

ARCHITECTURE
AND AUTISM.
SENSORY
PERCEPTION
AND
INDEPENDENT
LIVING

PROCEEDINGS OF THE INTERNATIONAL WORKSHOP
TRIESTE, 20th APRIL 2021



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SENSORY PERCEPTION AND INDEPENDENT LIVING
International workshop
Trieste, 20th April 2021

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HOME

<i>workshop programme</i>	11
ARCHITECTURE AND AUTISM. A PROMISING RELATIONSHIP Giuseppina Scavuzzo	15
RECENT ADVANCES ON INDOOR COMFORT FOR AUTISTIC INDIVIDUALS Marco Caniato	23
LIVING ENVIRONMENTS AND AUTISM: DESIGN ASPECTS IN LITERATURE AND GUIDELINES Anna Dordolin	29
LIVING ENVIRONMENTS AND AUTISM: DESIGN ASPECTS IN ARCHITECTURAL PROJECTS Paola Limoncin	39
LIVING ENVIRONMENTS AND AUTISM: ACOUSTIC ASPECTS IN BUILDINGS Federica Bettarello	49
A FRAMEWORK FOR JUSTICE IN DESIGN PRACTICE Matteo Bianchin, Ann Heylighen	55
PARTICIPATION OF USERS IN RESEARCH: HUMAN-CENTRED DESIGN IN THE PROJECT SENSHOME Lukas Wohofsky, Sandra Lisa Lattacher, Daniela Krainer, Philip Scharf, Sascha Fink	63
AUTISM SPECTRUM DISORDER: BUILDING REQUIREMENTS ON EVIDENCE-BASED RESEARCH AND ITALIAN FACILITIES Francesca Giofrè	71
THE PICTOGRAM HOUSE Javier Sánchez Merina	81
THE ROLE OF THE BUILT ENVIRONMENT IN EXPERIENCES OF INDEPENDENT LIVING ON THE SPECTRUM Phuong Lan Nguyen, Viviana d'Auria, Ann Heylighen	89
<i>authors short bio</i>	99

ARCHITECTURE AND AUTISM
SENSORY PERCEPTION AND INDEPENDENT LIVING

International workshop
Trieste, 20th April 2021

in the frame of
Interreg V-A Italy-Austria 2014-2020
<https://senshome.projects.unibz.it/>

9:30 Giuseppina Scavuzzo (University of Trieste)
WELCOME AND INTRODUCTION

9:45 Marco Caniato (Free University of Bozen-Bolzano)
RECENT ADVANCES ON INDOOR COMFORT FOR IMPAIRED INDIVIDUALS: THE SENSHOME PROJECT

SESSION 1 – DESIGN PROCESSES: THE ISSUE OF INCLUSIVITY

10:00 Ann Heylighen (KU Leuven)
BEYOND PREVAILING WAYS OF UNDERSTANDING AND DESIGNING SPACE: LEARNING FROM THE AUTISM SPECTRUM

10:30 Federica Bettarello, Anna Dordolin, Paola Limoncin (University of Trieste)
CURRENT STATUS OF LIVING ENVIRONMENTS FOR AUTISTIC PEOPLE: THE SIGNIFICANT ASPECTS OF DESIGN

11:00-11:15 – COFFEE BREAK

11:15 Matteo Bianchin (University of Milano-Bicocca)
DESIGN JUSTICE: DELIBERATIVE TOOLS FOR INCLUSIVE DESIGN PRACTICE

11:45 Philip Scharf (Carinthia University of Applied Sciences)
PARTICIPATION OF USERS IN RESEARCH: HUMAN-CENTRED DESIGN IN THE PROJECT SENSHOME

12:15 – DISCUSSION AND OPEN QUESTIONS
send questions to senshome@units.it

13:00-14:30 – LUNCH BREAK

SESSION 2 – DESIGN PRACTICES: INTEGRATING SENSORY PERCEPTION WITH INDEPENDENT LIVING

14:30 Francesca Giofrè (Sapienza University of Rome)

