

Urban Heritage as a Driver for mental health. Reactivating Urban Memory for Collective Well-being in Turin

*Original*

Urban Heritage as a Driver for mental health. Reactivating Urban Memory for Collective Well-being in Turin / Mezzalama, Giulia Maria. - STAMPA. - (2025), pp. 52-61. ( ARCHITECTURE AND AUTISM. SHARED SPACES AND SENSORY ESCAPES. Trieste 28 November 2025).

*Availability:*

This version is available at: 11583/3005585 since: 2025-12-02T09:22:13Z

*Publisher:*

EUT Edizioni Università di Trieste

*Published*

DOI:

*Terms of use:*

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

*Publisher copyright*

Common Ground Research Network postprint versione editoriale/Version of Record, con licenza CC by nc

(Article begins on next page)

# ARCHITECTURE AND AUTISM. SHARED SPACES AND SENSORY ESCAPES

PROCEEDINGS OF THE INTERNATIONAL WORKSHOP  
TRIESTE, 28 NOVEMBER 2025

The international conference *Architecture and Autism: Shared Spaces and Sensory Escapes* brings together researchers, designers, educators, and professionals to explore how architecture can support the sensory and emotional needs of neurodivergent individuals. The conference highlights the BeSENShome Interreg Italy-Austria project, a multidisciplinary initiative developing intelligent sensory systems and adaptive environments that respond to individual preferences, needs, and neurodivergent profiles. Through keynote lectures and four thematic sessions, the event examines multisensory spaces for care and education, participatory design and co-creation, research on auditory accessibility and comfort, and the integration of AI and smart technologies in inclusive environments. Case studies and innovative projects – from school classrooms to museums – illustrate how design can foster autonomy, well-being, and social connection.



ISBN 978-88-5511-662-6 (print)  
ISBN 978-88-5511-665-7 (online)

Design and layout:  
Martina Di Prisco

Edited by:  
Giuseppina Scavuzzo, Federica Bettarello, Martina Di Prisco

© Copyright 2025 EUT Edizioni Università di Trieste  
EUT Edizioni Università di Trieste  
via Weiss 21, 34128 Trieste  
<https://eut.units.it>

The open-access digital edition is distributed under a Creative Commons license:  
Attribution-NonCommercial-NoDerivatives 4.0 International  
(CC BY-NC-ND 4.0) <https://creativecommons.org/licenses/by-nc-nd/4.0/>  
Available at the link: <https://www.openstarts.units.it/handle/10077/37576>



**proceedings**

ARCHITECTURE AND AUTISM  
SHARED SPACES AND SENSORY ESCAPES  
International workshop  
Trieste, 28 November 2025

**scientific committee and editors**

Giuseppina Scavuzzo  
Federica Bettarello  
Martina Di Prisco

**organising committee**

Giuseppina Scavuzzo  
Federica Bettarello  
Martina Di Prisco  
Anna Dordolin

**texts and images**

Elena Bellini  
Federica Bettarello  
Marco Caniato  
Paolo Degiovanni  
Giulia D'Argenio  
Martina Di Prisco  
Patrizia Famà  
Andrea Gasparella  
Katie Gaudion  
Evie Jeffreys  
Jemma Jones  
Daniela Krainer  
Laura-Nadine Kroll  
Alessandro Leonelli  
Arianna Marzi  
Giulia Mezzalama  
Magda Mostafa  
Ivan Muscolino  
Mei-Yee Man Oram  
David Owen  
Valentina Passarella  
Suchi Priyadarshani  
Marco Raffael  
Anna Resch  
Massimo Rossetti  
Toar Sadia  
Romana Scandolari  
Giuseppina Scavuzzo  
Agata Tonetti  
Chris Watkins  
Lukas Wohofsky

**design and layout**

Martina Di Prisco

**financed by**

European Interreg BeSENSHome project.  
Sensors applied to sensitive environments.  
Interreg V-A Italia – Österreich 2021–2027  
<https://besenshome.units.it/>  
project start date: 2023-10-01  
project end date: 2026-04-30  
EU funding: 971.002,42 EUR  
ITAT -11-016 CUP I53C23001720007



