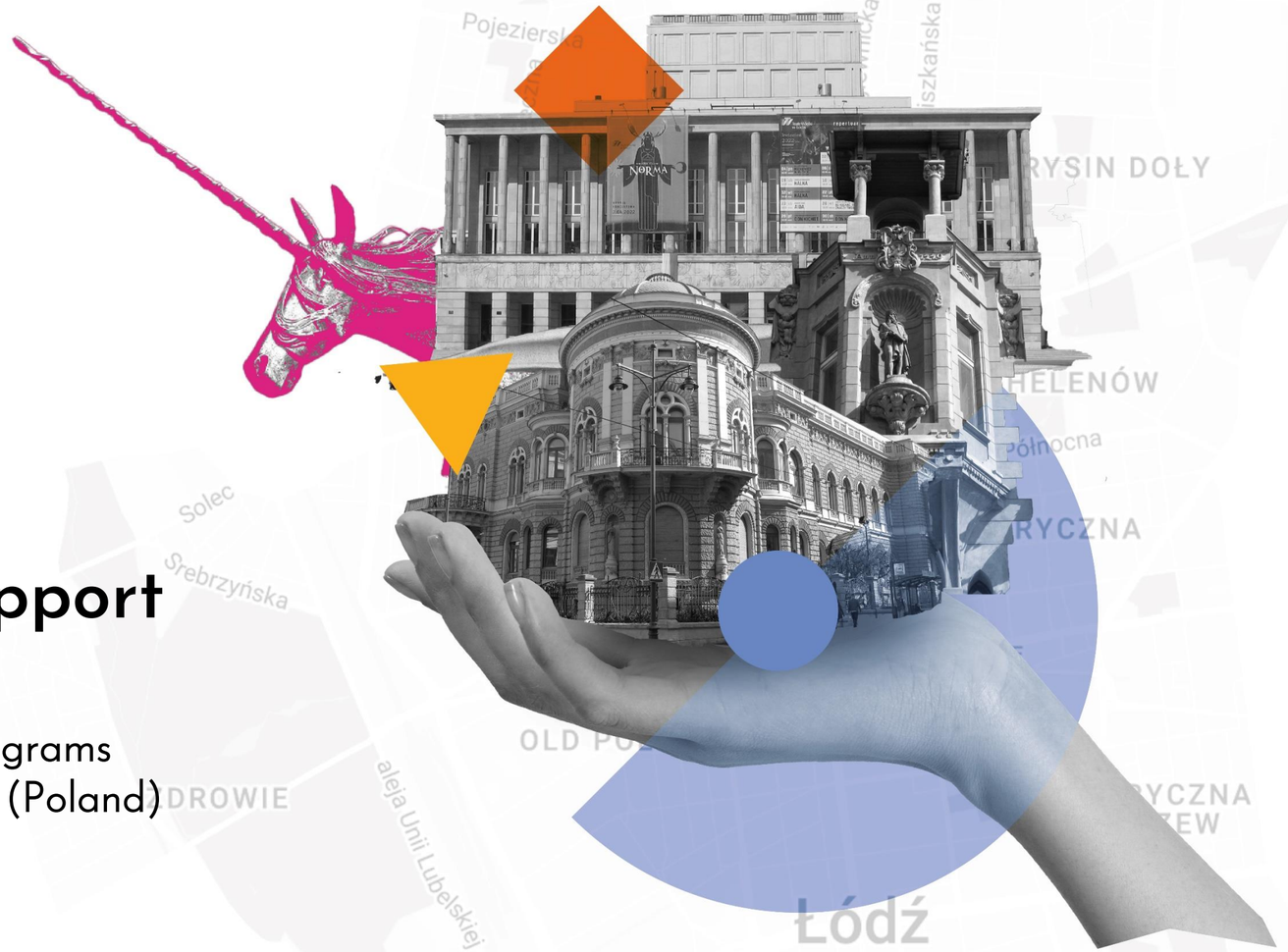
Aneta Pawłowska

Daria Rutkowska-Siuda

Tactile architectural drawings as a tool to support audio description

Presentation based on the experience of programs supporting visually impaired people in Lodz (Poland)



Art provides an opportunity to increase social and cultural inclusion of people excluded due to reduced motor, intellectual and sensory abilities, including the elderly.

Dissemination of knowledge about artists and art and its interpretation with the help of modern tools such as the Internet, cell phones, online classes, and tactile architectural drawings allows the inclusion of people from disadvantaged backgrounds in active participation in culture.