AUTISM SPECTRUM DISORDERS: BUILDINGS REQUIREMENTS ON EVIDENCED BASED RESEARCH AND ITALIAN CASE STUDIES

15:00 Javier Sánchez Merina (University of Alicante)

THE PICTOGRAM HOUSE

15:30 Phuong Lan Nguyen (KU Leuven)

DETAIL MATTERS: EXPLORING SENSORY PREFERENCES IN HOUSING DESIGN FOR AUTISTIC PEOPLE

16:00 Anna Dordolin, Paola Limoncin (University of Trieste)

SENSHOME STRATEGIC APPROACH FOR A HOUSE “AS NORMAL AS POSSIBLE, AS SPECIAL AS NECESSARY”

16:30 – DISCUSSION AND OPEN QUESTIONS

send questions to senshome@units.it

17:00 – CONCLUSION AND GREETINGS

abstract

This paper reports on the opening intervention of the Workshop: the title, objectives and structure are explained. The study day was proposed as a multidisciplinary comparison of the relationship between architecture and autism. The starting assumption was that this is not merely a relationship necessary to improve the living conditions of autistic people and their families, but also potentially useful to broaden the possibilities and viewpoints of architecture rather than limiting them. Some theoretical references are presented to support this hypothesis, which could guide the new technical possibilities which engineering and technology can make practicable to enrich the sensitive responsiveness of architecture.

keywords

SENShome; Autism; Plurality; Architecture; Otherness.

As the title of the workshop states, the theme proposed by the study day was not the one most frequently dealt with in manuals and guidelines of “architecture for autism” – suffice to mention the famous system of design criteria ASPECTSS* Architecture for Autism, by Magda Moustafa, and international reference to autism-tailored design – but to the relationship between architecture and autism. The aim of the title is to focus reflection on the desirability of establishing a relationship between architecture and autism, something which is not only necessary but could also broaden the possibilities and viewpoints of architecture rather than limiting them. Adopting this viewpoint means re-discussing widely held beliefs and conventions. For this reason, we welcome, and use as our starting point, the provocative assumption of the autism activist and theorist Damian Milton that autism is “Nature’s answer to over-conformity”. This is a statement linked to Milton’s criticism of those who consider compliance with appropriate behaviour and adaptation to the needs of the non-autistic world, the goal to be targeted when one thinks of – and thus plans – the life of autistic people, instead of opening up to an authentic reciprocal exchange between neurodiversity and neurotypicity. If we adopt the perspective of this exchange, designing for alternative models of the mind and non-prevalent sensory perceptions, this can lead architecture to a rethinking of ways of anticipating future realities, beginning from known models and experiences.

For this reason, the workshop linked a Sensory Perception survey to Independent Living, which is the objective pursued by the SENShome project itself, within which this discussion day was organized, as explained in the paper by Marco Caniato of the Free University of Bozen/Bolzano, Lead Partner of the project.

Planning living usually involves referring to habits, in Italian the two words, ‘abitare’ – to live –

and 'abitudine' – habit – have, in fact, the same root. Investigating a complex relationship with neurodiversity can convince architecture to question itself, as it did in the most fruitful moments of its history, about its own responsibility towards the other. This also means openness to "the otherness of the future", as Jacques Derrida wrote; the otherness of forms and ways of living that we are not yet familiar with: "[...] the opening to the other and, thus, to the future, to the otherness that cannot be anticipated" (Derrida, 1992, p. 23), by abandoning habits and certainties.

Another philosopher, Hannah Arendt, used the metaphor of a table – a furniture item, among other things, redesigned within the SENSHome project – which can be read, as was done recently (OASE, 2020), as an appeal to architecture to a responsibility towards otherness, understood in this case as a plurality of many kinds, all different from one another.

To describe the physical world we all share, Arendt wrote: "To live in the world means essentially that a world of things is between those who have it in common, as a table is located between those who sit around it. [...] The world, like every in-between, relates and separates men at the same time, it connects a plurality of people while simultaneously it enables plurality" (Arendt, 1958, p. 52).

