



CONNECTIVITY
and **CREATIVITY**
in times of **CONFLICT**

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CONNECTIVITY
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Track 3

Handle with care/
inclusivity

Handle with care/inclusivity

Adaptation of cultural heritage



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To *Handle with Care* in times of conflict, requires connectivity and creativity. The track Handle with Care/Inclusivity connects the fields of Inclusive Design, Design for Health and Well-being, and Cultural Heritage. This calls for creativity and a strong common starting point.

'Care' is a broad term with overlapping and diverging definitions used in different fields (Mol, Moser, and Pols, 2010). Finding its origin in nursing theory, its study soon expanded towards sociology, anthropology, geography, philosophy, history, and conservation. Design sciences and heritage studies are challenged to merge and discuss insights gained in these fields into solutions that are inclusive, empathic, and attending to individuals', communities', objects', and buildings' particularities. The papers presented in two parallel tracks "Handle with Care" and "Handle with Care for Heritage and Conservation" cover a broad range of present and future challenges related to care in design and care for cultural heritage.

'Care in design' can be approached as bi- or even omnidirectional interactions with attention for reciprocity, between living beings -human and non-human- and technology, including objects, interiors and buildings. Both design as an outcome and design as a process are addressed in this respect. Design research with a focus on care aims at practice and policy in order to integrate implicit and explicit care into people's everyday life and create future proof environments. This is reflected in a broad variety of contributions related to design of and for technology, products, services, interiors, and buildings with focuses shifting from designed outcomes to design processes.

The section **Design for/as Communication** unravels the mutual connection between design and communication. Digital tools and design toolkits can enhance communication on sensitive topics. At the same time communication can be designed as a way of care.

Design for Diverse Users raise awareness for the diversity in people we design for and the challenges they face. Several authors stress the importance of gender related issues in design. Others draw attention to specific groups such as refugees, homeless people, or students. All strive to make

design processes and outcomes more inclusive through an enhanced understanding of end-users' experiences, needs, and sensitivities.

The **Care(ful) spaces** sections discuss the role of the built environment, from urban, architectural, and interior perspectives. The papers combine insight into the impact of space and how it can be adapted, with theoretical and methodological reflections.

The section **Co-creating care(ful) design** focuses on a variety of design processes. By engaging end-users, often children, in the design process, authors aim to give voice to often unheard groups, empower them, and support (self-)acceptance.

Design(ers) & Learning unites papers on design education with a plea to educate designers about how to approach their daily design practice. Rethinking interactions between people, and between people and objects come to the fore.

The **Design & Theory** section sheds a light on how strong theoretical frameworks can open new perspectives on design outcomes and processes. The presented papers show how such frameworks add value to many of the topic mentioned in other sections.

Last but not least, the section **Design Ethos** foreground the importance of ethics in design. It draws attention to the responsibility of designers to work in a social, societal, and cultural respectful way. Only by doing so a caring design practice can be achieved.

'Care for Heritage and Conservation' is one of the most meaningful aspect of life that needs an approach 'Handle with Care'. Due to increasing pace of change, cultural heritage field in the past decade have invested on responding to conflicts, disasters and sustainability. The motto "management of change" and policies following it were drafted in a reactive way specific to each challenge. In due course, overarching concepts already fell short of fulfilling their mandate, in the face of pandemic, climate change, migration and wars. The heritage field is very much responsive to its context. A good reading of international policies will reflect the chang-

ing spirit of its time, moving from monuments protection on the losses of individual masterpieces to urban conservation following widespread destruction created by the world wars. The current global challenges, indispensable from the national boundaries, are forcing all fields of natural and cultural heritage to transform and adapt (Boccardi, 2015).

The section on **'Care for Heritage and Conservation'** aims to tackle the problem from an integrated point of view, acknowledging the fact that our natural environment, built environment and cultural inspirations and practices are forced to adapt to current and future global challenges. The key issue is how can heritage be the guiding resource in this transformation. Different research papers in this section, have addressed how creativity and scientific research can offer possible strategies on adaptation, learning from our heritage.