Łódź art against the background of European art. Excluded/Included

POWR.03.01.00-00-T141/18

Duration of project

2 February 2019 – 31 January 2022

Project value

239 736,00 EUR

Participants: 750 persons

Schoolchildren and senior citizens with visual and hearing impairments

Team

Institute of Art History, University of Lodz in cooperation Museum of the City of Lodz

Reach

Lodz Voivodship

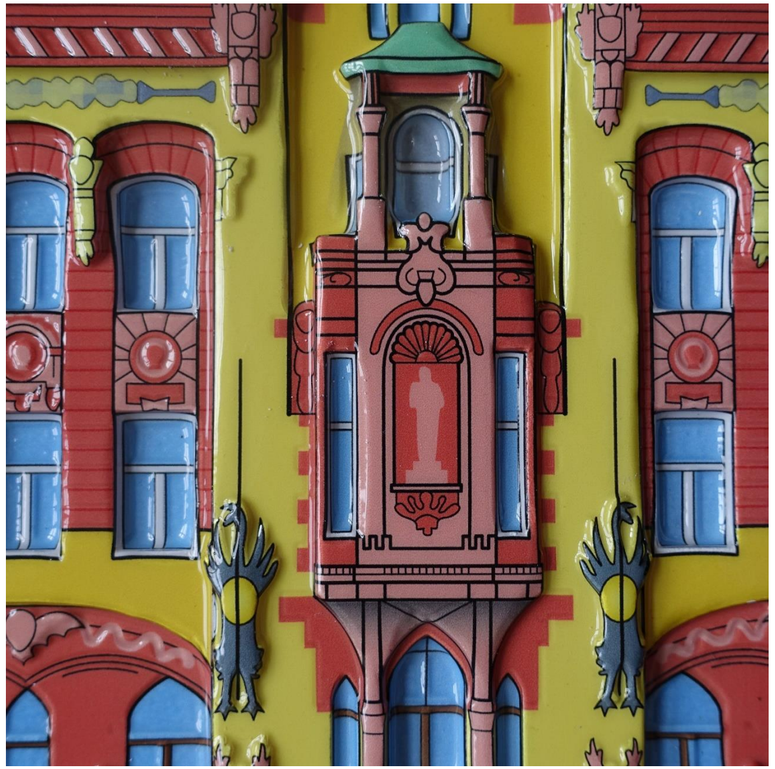
Innovative forms

Use of online tools, tactile architectural drawings, educational platforms, among others.

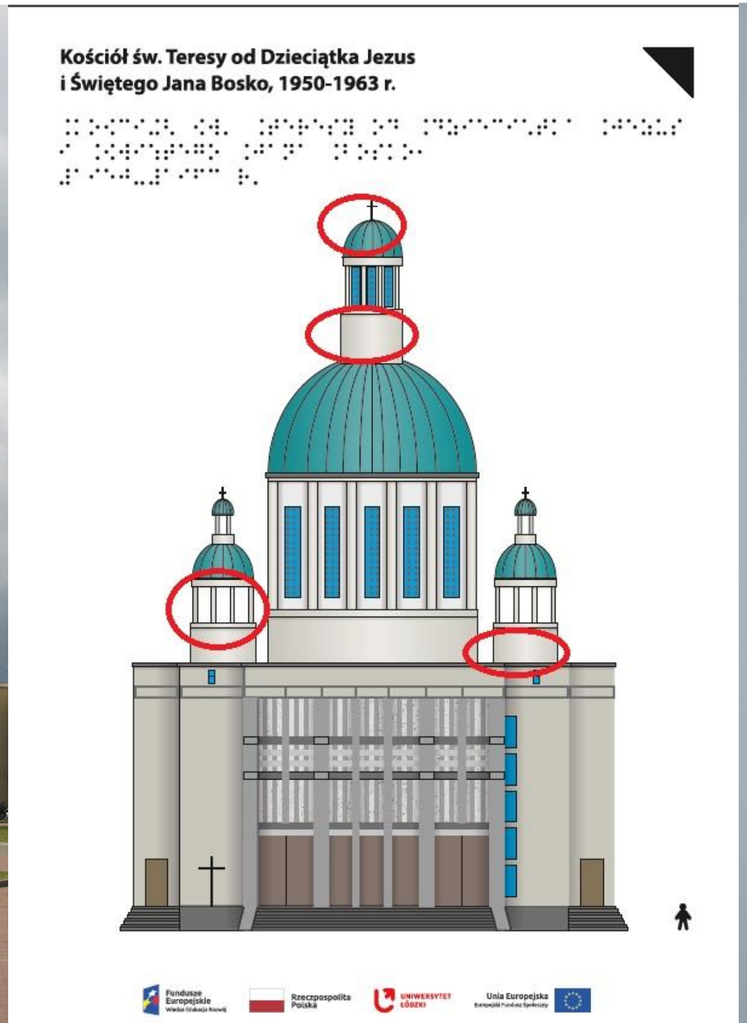
MUZEUM MIASTA ŁODZI

Architecture is one of the most difficult art fields to capture in an audio description. Also, the number of objects developed within the framework of accessibility for visually impaired people is much smaller.