This image was considered illuminating to investigate the sense of thinking about, designing and building works of architecture as part of that common world which connects and separates them. A useful metaphor to define the political, social and cultural roles of architecture. For Arendt, the table suggested an idea of the plurality of inhabitants in the world and the reality of the public realm that relies on the simultaneous presence of innumerable perspectives and aspects. One could call it diversity. "Being seen and being heard by others derive their significance from the fact that everybody sees and hears from a different position." [...] "Only where things can be seen by many in a variety of aspects without changing their identity, so that those who are gathered around them know the see sameness in utter diversity, can worldly reality truly and reliably appear." (Arendt, 1958, p. 57) Differences of position and variety of perspectives are what guarantee the reality of a common world.

Since the 1960s, architecture historian Kenneth Frampton has referred to 'The Human Condition' of Arendt to define the ability of architecture to represent a collective value (Frampton, 1969), to the extent that it guarantees a plurality of perspectives without nullifying diversity.

The world of autism, in which the issue of interaction and relationship is addressed day after day, is a potentially extraordinary opportunity to measure and exercise architecture's capacity to connect with the other, preserving diversity and avoiding compliance with the habits of the neurotypicals, as Milton requested.

In 'A Genealogy of Modern Architecture: Comparative Critical Analysis of Built Form', from 2015, Frampton returned, once again, to a reading of Arendt's text. Here the historian bases his critical analysis of architecture on the distinction between public and private, which the philosopher defines in spatial and architectural terms: the private person needs to be protected from the public world and is surrounded by "four walls". These walls – and of course the thresholds, doors and openings which together safeguard the private sector – constitute a spatial device which mediates between the public and private sectors. It is this intermediate space which brings to life the physical experience of the transition to the public scene or vice versa of withdrawing into the private one, offering "stabilizing protection." Thanks to this mediation/protection, the public sphere can become a social space between different pluralities.

For many autistic people, as we shall see in some of the contributions gathered here, the spaces of threshold, transition, and therefore mediation, are essential to prepare for an unfamiliar environment and situation.

During the Covid-19 pandemic, the mediation role of architecture may have become more

evident to everyone.

Evidence of this – arguably rather exaggerated – is that during lockdown, the International Committee for Documentation and Conservation of Buildings, Sites and Neighbourhoods of the Modern Movement, known as DoCoMoMo, posted this statement on social media: “So far, the best vaccine to prevent contamination has been made by architects: the house.”(1)

Prevention of the spread of the virus imposed on everyone a series of procedures related to the passage between interior private spaces and exterior or public spaces: the removal and putting on of masks, leaving used shoes and clothes at the entrance to the house outside, disinfecting the hands on entering a public or communal space. These sequences of actions re-proposed the intense experience of the threshold limit: crossing a limit through time slowed by a succession of gestures.

The spread of the virus also made us discover everyone to be fragile, exposed, potentially sickly, forcing us to slow the race to always be high-performance.

This experience can arguably help us to better understand the position of people who, regardless of the spread of a virus, every day experience an awareness of the limits on performance, sociality as a need not to be taken for granted and how to conquer it, hypersensitivity to the requirements of safety and comfort, and consequently, the need for spaces and times expanded in the passage between private and public, interior and exterior, intimate and collective.

This shared experience can, to some extent, help to build that empathy which, according to Milton, can fill the lack of mutual understanding of perceptions between autistic and non-autistic people, a lack which allows one group of people to consider themselves normal, while considering the other group abnormal, on the basis of a social deficit (Milton, 2012).

A kind of architecture as a part of a world in which differences are related without losing one's own identity, can move from a threshold idea which, from a space in which exterior and interior co-imply by putting something together, also becomes a place in which neurodiversity and neurotypicity, like different perspectives of those at the same table, co-imply pooling the collective experience of the tenuous limits of being “healthy”.

The study day was divided into two sessions. The first, entitled ‘Design Processes: the Issue of Inclusion’, sought to solicit some interdisciplinary reflections on the theme of inclusion as a non-obvious and problematic issue but as a concept to be handled with caution if one wishes to avoid the risk of falling into the schemes of standardization and if one intends, instead, to open up to a true encounter with otherness, to that reciprocal exchange between neurodiversity and neurotypicity which Damian Milton requested.