**BeSENSHome**

# ARCHITECTURE AND AUTISM. SHARED SPACES AND SENSORY ESCAPES

PROCEEDINGS OF THE INTERNATIONAL WORKSHOP  
TRIESTE, 28 NOVEMBER 2025

## ***index***

WORKSHOP PROGRAMME	10	REQUIREMENTS FOR BESENSHOME IN SCHOOL ENVIRONMENTS Anna Resch, Lukas Wohofsky, Laura Kroll, Daniela Krainer	94
INTRODUCTION	12		
SENSORY ROOM EXPERIENCE	15	DESIGN OF A MOBILE STRESS ASSESSMENT AND MANAGEMENT SYSTEM FOR NEURODIVERGENT INDIVIDUALS Laura-Nadine Kroll, Anna Resch, Daniela Krainer, Lukas Wohofsky	98
WOOD SNOEZELEN: A PROTOTYPE OF AN UNTREATED WOOD MULTI- SENSORY ROOM FOR THE CARE AND INCLUSION OF STUDENTS WITH DISABILITIES AT "G. MARCONI" PRIMARY SCHOOL IN LOZZO ATESTINO, PADUA, ITALY Massimo Rossetti, Agata Tonetti	16	EXPERIENCE OF CO-DESIGNING SENSOR-FRIENDLY SPACES: INSIGHTS FROM PROGETTOAUTISMO FVG Giulia D'Argenio, Giuseppina Scavuzzo, Federica Bettarello, Martina Di Prisco	102
SENSORY ENVIRONMENTS: A STRATEGY FOR INCLUSION Elena Bellini, Alessandro Leonelli	28	BESENSHOME AND THE SPATIAL DIMENSION: ARCHITECTURAL STRATEGIES FOR SENSORY INCLUSION Giuseppina Scavuzzo, Federica Bettarello, Martina Di Prisco	112
THE QUIET SPACE IN MUSE Paolo Degiovanni, Patrizia Famà, Ivan Muscolino, Romana Scandolari	38	BESENSHOME TECHNICAL ASPECTS	123
DESIGN THINKING AND USER ENGAGEMENT	47	BESENSHOME IN ACTION: AI AND SMART TECHNOLOGIES FOR INCLUSIVE AND SENSITIVE ENVIRONMENTS Valentina Passarella, Marco Raffael	124
BEYOND ACCESSIBILITY: CO-DESIGNING A SENSE OF BELONGING IN THE WELLCOME COLLECTION LIBRARY Katie Gaudion, Evie Jeffreys	48	AUTHORS' BIOGRAPHIES	134
URBAN HERITAGE AS A DRIVER FOR MENTAL HEALTH. REACTIVATING URBAN MEMORY FOR COLLECTIVE WELL-BEING IN TURIN Giulia Mezzalama	52		
DESIGNING RESTORATIVE SPACES FOR PEOPLE WITH NEURODIVERGENT CONDITIONS Toar Sadia	62		
AURAL DIVERSITY TOOLKIT: ENGAGING COMMUNITIES FOR INCLUSIVE ACOUSTIC DESIGN Jemma Jones, Chris Watkins, Mei-Yee Man Oram, David Owen	66		
BESENSHOME RESULTS	75		
ARCHITECTURAL SOUNDSCAPES AND AUTISM: RETHINKING AUDITORY ACCESSIBILITY Marco Caniato, Federica Bettarello	76		
DESIGNING SPACES FOR AUTISM: INSIGHTS FROM SENSORY RESEARCH Suchi Priyadarshani, Arianna Marzi, Andrea Gasparella	80		



## ARCHITECTURE AND AUTISM. SHARED SPACES AND SENSORY ESCAPES

International workshop  
Trieste, 28 November 2025  
in the frame of Interreg V-A Italia – Österreich 2021–2027  
<https://besenshome.units.it/>

9:00 - 9:20 WELCOME AND INTRODUCTION  
Giuseppina Scavuzzo (DIA - UniTS), Andrea Gasparella (UniBZ)

9:20 - 10:00 KEYNOTE  
"Refuge as Prospect: an Anthology of the ASPECTSS of the Sensory Landscape"  
Magda Mostafa (AUC)

### SENSORY ROOM EXPERIENCE

Chair: Giuseppina Scavuzzo, Martina Di Prisco

10:00 - 10:20 "Wood Snoezelen: a prototype of an untreated wood multi-sensory room for the care and inclusion of students with disabilities at "G. Marconi" primary school in Lozzo Atestino, Padua, Italy"  
Massimo Rossetti, Agata Tonetti (IUAV)

10:20 - 10:40 "Sensory environments: a strategy for inclusion"  
Elena Bellini (DIA - UniFI), DU IT s.r.l.

10:40 - 11:00 "Designing well-being: the calm space of the MUSE"  
Romana Scandolari, Paolo Degiovanni (MUSE)

11:00 - 11:20 Q/A + coffee break  
room Sala Atti, building D

### DESIGN THINKING AND USER ENGAGEMENT

Chair: Federica Bettarello, Martina Di Prisco

11:20 - 11:40 "Reflections and lessons learnt on inclusive design and meaningful collaboration with autistic individuals"  
Katie Gaudion (RCA)

11:40 - 12:00 "Urban Heritage as a Driver for Mental Health"  
Giulia Mezzalama (PoliTO), MinD MAD in Design

12:00 - 12:20 "Designing restorative spaces for people with neurodivergent conditions"  
Toar Sadia (UCL)

12:20 - 12:40 "Aural Diversity Toolkit: engaging communities for inclusive acoustic design"  
Jemma Jones, Chris Watkins (ARUP)

12:40 - 14:00 Q/A + lunch

### BESENSHOME RESULTS

Chair: Giuseppina Scavuzzo, Federica Bettarello

14:00 - 14:20 "Architectural soundscapes and autism: rethinking auditory accessibility"  
Marco Caniato (HFT)

14:20 - 14:40 "The senses and their role in special needs comfort"  
Arianna Marzi, Suchi Priyadarshani (UniBZ)

14:40 - 15:00 "Requirements for BeSENShome in school environments"  
Lukas Wohofsky, Anna Resch, Laura Kroll, Daniela Krainer (CUAS)

15:00 - 15:20 "Mobile support for sensory regulation: a stress management app for neurodivergent individuals"  
Laura Kroll, Anna Resch, Daniela Krainer, Lukas Wohofsky (CUAS)

15:20 - 15:40 " Experience of co-designing sensor-friendly spaces: insights from ProgettoAutismoFVG"  
Giulia D'Argenio (UniUD), ProgettoAutismoFVG

15:40 - 16:00 "BeSENShome and the spatial dimension: architectural strategies for sensory inclusion"  
Giuseppina Scavuzzo, Federica Bettarello, Martina Di Prisco (UniTS)

### BESENSHOME TECHNICAL ASPECTS

Chair: Federica Bettarello, Martina Di Prisco

16:00 - 16:20 "BeSENShome in action: AI and smart technologies for inclusive and sensitive environments"  
Valentina Passarella, Marco Raffael (EUREKA System s.r.l.)