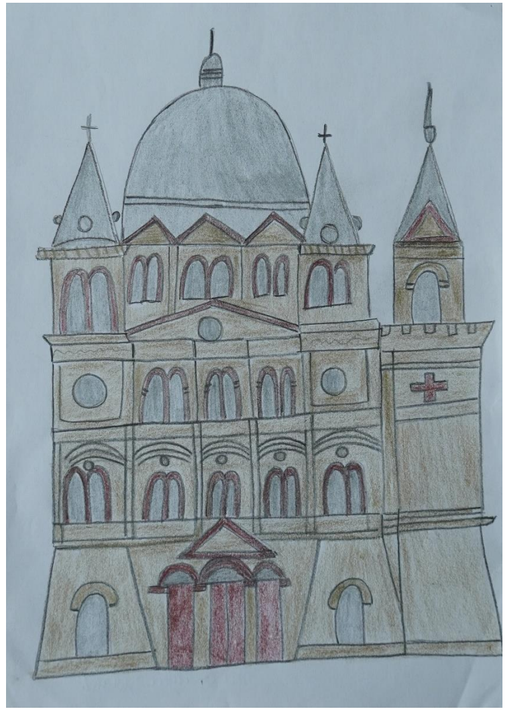
As part of the project *Lodz art against the background of European art. Excluded/Included*, more than 810 boards of tactile architectural drawings have been produced.