The second session, entitled ‘Design Practices: Integrating Sensory Perception with Independent Living’, proposed and compared practices which are also profoundly different from Participatory Design, as well as some project experiences which share with the SENSHome project the objective of favouring and supporting the autonomous living of autistic people by working on specific skills rather than on alleged deficits.

The challenge of the SENSHome project is to allow degrees of customization, a tuning sensitive to the user's needs, in vigilant safety, but without making the securitarian logic become dominant, inhospitable to the autistic person and his/her family alike.

Here comes into play what environmental psychologist Robert Sommer has called “hard architecture,” buildings and furnishings that aim to stand up to the user in order to preserve his/her safety, but which, in this way, cannot be modified by the user, are never marked by his/her imprint: “Hard architecture is designed to be strong and resistant to human imprint. To the inhabitants it seems impervious, impersonal and inorganic” (Sommer, 1974, p. 2)

To face the challenge of “soft architecture”, as Sommer calls it, as safe as possible but not impersonal, the multidisciplinary contribution can be decisive.

This is what was sought at the conference, convening the humanistic disciplines – which ask architecture questions and solicitations, such as those seen before, inspired by philosophers – engineering and technology, which enable new ways to enrich the sensitive responsiveness of architecture.

I would like to close with a final question, which may appear a formal or ritual clarification, but instead has a relevance that does not differ from the themes of the study day.

During the Workshop, which was attended by PhD students of the Inter-University Research Doctorate between the University of Trieste and the University of Udine in Environmental Civil Engineering and Architecture, and involved Italian and European scholars and architects, some comments were received regarding the terms used by the speakers. The question of the terms chosen to define people “with autism”, “in the autistic spectrum” or “autistic”, is complex and interesting since it reflects the plurality of perspectives and the impossible-to-simplify elaboration of awareness by the people involved in autism, with various roles. In the various papers we find the lexical expressions that each author has decided to adopt and the definition Autism Spectrum Disorder, abbreviated as ASD – used by two international psychiatric classification systems: the Diagnostic and Statistical Manual of Mental Disorders, DSM, and the International Classification of Diseases, ICD – however, we should like to point out here that some people who were streaming wrote that they would prefer to use the formula “Autism Spectrum Conditions”, to avoid the perceived negativity associated with the word “disorder”. Personally, I share this view, and I trust that the many opinions gathered here will contribute to a better understanding of Autism Spectrum Conditions and how architecture can enrich itself in embracing them.

notes

(1) DoCoMoMo International [Facebook page]. (April 15, 2020). Sites and Neighbourhoods of the Modern Movement. Retrieved from <https://www.facebook.com/docomomointernational/photos/>

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(image 1) 'Próximamente', Uruguay pavilion exhibition at the Biennale Architettura, Venice 2021, 'How Will We Live Together?'. "Throughout history, tables have worked as storytelling devices, becoming a powerful communicational emblem in which the public and the private, the domestic and the territorial can live together".

(image 2) 'Border Ecologies and the Gaza Strip', Foundation for Achieving Seamless Territory (FAST) exhibition (Central pavilion) at the Biennale Architettura, Venice 2021, 'How Will We Live Together?'. The installation tells ten stories that highlight daily life in a small farm in Kutzaz using a table as a place where many different aspects come into play in the dialogue on the border.





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The International Workshop 'Architecture and Autism. Sensory Perception and Independent Living' was proposed as a multidisciplinary discussion on the relationship between architecture and autism. The underlying hypothesis is that this is not only a necessary relationship to improve the living conditions of autistic people and their families, but also potentially useful to expand the possibilities and views of architecture rather than limiting them.

Designing for alternative models of mind and non-prevalent sensory perceptions can lead architecture to rethink ways of prefiguring future realities by moving from known patterns and experiences.

The Workshop was divided into two sessions. The first session, 'Design Processes: the Issue of Inclusion', aimed to raise some interdisciplinary reflections on the topic of inclusion as a non-obvious but problematic issue. The second session, 'Design Practices: Integrating Sensory Perception with Independent Living', proposed and compared some design practices and experiences.