16:20 - 16:30  
Q/A + greetings

## **introduction**

The international conference *Architecture and Autism. Shared Spaces and Sensory Escapes*, arise from the growing awareness that architecture and design play a fundamental role in shaping the sensory and emotional experience of neurodivergent individuals.

The event brings together researchers, designers, educators, and professionals to explore how built environments can become supportive, responsive, and inclusive – spaces that enable autonomy, well-being, and social connection.

At the heart of this discussion lies the BeSENShome Interreg Italy-Austria project, a multidisciplinary initiative that aims to develop an intelligent sensory system capable of supporting neurodivergent people in their daily lives. The overall objective of BeSENShome is to bring into homes, workplaces, public spaces, and community environments a network of smart sensors that can act as a personalized sensory extension, entirely shaped by individual needs, preferences, and neurodivergent profiles.

The integration of these sensors within the designated environments is achieved using appropriate smartboxes that are dedicated and co-designed with the potential users of the BeSENShome system.

The project analyses the environmental factors that may trigger stress – such as noise, light fluctuations, or thermal discomfort – and seeks architectural solutions to mitigate them. It also investigates the adaptive and personalized redesign of spaces, ensuring that environments can flexibly respond to the sensory and emotional requirements of their users.

The conference's program reflects this vision through four thematic sessions.

The **Keynote Lecture**, *Refuge as Prospect: an Anthology of the ASPECTSS of the Sensory Landscape*, by Magda Mostafa, introduces a theoretical and methodological framework for designing sensory environments that foster inclusion and dignity.

**Session 1 – Sensory Room Experience** explores how multisensory spaces can support care, education, and well-being. Presentations include the Wood Snoezelen prototype, an untreated wood multi-sensory room designed to support the inclusion and care of students with disabilities at a Primary School in Padua, developed by Massimo Rossetti and Agata Tonetti of IUAV. Further contributions focus on sensory environments as a strategy for inclusion, presented by Elena Bellini of the University of Firenze and Alessandro Leonelli of DU IT S.r.l., and on the Calm Space of the MUSE Museum in Trento, presented by Paolo Degiovanni, Patrizia Famà, Ivan Muscolino, and Romana Scandolari, which illustrates design approaches for well-being and restorative experiences in museum contexts.


**Session 2 – Design Thinking and User Engagement** focuses on participatory design processes and user collaboration. Contributions include co-designing a sense of belonging in the Wellcome Collection Library by Katie Gaudion from the Royal College of Art and Evie Jeffreys, reactivating urban memory for collective well-being in Turin by Giulia Mezzalama in collaboration with the association MinD MAD in Design, designing restorative spaces for people with neurodivergent conditions by Toar Sadia from University College London, and developing the Aural Diversity Toolkit to engage communities in inclusive acoustic design by Jemma Jones and Chris Watkins from the design firm ARUP. These presentations share insights and lessons learned from co-designing restorative and acoustically inclusive environments across educational, cultural, and urban contexts.

**Session 3 – BeSENShome Results** presents the project's research outcomes across multiple aspects of sensory-inclusive design. The session covers auditory accessibility and comfort studies, led by Marco Caniato from Stuttgart University of Applied Sciences, and explores insights from sensory research presented by Suchi Priyadarshani, Arianna Marzi, and Andrea Gasparella. Requirements for implementing BeSENShome in school environments, as well as the design of a mobile system for stress assessment and management for neurodivergent individuals, are discussed by Anna Resch, Lukas Wohofsky, Laura Kroll, and Daniela Krainer from the Carinthia University of Applied Sciences in Austria.

The session also includes experiences of co-designing sensory-friendly spaces shared by Giulia D'Argenio in collaboration with ProgettoAutismoFVG, as well as a discussion of the spatial dimension and architectural strategies for sensory inclusion, presented by Giuseppina Scavuzzo, Federica Bettarello, and Martina Di Prisco from the University of Trieste.

**Session 4 – BeSENShome Technical Aspects** finally showcases the technological dimension of the project, with project partner EUREKA System s.r.l. presenting the integration of AI and smart technologies for inclusive and sensitive environments (in collaboration with project partner MCI Management Center Innsbruck).

Together, these contributions form a collective reflection on how architecture can transcend its physical boundaries to become a living, learning, and caring system – one that recognizes sensory diversity as a fundamental aspect of human experience.