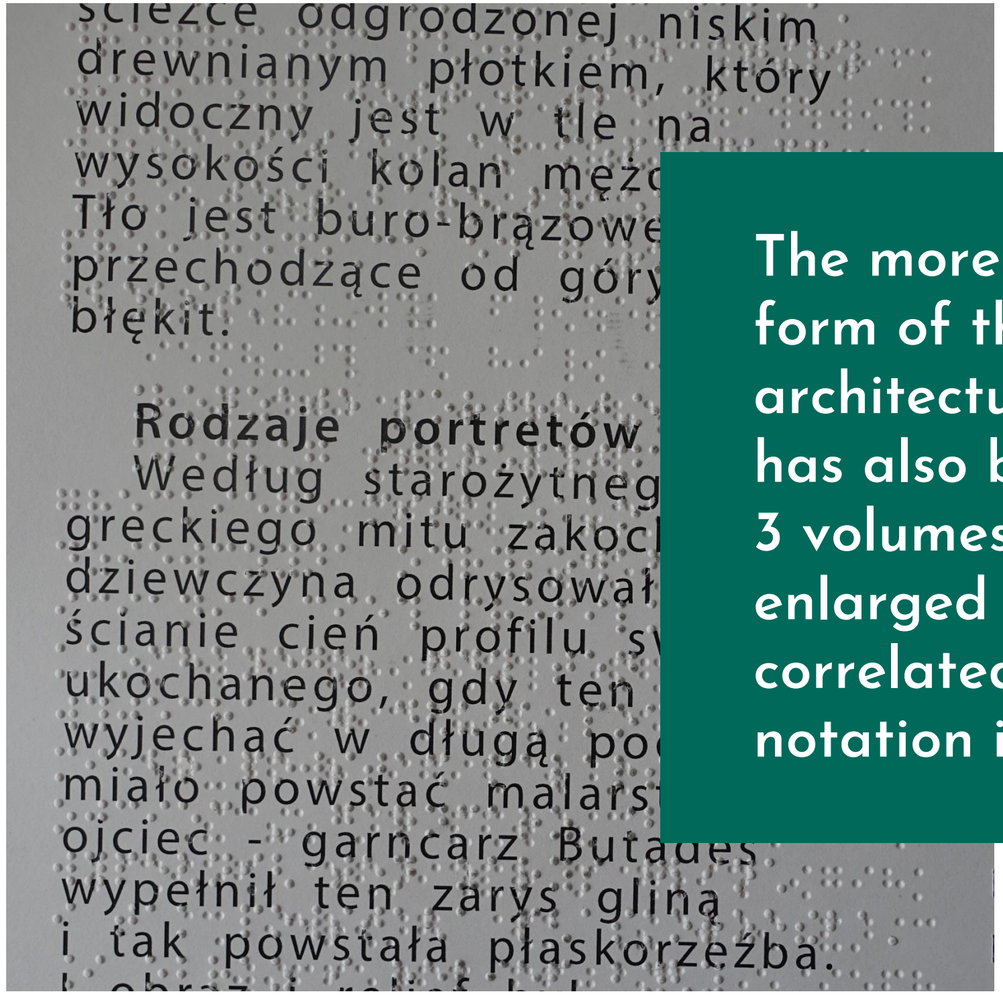


The process of working on a tactile architectural arawing

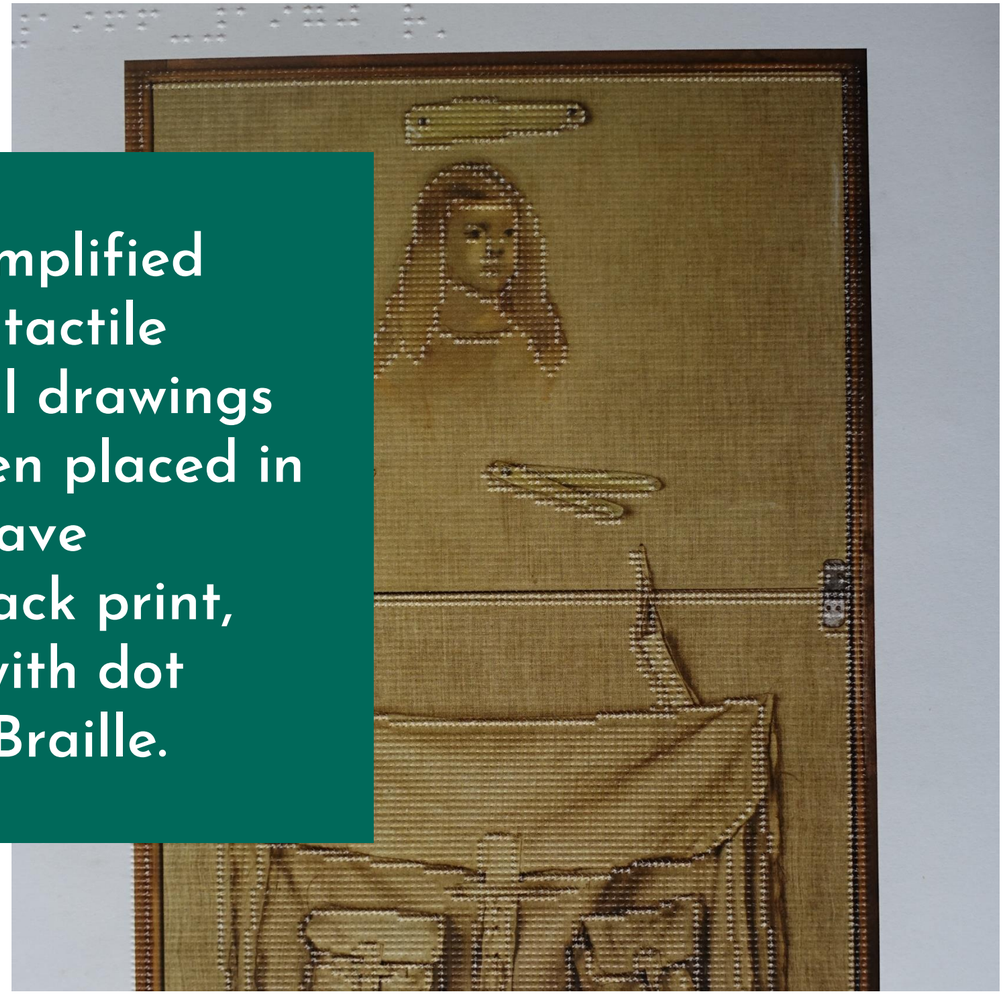


The tactile architectural drawings proved to be very useful in working with the hearing impaired. In comparison with photographs and plans, their form translated into greater legibility of the analysed object. The possibility of indicating an architectural element, e.g. the design of windows or the architectural detail used, gave a more complete picture of the whole. Their very form, different from flat prints of object shots, was more attractive, thus focusing attention and influencing concentration. They were used for workshop exercises.