Inclusive Approaches to Intangible Cultural Heritage section explored envisioning design strategies for intangible cultural heritage activation; media art productions to create a bond between traditional arts and the younger generations; communication design tools and heritage contemporary enhancement as a resource for social changes, fostering diversity and inclusion.

Sustaining Traditional Crafts and Techniques section focused on material aspects of various cultural heritage ob-

jects, such as the affordances of design-led mediation towards sustaining an ancestral cycle of linen making; culture towards circularity; a design-led visual ethnography of traditional embroidery motifs.

Adaptation of the Built Environment section on one hand explored ways and which climate change and green infrastructure and on the hand how adaptive reuse can be instrumental.

The section on **Participation and Role of Communities** explored various ways of participation such as digital solutions for visitor participation in museums; looking participation at times of war; and role of communities in disasters.

The overview of papers in the sub-tracks 'Care in design' and 'Care for Heritage and Conservation' show how the two cover overarching topics and face similar challenges regardless of the different starting points and focusses. Whether we care for present or past buildings or objects, taking an inclusive approach is essential to realize societally relevant outcomes and processes.

This stance is not only reflected in the presented papers but also forms the common thread through the posters, workshops, and conversation groups that substantiate the 'Handle with Care/Inclusivity' track. A huge "thank you" to all contributors is well placed here.

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Human-space relationships as narrative processes for inclusivity

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Abstract

Inclusion is a broader term connected not only to race, origin, religion, and economic status but also to health status, physical and intellectual inequalities, and disabilities of any level. Nowadays, more than ever, it is fundamental to find a way to confront and overcome stigma-related problems, increase well-being and quality of life, and give voices to people living at society's margins. In addressing the human-space relationship as a narrative process, a research question emerges: What is the connection between the experience of space and Storytelling? To reply to this research question, the paper presents two action research projects which explore a narrative-based approach to the experience of spaces in the form of narrative-based processes for promoting inclusion and home-making dynamics. These two cases highlight how Spatial Design can support Storytelling while narrative can considerably benefit architectural understanding and perception of space. In particular, the first research-action explores how home-making processes enable people with dementia (PWD) to create and establish a sense of belonging in their living environment after relocating from their homes. These practices encompass the involvement of material possessions in the form of objects owning an intrinsic emotional value. The memories and emotions embedded in those treasured possessions bring along narratives and habits proper of each older adult, which promote belongingness and trust towards the new living context. Through individual memory and personal narratives, this in-field research aims to understand how PWD have manifested belonging and identity formation in the material and immaterial practices of their new "home" environments and, from this understanding, create a narrative of home-making practices. Similarly, the project ACTS - A Chance Through Sport experiments with the transformative power of stories considering the educational purposes of prison facilities and the power of imagination in shaping the function that sports and the space of physical activities can represent. During the project, practical strategies for rethinking stories in practice, in the form of collaborative storytelling activities, were designed to support the construction and reconstruction processes of individual and collective identities. The main aim was to challenge the ordinary representation of penal institutions, overcoming the common belief that sports activity in prison is merely a hobby whose potential is neutralised by the emphasis on crime and punishment. To

conclude, these two experiences demonstrate how experimenting with storytelling techniques, world-building practices, and home-making practices can underpin the design of inclusive spaces (physical, digital, virtual, or hybrid). As a result, we can create spaces that support social dialogue and collaboration, foster the reappropriation of places, and create a sense of belonging.