DESIGN THINKING  
AND USER  
ENGAGEMENT

## URBAN HERITAGE AS A DRIVER FOR MENTAL HEALTH. REACTIVATING URBAN MEMORY FOR COLLECTIVE WELL-BEING IN TURIN

Giulia Mezzalama

### **abstract**

The paper explores the relationship between urban heritage and mental health through the action-research project *Healing Heritage*, developed in Turin by the Politecnico di Torino. Framed within a biopsychosocial and salutogenic perspective, the project investigates how urban cultural heritage can support community well-being and social inclusion. The workshop focused on the Borgo San Paolo neighborhood, experimenting with participatory methods for the collective construction of urban memory. Activities combined analogue and digital tools, collaborative mapping, and digital storytelling, engaging students, young adults, and elderly residents as bearers of local memory. The experience highlights the potential of urban heritage as a medium for care, connection, and intergenerational dialogue, fostering belonging and inclusion through the reactivation of urban memory.

### **keywords**

Urban Heritage, Urban History, Mental Health, Co-Design, Participatory Methods

The issue of mental health, already included among the Sustainable Development Goals of the 2030 Agenda (SDG 3), is today emerging as an intrinsically urban dimension – a phenomenon that affects social dynamics and, more generally, the quality of life in cities. In this perspective, mental health is understood not only in its clinical dimension, but as an essential component of *well-being*, reflecting the interconnections between psychological, social, and environmental factors that shape the quality of life in contemporary urban environments.

As recently underlined by the European Forum for Urban Security (EFUS), mental health represents a “silent crisis” that crosses Europe and directly influences the cohesion of urban communities and the perception of safety in public space (EFUS, 2025).

However, understanding mental health as an urban matter is not such a new approach. Within the principles of *democratic psychiatry*, there was already the idea of a *caring community*, capable of assuming the role of an instrument of care, in which patients are active rather than passive participants in the healing process (Basaglia, 2005). In the broader vision of the urban dimension of care inherited from Basaglia’s thinking, it is the city – with its health facilities but also with its streets, squares, courtyards, and gardens – that welcomes fragility in the name of an idea of social inclusion and participation, which are both goals and integral parts of the person’s rehabilitation path.

The city is thus entrusted with a new double responsibility: to guarantee new territorial services in newly designated places, and to enhance existing places as new spaces for socialization and opportunity.

Starting from the 1970s, with the approval of Law 180/1978, the urban dimension acquired an unprecedented role in the history of psychiatry. This represented a shift in scale – from architecture designed as a mechanism of containment and treatment to the city itself as an inclusive and therapeutic space, capable of responding to people’s needs in ways that respect and enhance their humanity. An *urban dimension of care* which, in its dynamic and transformative nature, also restores those factors that, according to Basaglia, are fundamental human rights: *planning, perspective, and the possibility of a future*.

*A city that cares* (Gallio & Cogliati Dezza, 2018) nevertheless presupposes another concept – that of urban proximity. This is understood not only as the condition of being physically close in space, but rather, as “a feeling derived from the awareness of sharing something with someone” (Manzini, 2015, p. 9), and therefore as a sense of human closeness, a factor that can foster greater social cohesion. This concept of proximity gains even greater value when associated with a collective recognition and shared awareness of the tangible and intangible values that characterize urban contexts. When this occurs, collective dynamics of care can emerge, drawing not so much on the sharing of services or products, but on the generative value of cultural heritage itself (Saporito & Ciaffi, 2022). This absence of a merely utilitarian dimension is made explicit in the English definition of *heritage* as: “Inherited resources which people value for reasons beyond mere utility” (English Heritage, 2008).

According to UNESCO’s definition of the *Historic Urban Landscape*, the urban area is a “historic layering of cultural and natural values and attributes, extending beyond the notion of ‘historic centre’ or ‘ensemble’ to include the broader urban context and its geographical setting” (UNESCO, 2011, p. 4). It focuses on “the entire human environment with all of its tangible and intangible qualities. It seeks to increase the sustainability of planning and design interventions by taking into account the existing built environment, intangible heritage, cultural diversity, socio-economic and environmental factors along with local community values” (UNESCO, 2011, p. 4).

Together, these aspects shape the identity of cities and historic settlements, allowing us to consider urban heritage as a resource for well-being and social cohesion:

“Urban heritage is of vital importance for our cities – now and in the future. Tangible and intangible urban heritage are sources of social cohesion, factors of diversity and drivers of creativity, innovation and urban regeneration.” (UNESCO, 2013, p. 5)

In the Anglo-Saxon context, the concept of place-shaping refers to the sense of belonging associated with historic places that contributes to reducing social isolation. *Place-shaping* is a central practice in community development, linked to the creation of local belonging and empowerment. This approach emphasizes the importance of ensuring that local people have a voice, feel valued, and can express a shared sense of identity. Culture and heritage are recognized as fundamental drivers for generating this sense of belonging and social cohesion, countering phenomena of social isolation (Historic England, 2018).

Social isolation has now become a public health issue – and not only a mental health one. In August 2025, the World Health Organization (WHO) Commission on Social Connection released its global report revealing that one in six people worldwide is affected by loneliness, with significant impacts on health and well-being. Loneliness is estimated to be linked to about 100 deaths every hour – more than 871,000 deaths annually.