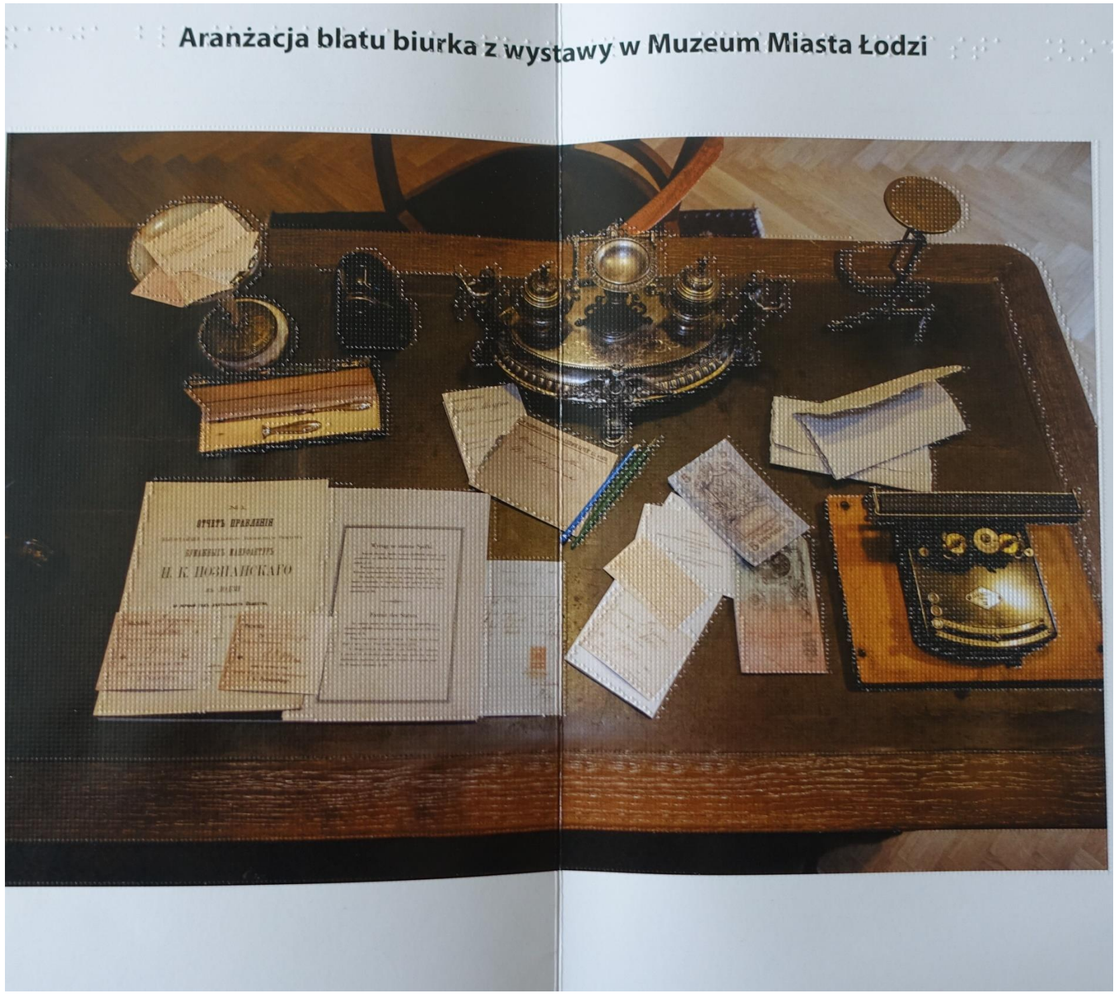


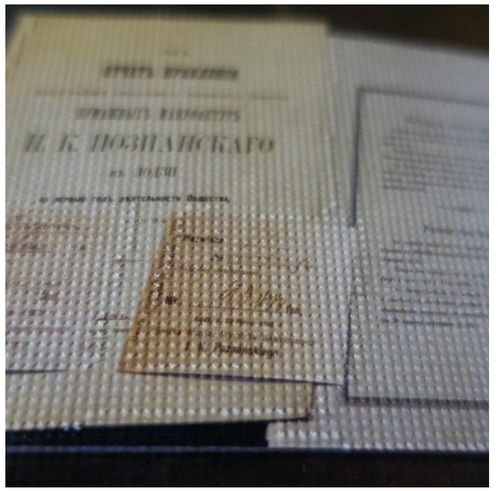


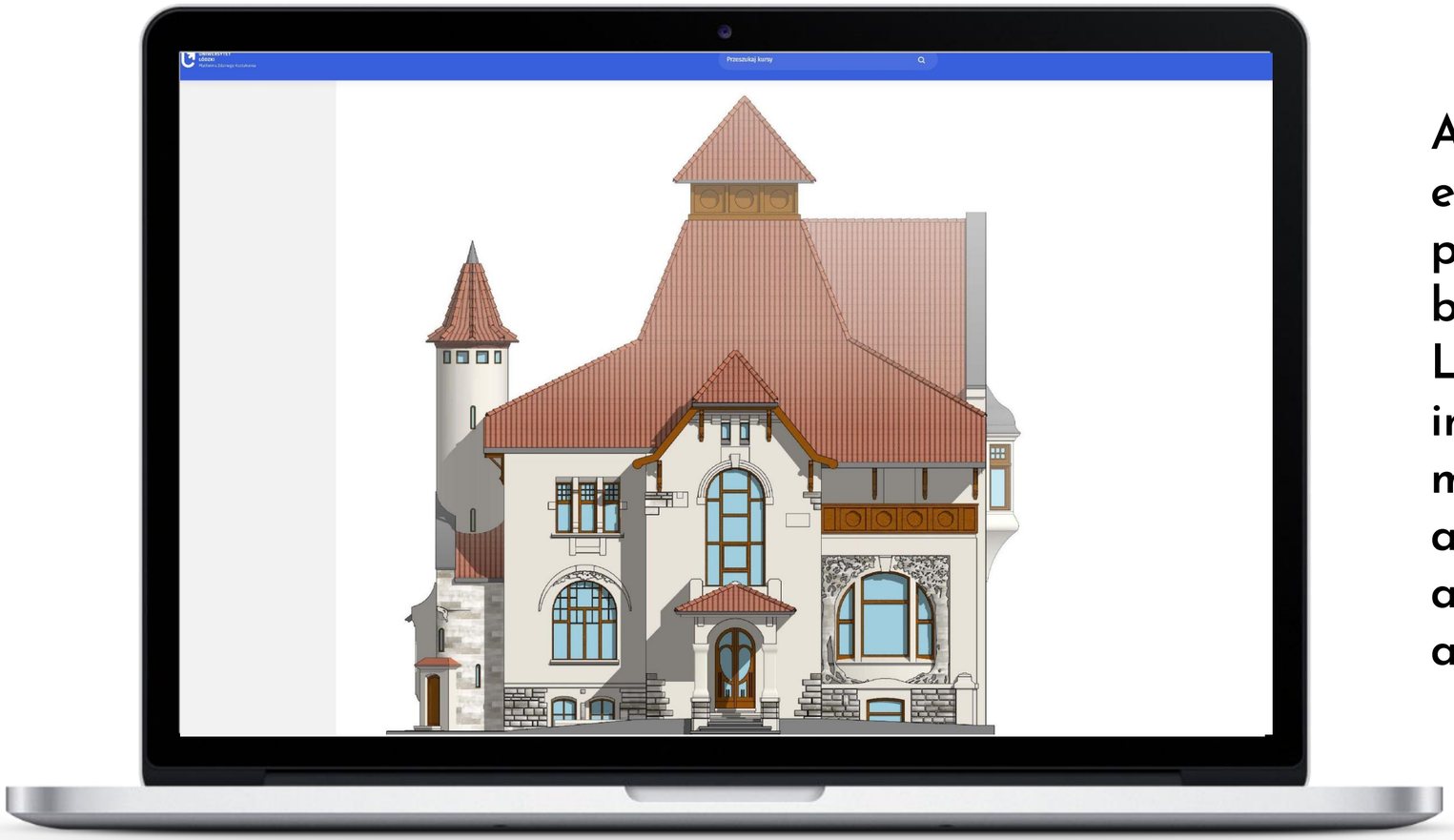
The more simplified form of the tactile architectural drawings has also been placed in 3 volumes have enlarged black print, correlated with dot notation in Braille.