Author keywords

Spatial Design, Human-space relationship, Narrative Spaces, Narrative Change

Introduction

Inclusion is a broader term connected not only to race, origin, religion, and economic status but also to health status, physical and intellectual inequalities, and disabilities of any level. Nowadays, more than ever, it is fundamental to find a way to confront and overcome stigma-related problems, increase well-being and quality of life, and give voices to people living at society's margins. By definition, a stigma is a discrediting or disgraceful mark that distinguishes individuals from others and makes them undesirable, tainted, degraded, or inferior in the eyes of others (Wogen & Restrepo, 2020; Bos et al., 2013). Over time, the term stigma has come to be associated with a discredited state that causes individuals to be isolated from society. Therefore, inclusion also means the re-appropriation of spaces, and taking care not only of those who are excluded, disabled or on the margins of society, but also of the places and human needs that require spaces to be met, benefitting people in terms of their social, physical, and psychological well-being. Yi-Fu Tuan (1977, p.3) wrote: "Space is abstract. It lacks content; it is broad, open, and empty, inviting the imagination to fill it with substance and illusion. Place, by contrast, is the past and the present, stability and achievement..." "Space" and "place" are familiar words denoting common experiences. We live in space ... Place is security, space is freedom: we are attached to the one and long for the other. There is no place like home. What is home? It is the old homestead, the old neighborhood, hometown, or motherland ... Planners would like to evoke "a sense of place." ... Space and place are basic components of the lived world. When we think about them, however, they may assume unexpected meanings". Place, in fact, is more than just a location; it is a singular entity, a "particular ensemble" (Lukermann,



1964, p. 70), with a background and significance. People's experiences and goals are embodied in a place. Place is a reality that needs to be clarified and understood from the perspectives of the people who have given it meaning, in addition to being a fact that needs to be explained in the context of space as a whole. Moreover, a sense of place or experience consists of emotional bonds, values, meaning, symbols and stories attached to a place. A place is made up of intricate combinations of physical elements, the inhabitants of a location, tangible things, and elements like atmosphere, values, memories, history, and circumstances indicative of the place for the individual (Diener & Hagen, 2022; Breines et al., 2014; Gregory et al., 2011). These components' intricacy results in sentiments and emotions that constitute a person's "sense of place" (Gregory et al., 2011). Accordingly, the experience of places is defined by Yi-Fu Tuan (1977, p. 151) as "all the modes by which a person knows and constructs reality". In light of these premises, by employing narratives to evoke feelings, memories, participation, and action, Storytelling is a technique for conveying ideas, constructing realities and improving conversation among individuals. The portrayal of events is what narrative is, in general. We are also moving toward a situation in which storytelling goes beyond mere entertainment by acknowledging the narrative paradigm and designating humans as *homo narrans* (Fisher, 1989). The design discipline also acknowledges storytelling as having a place in the design process. The relationship between design and storytelling is founded on the capacity of narrative to transcend the functional, problem-solving side of the discipline and provide information that generates new meanings in the ongoing interaction between representation and interpretation. In this sense, designers working in the social space should experiment with storytelling and world-building practices to support social dialogue and collaboration and foster a reappropriation of public space. In addressing the human-space relationship as a narrative process, a research question emerges: What is the connection between the experience of Space and Storytelling?

A narrative-based approach to spaces: two research-action case studies

In order to reply to this research question, the paper presents two in-field research projects which explore a narrative-based approach to the experience of spaces in the form of narrative-based processes for promoting inclusion and home-making dynamics. These two cases highlight how Spatial Design can support Storytelling while narrative can considerably benefit architectural understanding and perception of space, supporting social dialogue, collaboration, and fostering the reappropriation of places.

Case study 1: space as an activator of dialogue and stories for promoting inclusion

The first case presented in this paper is part of a larger study on therapeutic environments for PWD conducted within *GRACE_Lab*, an experimental research laboratory involving designers and researchers from the *Department of Design (Politecnico di Milano)*, as well as therapists and medical professionals from *EQUA Cooperativa*, a Milan-based organisation active in dementia care. The goal of this ongoing research is to determine the aesthetic/functional identity of care environments to improve well-being and sense of belonging. We