### **Healing Heritage: An Action-Research Project on Urban Memory and Well-being**

In Italy, a research project conducted between 2024 and 2025 by Arup, in collaboration with the associations *MinD Mad in Design* and *OrMe ETS Orti Metropolitan di Torino*, investigated the relationship between mental and physical health and environmental factors in the urban context.

The study, entitled *Regenerative Neighborhoods: Promoting Mental and Physical Health in the Urban Environment*, developed an analytical, qualitative, and quantitative framework applied to the case study of the city of Turin. Among the determinants of health, the research also identified cultural heritage and the presence of artistic and creative activities as key factors (Candiracci et al., 2025).

Within the same urban context of Turin, but with a specific focus on the relationship between urban heritage and collective well-being, the Healing Heritage action-research project was developed. Promoted by the Politecnico di Torino, Interuniversity Department of Regional and Urban Studies and Planning (Mezzalama, 2024), it has been active since 2023 and includes an annual workshop for university students and young adults interested in the intersections between cultural heritage and mental health.

Conceived as a participatory and inclusive design initiative, *Healing Heritage* experiments with actions and practices that enhance the role of cultural heritage in promoting mental well-being. The project recognizes the potential of involving young people in heritage-based activities as platforms for creative expression, social interaction, and the exploration of personal and collective narratives.

Through a multidisciplinary approach combining collaborative practices and psychological observation, *Healing Heritage* has revealed the psychological and social value of such practices by analysing group dynamics, interpersonal relationships, and subjective experiences. It also functions as an interdisciplinary educational space that connects students with the broader relationship between urban heritage and well-being, introducing innovative approaches, methodologies, and tools – including digital ones – for more democratic and inclusive processes of heritagization.

In collaboration with public institutions, third-sector organizations, and mental health services, *Healing Heritage* explores participatory processes for the collective construction of urban memory and its role in fostering social inclusion and collective well-being. It interprets the urban dimension of care through the lens of the *city as memory* (Comoli, 1983, p. 238), understood as a living palimpsest where the material traces of the city intertwine with collective memories and shared narratives of belonging and regeneration.

### Collective Urban Memory and Well-being in the Borgo San Paolo Neighborhood

In Turin, the *Healing Heritage* workshop focused on the Borgo San Paolo neighborhood, located in the western part of the city. It is one of Turin's historic working-class districts, developed during the city's industrialization phase, where the process of urban identity construction unfolded over the course of a century. Since the deindustrialization of the 1980s, the neighborhood has gradually found a new urban vocation through culturally driven processes of social regeneration.

Borgo San Paolo's industrial character consolidated between the two World Wars, turning it into one of the most significant popular districts of Turin and a symbol of the city's working-class pride, largely due to the establishment of several factories – among them, the Lancia automobile plant (image 1).

From the 1980s onwards, the progressive closure of industrial activities triggered major interventions in the redefinition of the street grid and land use, leading to the construction of residential complexes and new cultural centers, such as the Fondazione Merz and the Fondazione Sandretto Re Rebaudengo, aimed at fostering culture-based urban regeneration dynamics.

As a tangible reminder of the neighborhood's industrial identity – and particularly of the Lancia factory – a single architectural landmark remains: the Palazzo Uffici Lancia, built between 1953 and 1964 by architect Nino Rosani, with Gio Ponti and Alberto Rosselli.

At the beginning of the 21st century, the areas surrounding the former Lancia site were

redeveloped into a mixed residential and commercial zone, with new apartment buildings and commercial structures. The workshop focused especially on the area of today's Giardino Piredda, which replaced the former Lancia buildings (images 2, 3). The garden preserves only a faint memory of that industrial past, yet it has become a meaningful place where mental health, memory, and community care intersect. Located between Via Issiglio and Corso Rosselli, it faces two small psychiatric residential facilities whose users, supported by local mental health services, have been involved since 2019 in participatory activities promoted by *MinD Mad in Design* to encourage shared use of the garden.

Its name, assigned in 2008 to commemorate Filippo Piredda, a young man who lost his life in 1997 while defending a woman from gender-based violence, adds a second layer of collective memory to a place already marked by its industrial past. Subsequent initiatives – such as the 2021 awareness campaign on gender violence, the planting of thirty cherry trees in 2022, and the 2024 Collaboration Pact between the municipality and *MinD* – have contributed to defining *Giardino Piredda* as a potential space of inclusion and cultural regeneration: a place whose value for well-being is still not fully perceived by the community and therefore calls for shared narratives to make its meanings visible and collectively experienced.

Both the industrial and social memories embedded in this area remain largely imperceptible to newer residents, particularly young university students, while they persist vividly among older inhabitants who experienced the neighborhood's transformations firsthand. As they say, “under the soil of Giardino Piredda, there are still traces of the tires once produced by the factory.”

The workshop focused on innovative methods of collective construction of urban memory. Through the analysis of documentary and iconographic materials from local archives – including those of the CircoScrizione, the ANPI (National Association of Italian Partisans), the Monginevro Association, and the Polo del '900 Archives – participants were encouraged to view archives not merely as repositories of preservation but as active laboratories for the creation of shared narratives (image 4).

This process included co-creation and digital activities such as collaborative mapping and digital storytelling. The engagement of archives as cultural institutions to be valorized in the perspective of social inclusion aligns with the evidence produced by the *Archivi e Salute* project (Uboldi et al., 2025), particularly its experimentation with “memory boxes” in care settings and creative protocols of narrative activation.