The individual topics are complemented by audio descriptions adjacent to full-page, colour, relief graphics.







As part of the programme, educational materials have been prepared for visually impaired and blind people on the University of Lodz Moodle digital platform, which includes a wide collection of multimedia presentations and films, as well as audio description accompanying images of tactile architectural drawings.

The Conclusion of The Excluded/The Included project

People with disabilities want full participation in visual culture and access to historical heritage. During surveys conducted with 750 beneficiaries, they all indicated the need for stronger support in the area of access to culture and art.

Friendly City. Supporting the independence of visually impaired people in the use of the public transport network in Lodz, including an application for locational information and local architectural monuments

NCBiR

Duration of project

1 January 2021 r. – 31 December 2024 r.

Project value

728 293.00 EUR

Participants:

inhabitants of Lodz and other Polish cities, tourists

Team

Institute of Art History, University of Lodz in collaboration with the SWPS University

Reach

Lodz

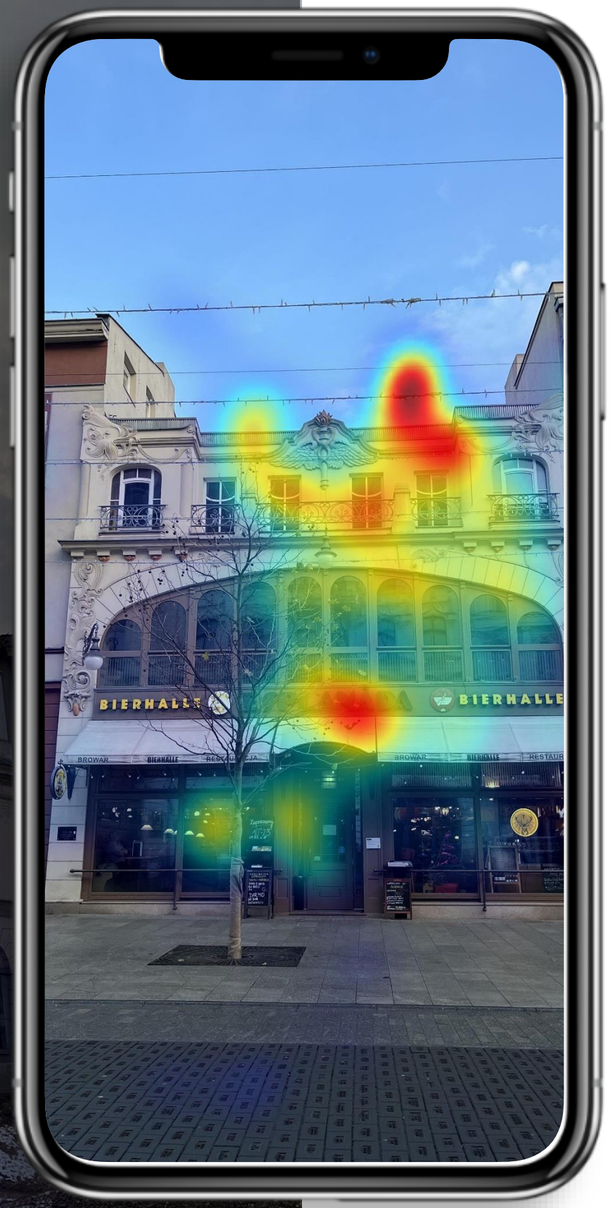
Innovative forms

Combination of eye-tracking and audio description experiences in the creation of an application linked to the Lodz public transport presenting architectural heritage