explored how home-making processes and dynamics enable people with dementia (PWD) and their caregivers to create and establish a sense of belonging and a "sense of home" in their living environment after relocating from their homes. The sense of belonging, intrinsic to every individual, is mined in PWD, when they experience a transition from their home to a care facility, or generally, to a new living environment. Changes in the living environment typically result in bewilderment, irritation, and disorientation. *Piazza Grace*, a Dementia Village (DV) in Milan represented the pilot project: it encompasses 6 apartments, each having space for 2 people and outfitted with a bathroom, and a customizable sleeping area. The 6 units face out onto a communal kitchen and living room, a crucial area for planning social gatherings, and daily common activities. After relocating in the DV, PWD need to re-establish their "sense of home". A person's sense of belongingness is strongly correlated with their sense of well-being (*Ref removed*; Cooney, 2012; Falk et al., 2012; Giuliani, 2003), as home is a key location that can offer comfort, safety, and security. Elderly with dementia benefit from feeling at home because it promotes a sense of independence, self-assurance, and social integration (*Ref removed*; Meijering and Lager, 2014; Smith, 2009). When unrelated individuals live in a DV, home-making techniques play an important role to integrate, include and generate relations between the residents and the environment. In particular, home-making practices encompass the involvement of material possessions in the form of objects owning an intrinsic emotional value (Van Hoof et al., 2016). The material possessions brought along by PWD, after relocating to care environments, enable home-making dynamics that evoke memories and emotions. The ways that PWD make their homes, which may involve various material belongings, may reflect various facets of their complex identities, including their sexuality, heritage, families, connections, and spiritual beliefs (Pazhoothundathil & Bailey 2020). In a new care setting, the memories and emotions embedded in those treasured possessions bring along narratives and habits proper of each older adult, which promote a sense of belonging and trust towards the new living context. The ongoing research is focused particularly on the six private apartments and the communal kitchen. The research activities started in 2021, through semi-structured interviews, observations, and focus group activities through storytelling with guests and staff of the DV, in the period between April and October 2021. This project was approved by the ethical committee of the *Department of Design (Politecnico di Milano)*, and the internal ethical committee of *EQUA Cooperativa*. The researchers interviewed 8 elderly people with dementia and 4 people from the staff to collect information about the life histories, life experiences and home-making practices of older adults living in the DV. Participants in the study were questioned on things like: Did you carry any personal items to your new house? What belongings did you bring? What was the purpose of bringing these items with you? What connection do these goods have to you?

In fact, through individual memory and personal narratives, this research aimed to understand how PWD have manifested belonging and identity formation in the material and immaterial practices of their new "home" environments and, from this understanding, create a narrative of home-making practices. Information was also gathered through observation to provide a fuller insight of both the DV and of the inti-

mate and personal places used by older persons. The information revealed in interviews was contextualised with the use of observations of the physical setting of the care facility, the material items utilised by the older individuals, the ways the older adults interacted with various material belongings, and the activities of the older adults. A second phase encompassed focus group activities through storytelling with the participants. Researchers collected individual memories and personal narratives elicited by the material belongings. Most of the residents described their material belongings as cherished or treasured possessions, as they bring along memories, stories, and nostalgic feelings. According to the data gathered, there are 3 categories of cherished possessions: those connected to religion, those connected to past-life experiences, and those connected to memories of family members, including gifts, mementos, and photographs. Each of them elicits narratives, memories, shared habits, and activities. In the focus groups, those material objects were used to foster conversations, retrace shared habits and common cultural backgrounds. The older adults in this study interact with their possessions in various ways. Some of these items are prominently displayed, decorating the spaces. This enables older adults to manage their self-identity, self-esteem, social relations, and past memories reminiscence. Furthermore, personal narratives and memories generated from those possessions, were used to co-design the physical ambiance of the DV spaces, and to create shared daily activities to engage all residents, promoting a sense of belonging, community, and trust towards the new living context, fostering the creation of an inclusive community within the DV. Over time, focus groups have been repeated, every time new residents join the DV, as home-making is a continuous process involving adaptation and modification. As a result, narratives helped to shape and decorate spaces, supporting social dialogue, collaboration, and fostering the reappropriation of places.

Case study 2: a narrative-based approach to support the perception of space

Similarly, the research project *ACTS - A Chance Through Sport*, funded by the *Polisocial Award 2019*, experiments with the transformative power of stories considering the educational purposes of prison facilities (Bezzi & Oggioni, 2021) and the power of imagination in shaping the function that sports and the space of physical activities can represent. The project as a whole intervened in Milan detention institutions to investigate the function of sport in prison as a tool for education, training and social reintegration. Within the research, the theme of sport is addressed and declined according to a multidisciplinary approach, combining design, architecture and engineering skills. *ACTS* is a project in which a system of stakeholders consisting of universities, businesses and creative enterprises has allowed the creation of a virtuous system where different competencies - research, entrepreneurial, productive and creative - have led to the activation of a series of initiatives that are continuing beyond the starting funding. The *Il Casa di Reclusione Milano Bollate* (henceforth Bollate prison) represented the pilot project, which had kick-off during the Covid-2019 outbreak. The consequence was an alternation of activities carried out in blended and in-presence modes (regularly starting in 2021). The first activity was the phase of Listening to identify stakeholders' needs and opportunities through administering questionnaires and in-