More broadly, the workshop adopted co-creation methods and tools grounded in the awareness of the role that cultural experiences can play as forms of care within a biopsychosocial and salutogenic framework. This approach contributes to the development of tools and guidelines for assessing the social impact of culture, drawing on the growing body of evidence about the contribution of the arts and cultural participation to health and well-being (Fancourt & Finn, 2019), and on the principles of the Faro Convention (Council of Europe, 2005), which emphasizes the right of citizens to engage with cultural heritage as a resource for human development, social cohesion, and quality of life.

The Healing Heritage co-design workshop was structured in project teams led by a multidisciplinary faculty of designers, urban planners, heritage scholars, psychologists, and anthropologists, fostering an integrated perspective on the relationship between place, memory, and community well-being. Participants engaged in a range of activities aimed at increasing awareness and reflection on the historical context and urban memory, and at reframing its narrative through digital and participatory tools.

The teams experimented with innovative methodologies for analyzing cultural heritage and historicized environments, mediating between analogue and digital dimensions through collaborative mapping and visualization platforms. They also met with elderly residents as bearers of local memory (image 5), conducted site explorations in the form of “treasure

hunts” to rediscover hidden narratives, and developed digital storytelling outputs using the *StoryMap* application (image 6).

The methodology combined individual and collective actions, valuing both personal experiences – including those of young patients – and shared outcomes. This perspective highlights the importance of recognizing and celebrating diverse individual narratives while acknowledging that collective meaning emerges from their interaction. Digital tools played a crucial role in synthesizing these contributions, shaping the *StoryMap* as a product of collective reflection.

In this sense, *Healing Heritage* underscores the potential of urban cultural heritage as a medium for care, connection, and intergenerational dialogue, demonstrating how participatory and heritage-led digital practices can foster belonging, inclusion, and community well-being through the reactivation of urban memory.

## references

Basaglia, F. (2005). *L'utopia della realtà*. Torino: Einaudi.

Candiracci, S., Sala, G., & Spadafora, M. (2025). *Regenerative neighborhoods: Promoting mental and physical health in the urban environment* [Internal report].

Comoli Mandracci, V. (1983). *Torino*. Roma–Bari: Laterza.

Council of Europe. (2005). *Framework Convention on the Value of Cultural Heritage for Society (Faro Convention)*. Strasbourg: Council of Europe.

English Heritage. (2008). *Conservation principles, policies and guidance for the sustainable management of the historic environment*. London: English Heritage.

European Forum for Urban Security (EFUS). (2025). *Security, democracy and cities manifesto: Recommendations on mental health*. Paris: EFUS. [https://efus.eu/wp-content/uploads/2025/01/Efus\\_recommendations\\_MENTAL-HEALTH\\_Eng.pdf](https://efus.eu/wp-content/uploads/2025/01/Efus_recommendations_MENTAL-HEALTH_Eng.pdf)

Fancourt, D., & Finn, S. (2020). *What is the evidence on the role of the arts in improving health and well-being? A scoping review*. Copenhagen: World Health Organization, Regional Office for Europe.

Gallo, G., & Cogliati Dezza, M. G. (2018). *La città che cura. Microaree e periferie della salute*. Merano: Alpha Beta Verlag.

Historic England. (2018). *Wellbeing and the historic environment*. London: Historic England.

Manzini, E. (2021). *Abitare la prossimità: Idee per la città dei 15 minuti*. Milano: EGEA.

Mezzalama, G. (2024). *Healing Heritage. Patrimonio culturale e benessere: Esperienze di ricerca tra architettura, città e salute mentale*. Pisa: ETS.

Saporito, E., & Ciaffi, D. (2022). Il diritto alla cura dei beni comuni come palestra di democrazia. *Sociologia urbana e rurale*, 44(127), 39–51.

Uboldi, S., Iannacci, L., Menon, V., Bortolotti, A., Candeloro, G., Crociata, A. & Sacco, P. L. (2025). Archives and health program for dementia: A pilot study of a non-pharmacological creative arts-based intervention protocol. *Archives of Gerontology and Geriatrics Plus*, 100199. <https://doi.org/10.1016/j.aggp.2025.100199>

UNESCO. (2011). *Recommendation on the historic urban landscape*. Paris: UNESCO.

UNESCO. (2013). *New life for historic cities: The historic urban landscape approach explained*. Paris: UNESCO World Heritage Centre.



**image 1**

Workers leaving the Lancia factory, circa 1958  
City of Turin Archives.



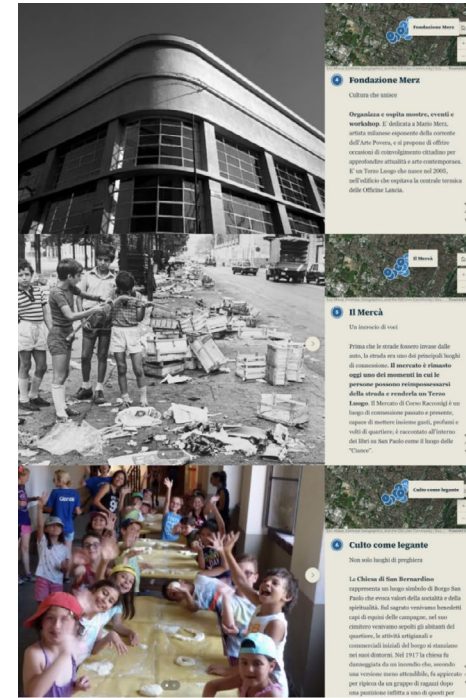
***image 2***

Lancia factories in 1962.  
City of Turin Archives.