SWPS University

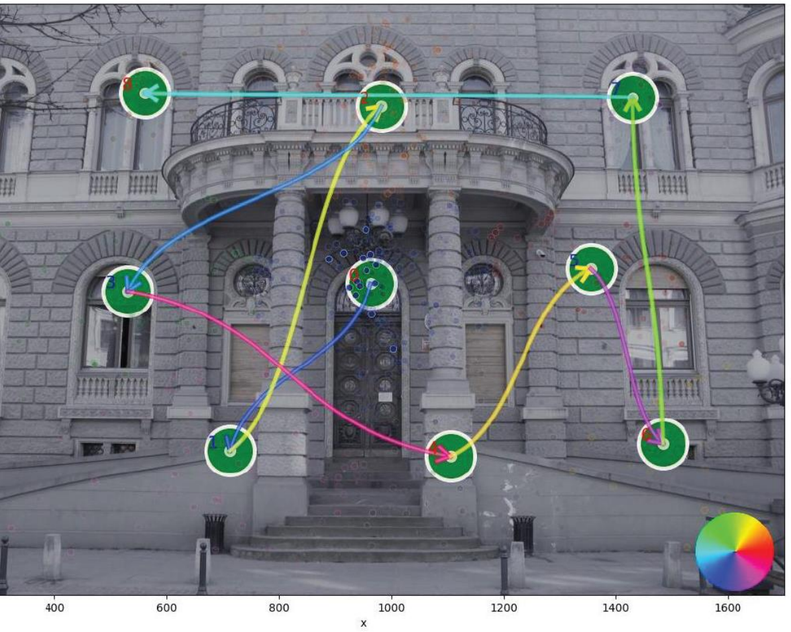
The Friendly City supports the blind and visually impaired people to perceive the local architectural heritage in Lodz (Poland). The multidisciplinary project aims on promoting the accessibility of architectural heritage to BVI community by adding audio descriptions to 85 public places.

Eye-tracking study

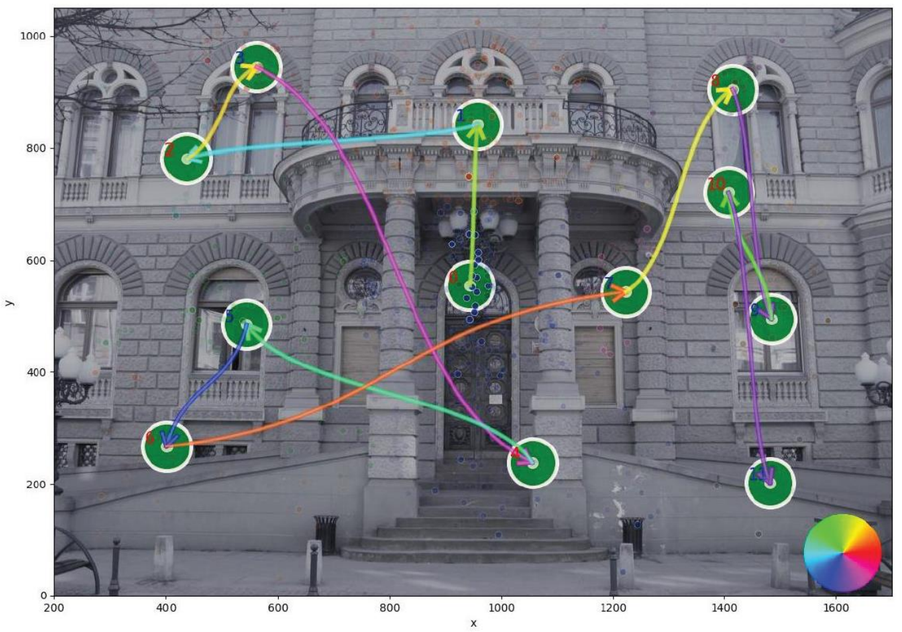


The ADs in FC are guided by insights from an eye-tracking study on the perception of architecture by novices and experts, and interviews with BVIs from the Lodz association.
Feb 2022 to Oct 2022