terviews conducted with inmates and prison police for 22 hours of dialogue. The second pillar was the design of prison spaces on two levels: quantitative and qualitative. The former concerns the proportion between the number of people incarcerated and the available space. The latter concerns the appropriateness of the places and their uses, which is tackled by the project experimentations. Specifically, it is about the 'prison system' capacity to support the reconstruction of broken ties between offenders and the social body (Di Franco & Bozzuto, 2020). Then, experimental implementations were added in the common interior spaces and walking areas in the form of light and interstitial operations. Thus, concrete interventions were carried out to upgrade the prison spaces through sponsors of materials, innovative instrumentation, and cutting-edge technological products, followed by monitoring the physical activity of a sample of the prison population (inmates and prison officers). The activity tracking was conducted through diaries and wearable devices, allowing the researchers to read a discrepancy between actual and perceived activity performed. The last pillar of the research is Storytelling, in which we experimented with a narrative-based approach to promoting inclusion. During the project, practical strategies for rethinking stories in practice, in the form of collaborative storytelling activities, were designed to support the construction and reconstruction processes of individual and collective identities. The main aim was to challenge the ordinary representation of penal institutions, overcoming the common belief that sports activity in prison is merely a hobby whose potential is neutralised by the emphasis on crime and punishment. On the one hand, we experimented with the synergy between sports-related imagery and actual sports practice; and, on the other, with collaborative storytelling as a practice to support processes of individual identity construction and reappropriation of spaces. In the first phase (October 2020), 55 inmates voluntarily participated in an individual storytelling activity, creating 51 characters using a tool we developed in previous research (Mariani & Ciancia, 2019; Piredda et al., 2015). In the second phase (June 21, 2021-July 8, 2021), 5 inmates from the Third Ward and 7 from the Women's Ward participated in a collaborative storytelling activity to experiment with the integrated use of co-design processes and co-creation of narratives. This was followed (September 2021 - ongoing) by the design, production and multichannel distribution of audiovisual and multimedia content. The outputs of the storytelling activities are two, both presented at the Laboratorio Carcere exhibition, hosted in the *Project Room* of *PAC Milan* from October 9 to November 6, 2022: A documentary on the research project activity in its entirety with the purpose of dissemination of results (supported through a crowdfunding campaign on the *DONA Polimi* platform); A serial podcast with episodes written directly by incarcerated people during collaborative storytelling activities. In the project, the act of telling stories, whether about sports or not, serves as a tool for analysing reality and everyday life (inside and outside prison). It was obtained through an inclusive design process in which worldbuilding practice and narrative-based strategies demonstrate the ability to empower people, including marginalised groups. The space was used as a story idea generator in the first part of the co-design narrative process. In the collaborative storytelling workshop, the second and third meetings focused on creating a shared narrative world that accommodates all the created charac-

ters through storytelling and dialogue. We narrowed the topic to sports to explore the role of space devoted to physical activity in this fictional universe and the feelings connected to playing sports. Starting from the stories and characters written by workshop participants, we decided to co-design a podcast with the following aims: giving a voice to people whose rights have been suspended and providing those living outside of prison with a direct and authentic telling of experiences coming from the outskirts of society. We designed a podcast because listening without prejudice is the only way to understand situations. We wanted humanity and the relationships that emerge from sharing a space to do the talking. Using an audio medium allowed us to convey not only the stories of people, with their fears and hopes, but also an aural narrative of the space that could go beyond the classic genres of prison tales: critique, redemption, and jailbreak. The result is a narrative space where reality and fiction intertwine, offering people the unprecedented possibility of exploring alternative opportunities, roles, and identities to those usual and already given.

Final Discussion

It is possible to observe a strong emphasis on time, while the concept of space is frequently disregarded in discussing narrative from the perspective of its ontological elements.