***image 3***

Aerial view of Giardino Piredda public park, 2018.



**image 4**

A workshop session during the activity “La mia Scatola della Memoria” at the Polo del ‘900 Archives  
Credit: Alberto Costa.

**image 5**

A moment from the co-mapping session at Cumiana15, former Lancia factory.  
Credits: Alberto Costa.

**image 6**

Frames from the digital narrative created by the participants using StoryMaps, focusing on sites of urban memory in the Borgo San Paolo neighborhood.



## **authors' biographies**

ELENA BELLINI. Architect, PhD, Research Fellow and Adjunct Professor at the Department of Architecture, University of Florence. Her doctoral thesis on autism-friendly and sensory design won the 2018 FUP award. She's co-founder, co-CEO and head of R&D of DU IT s.r.l. Her main fields of research and expertise are inclusive and sensory design in healthcare and learning environments, especially relating to frailties and disabilities. Member of TESIS research center and SITdA.

FEDERICA BETTARELLO. Engineer with a PhD in Engineering Sciences. He is a skilled acoustics technician and a research fellow at the Department of Engineering of the University of Trieste (UniTS). His scientific work focuses on architectural and environmental acoustics. He has contributed to the European Inter-reg projects Senshome and Besenshome, handling aspects related to acoustic comfort.

MARCO CANIATO. Prof. Dr. Marco Caniato is professor of Building Physics and Room and Psychoacoustics at the University of Applied Science of Stuttgart (HFT). His research focuses on indoor comfort, sustainable materials and inclusive design for neurodiverse users. He has published over 120 scientific works on building physics, acoustics and perception.

PAOLO DEGIOVANNI. Biologist and environmental educator, has been working at MUSE since 2013 as a museum educator for schools and the general public. Since 2021, he has been involved in Accessibility and Inclusion, developing educational projects for various types of disabilities, as well as initiatives in intercultural education and social welfare.

GIULIA D'ARGENIO. Psychologist, PhD in Neuroscience and Cognitive Sciences (University of Trieste, 2022). Researcher at Progettoautismo FVG and adjunct professor of Psychobiology and Physiological Psychology in the Bachelor's degree program in Motor Sciences (University of Udine-UniUD).

MARTINA DI PRISCO. PhD in Architecture from the University of Trieste (UniTS), with a thesis on architectural spaces for mental health (2023). Architect specialized in interiors, museum layouts, and graphic design. She participated in the SENSHome co-design workshop and is currently a research fellow on the BeSENSHome project, developing inclusive environments for neurodivergent individuals.

PATRIZIA FAMÀ. She has a degree in Natural Sciences and a PhD in Algal Biology. After completing her PhD, she got a post-doctoral position at the University of Geneva and collaborated with institutions such as the University of New South Wales. Since 2009, she has been at MUSE where she started as a scientific curator. She has progressively taken on strategic leadership positions: first as Head of Scientific and Cultural Mediation and now as Director of the Public Programmes Office.

ANDREA GASPARELLA. Full Professor of Building Physics and Energy Systems at the Free University of Bolzano (UniBZ), where he is Dean of Engineering and founder of the Building Physics Research Group. President of IBPSA-Italy, he leads research on energy optimisation, indoor quality and simulation, incl. SENSHome and BeSENSHome projects for neurodivergent comfort.

KATIE GAUDION. Design consultant and researcher at the Helen Hamlyn Centre for Design (Royal College of Art-RCA) and Design Associate at Heart N Soul. She works on projects that involve neurodivergent people to co-create better spaces- from homes and hospitals to gardens and universities- using inclusive design through meaningful collaboration.

EVIE JEFFREYS. Access Advisor at Wellcome Collection. She was previously Communications Manager at Heart n Soul at The Hub, a two year research residency at Wellcome, after working with Heart n Soul for 2 years. She started her career at the British Library, where she led media campaigns promoting their public programme for 5 years.

JEMMA JONES. Senior Acoustic Consultant in Arup's Acoustics team specialising in inclusive design and aural diversity. Her work focuses on leveraging data to inform the design of sound environments that can better serve diverse communities.

DANIELA KRAINER. Senior Researcher and Lecturer at Carinthia University of Applied Sciences (CUAS). As occupational therapist and medical engineer, she focuses on digitalization, health, inclusion, and care. She co-leads the research unit ENABLE and co-chairs the ethics board.

LAURA-NADINE KROLL. Junior Researcher at the ENABLE Research Unit at CUAS (Carinthia University of Applied Sciences). Holding a Master's degree in Health Care & IT, she focuses on assistive technologies, user experience, and using technology to tackle inclusion and health challenges. She has expertise in participatory research and a human-centered design approach.