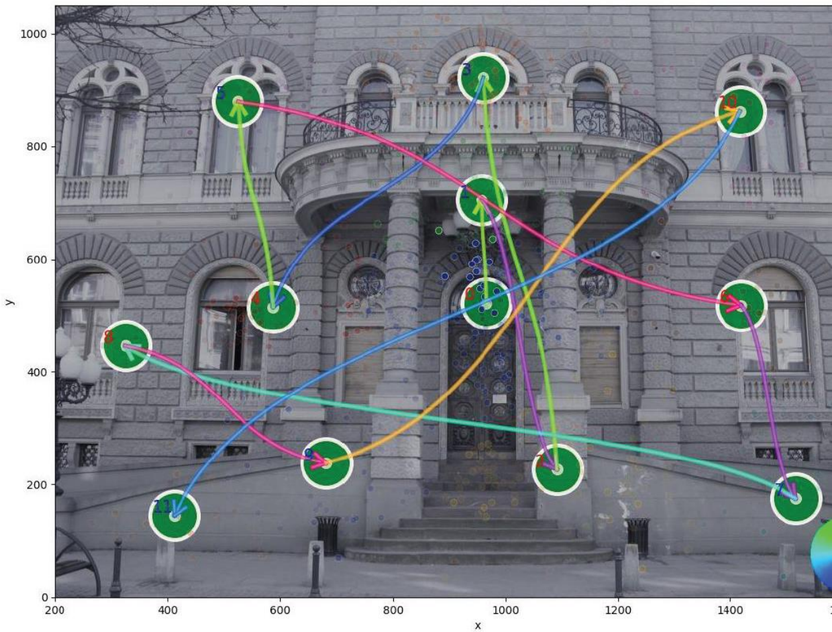
Eye-tracking study



(a) architects



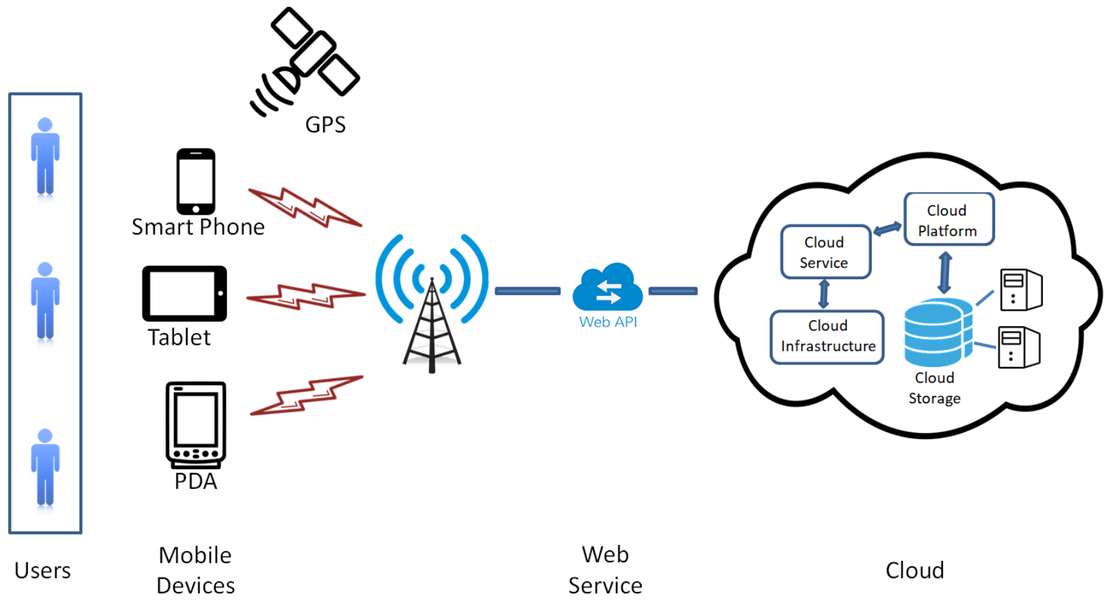
(b) art historians

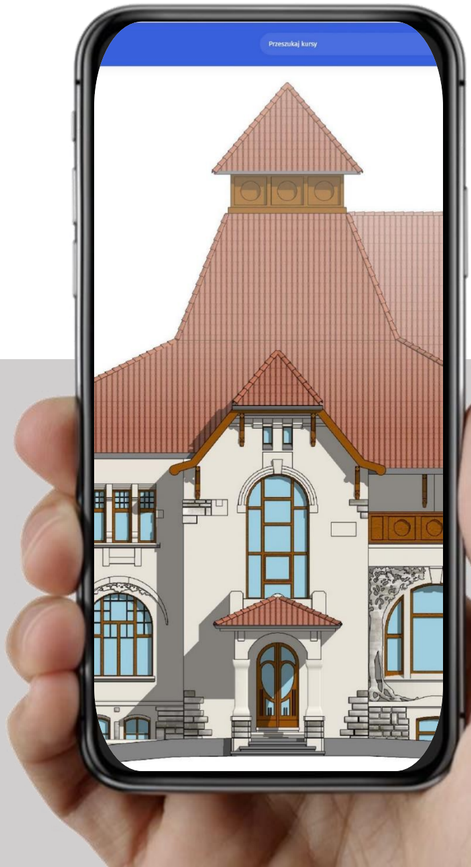


(c) non-expert viewers

Example aggregated scanpaths for groups of architects, art historians, and non-expert viewers when viewing an architectural object. Note: circles indicate centroids of fixations clusters, and color of the paths represents their direction as indicated by the color-direction wheel at the bottom right.

The project supports independent mobility for people with BVI in the center of Lodz using public transport by installing 200 Bluetooth beacons at city bus stops and public places. The beacon devices communicate with the smartphones of people with BVI and sighted people via a mobile application. The system and applications for the FC have been designed with the principles of universal user-center design in mind. So all users (such as tourists) will be able to use it. The beacons will help people with BVI to locate a bus stop through voice messages about distance and location.





The system will be available through a free smartphone and smartwatch app for IOS and Android operating systems.

INSTYTUT
HISTORII SZTUKI
Uniwersytet Łódzki

Thank you for your attention.