In this regard, the work of Marie-Laure Ryan, Kenneth Foote, and Maoz Azaryahu, published in 2016, provides intriguing insights into the connection between narrative and space (2016). Their research identifies four typologies of textual space and questions how narrative and space can conflict (Ryan, 2021). These typologies are the spatial form of the text, the space it physically occupies, the spatial context of the text, and the mimetic space or space of the storyworld. The two final spaces are the most intriguing for considering the relationship between narrative and space and reflecting on the human-space relationships as narrative processes for inclusivity.

The text's physical backing is discussed in the third type of textual space, which is also referred to as the text's spatial context. The environment and architectural landscapes are essential in this context. They can provide the narrative experiences in a physical setting and create hooks to increase audience involvement, engagement, and immersion. This typology covers site-specific and location-based narratives that employ space as a medium and can be clustered into three major groups. The first category, referred to as "spatial annotation," includes all the initiatives encouraging individuals to wander the city in search of narrative content and experiences. The second category is mainly represented by location-based games, in which the real world serves as the playing field. In the final category, we can find the mobile narrative experience that emphasises the story rather than the experience itself or the game mechanics. Finally, the mimetic space, or the space of the storyworld, is the fourth type of narrative space. In this type of space, characters act and move in storyworlds inspired by space and architecture (Buchholz & Manfred, 2007). Addressed by several researchers

(Doležel, 2000; Doležel, 2019; Pavel, 1989; Wolf, 2012), fictional worlds are described as collective mental constructs (Ryan, 1991) that have semiotic meaning spheres (Boni, 2017) that viewers can investigate in their parts. According to this, fictional worlds emerge as accurate, maybe eternal and independent construction anchored in interpretive processes. The creation of storyworlds should include hooks or connections to the real world because stories require readers to mentally imitate the actions and movements of characters across the storyworld (Ryan et al., 2016, p. 4) which makes the fictional but shared mental environment seem realistic. In this sense, designers working in the social space should be experimenting with storytelling and world-building practices to support the experience of places (Tuan, 1977), fostering social dialogue, collaboration and the reappropriation of public space. The memory of events that have taken place can help people feel comfortable and diminish non-place feelings (Webber, 1964; Augè, 1995); their cultural and social specificities affect place as a process (Banerjee & Baer, 1984). In this respect, events can be real or fictional, both capable of effectively building a sense of belonging that derives from a familiarity with the stories that are set in the place to develop people's ties and attachment to their places, the so-called "sense of place" or "structure of feeling" (Agnew, 1987). The design of home-making dynamics can support storytelling, such as providing hints in the form of decorative elements, patterns, objects and paraphernalia shapes and decorations. In the same way, stories and memories can support the creation of spaces able to enhance a person's sense of belongingness. Referring to the first case study reported in this paper, the ability of persons with dementia to participate in worthwhile activities and build relationships with others contributes to a sense of home (van Zadelhoff et al., 2011, Norberg et al., 2015; Wada et al., 2020). The design of these activities can be supported by narratives, stories, and memories elicited by those physical elements, or cherished possessions which, for example, are brought by PWD in their living care environment. In contrast, stories can support the understanding of space and architecture, including not only visual, but also aural elements. Moreover, private and public spaces can be designed to support stories, offering in their architectural landscapes elements that may be used to hook story events. In light of such premises, the case studies presented demonstrate how a narrative-based approach can significantly improve and support understanding and perception of space (Case Study 2) while space itself can become an activator of dialogue and stories for promoting inclusion (Case Study 1), constructing knowledge settings that improve interactions, given that people use narratives to form and share their unique experiences (Jenkins, 2006).

To conclude, these two experiences demonstrate how experimenting with storytelling techniques, world-building practices, and home-making practices can underpin the design of inclusive spaces (physical, digital, virtual, or hybrid). As a result, we can create spaces that support social dialogue and collaboration, foster the reappropriation of places, and create a sense of belonging.

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The contributions were double blind reviewed in the tracks

- 1) Nature positive/Design for transformation,
- 2) Digital futures/Hybrid reality,
- 3) Handle with care/Inclusivity, and
- 4) PhD network.

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