ALESSANDRO LEONELLI. Graduated in Architecture from the University of Florence, he has been part of a research group on inclusive living at the same university since 2025. He collaborates with DU IT S.r.l., working on architecture and the design of multisensory environments for schools and hospitals, integrating expertise in play studies, music, and technology.

ARIANNA MARZI. Postdoctoral researcher in Building Physics at the Free University of Bolzano (UniBZ), expert in acoustics and indoor comfort for neurodivergent people. Since 2020, she works on SENSHome and BeSENSHome projects. In 2025 earned a PhD on environmental stressors. Her research blends technical expertise and inclusive design for well-being through evidence-based indoor comfort strategies.

GIULIA MEZZALAMA. Senior Assistant Professor of History of Architecture at the Interuniversity Department of Regional and Urban Studies and Planning, Politecnico di Torino (Italy). Her research explores the role of cultural heritage in social innovation processes. Co-founder of the MinD Mad in Design Association, she is Deputy Director of the Executive Master "Culture and Health" promoted by the Cultural Welfare Centre, an interdisciplinary Italian center on expertise on Culture and Health.

MAGDA MOSTAFA. Founding Partner and Principal of StudioTM, a design consultancy based in Dubai specialising in Autism and Neuro-Inclusive Design, Professor of Design at the American University in Cairo. She is the author of the ASPECTSS® Design Index, the world's first research-based design framework for autism. Her work has been presented globally and was most recently exhibited at the 2021 and 2023 Venice Architecture Biennales.

IVAN MUSCOLINO. Architect who graduated from IUAV in Venice, tries to translate space into a sensory experience: through light, materials and proportions, he creates interiors that reflect identity, harmony and well-being. He works as a freelancer while he has been collaborating with MUSE since 2019.

MEI-YEE MAN ORAM. Mei is the Access and Inclusive Environments Lead at Arup. For over 20 years, Mei has contributed to designing the built environment to offer more equitable experiences for more people, considering intersectionality, and the interface between people, spaces and technology.

DAVID OWEN. Associate Director in Arup's Acoustics team, specialising in the assessment of noise and its effect on human experience.

VALENTINA PASSARELLA. Communication Manager at Eureka System, she coordinates corporate image and contributes to R&D and EU-funded projects through dissemination, UX/UI design, and stakeholder engagement. With a background in the humanities, she works to bring people closer to cutting-edge technologies,

SUCHI PRIYADARSHANI. Architect and PhD in Sustainable Technologies from the Indian Institute of Science (IISc), with research on indoor quality, sustainable materials and inclusive design. Awarded for her thesis on mine rehabilitation and studies on humidity and health. At the Free University of Bolzano (UniBZ), she works in the Building Physics group on BeSENShome project.

MARCO RAFFAEL. Full Stack Developer at Eureka System, he possesses several years of expertise in various programming languages, stacks, and frameworks. He is also knowledgeable in data collection and visualisation systems, distributed edge computing, and microservices infrastructures.

ANNA RESCH. Psychologist and Junior Researcher at the Carinthian University of Applied Sciences (CUAS) at the research group ENABLE. She focuses on participatory research health promotion and inclusive solutions to address health-related challenges.

MASSIMO ROSSETTI. Architect, PhD, Associate Professor in Technological and Environmental Design of Architecture. He carries out research on technology transfer in the construction sector, energy-efficient building refurbishment, and inclusive environments for people with disabilities in schools.

TOAR SADIA. Senior Inclusive Environments Consultant in Buro Happold, a global multi-disciplinary engineering consulting practice, and a lecturer and module lead on Designing Inclusive Places at the Bartlett in University College London. Toar has an MSc in Health, Wellbeing and Sustainable Buildings from UCL and is a registered architect in the USA. Toar's research on restorative spaces has contributed to BSI's PAS 6463 "Design for the Mind: Neurodiversity and the Built Environment - Guide".

ROMANA SCANDOLARI. Paleontologist, served for 20 years as Curator of the Museum of Pile Dwellings at Lake Ledro. In 2020, she joined the MUSE Audience Development team and, since 2022, has been coordinating the Accessibility and Inclusion Program, focusing specifically on cognitive and intellectual-relational accessibility.

GIUSEPPINA SCAVUZZO. Architect and PhD in Architectural Composition from IUAV University of Venice, she is a full professor of architectural and urban composition at the University of Trieste (UniTS), where she also serves as coordinator of the Master's degree program in Architecture. Among her publications are "Il parco della guarigione infinita", (2020) and "SENShome: Architecture and Atypical Sensitivities" (2023).

AGATA TONETTI. Architect and PhD candidate in Technological and Environmental Design of Architecture. She carries research at Università Iuav di Venezia in collaboration with companies and public authorities. Her work focuses on building refurbishment, environments for vulnerable people, and educational and museum spaces.

CHRIS WATKINS. Senior Consultant in Arup's Access and Inclusive Environments team. He works across the built environment to create inclusive spaces, specialising in public realm, commercial, and education projects that support the needs of marginalised communities, including disabled users.

LUKAS WOHOFSKY. Researcher and lecturer at Carinthia University of Applied Sciences (CUAS), department of healthcare and nursing, and co-lead of the research unit ENABLE. His research focuses on digitalization in healthcare and assistive technologies, using participatory research approaches.

