Embracing Inclusion, Protection, And Empathic Resonance
Through Design, Architecture, And Art

Guest Editor:

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Industrial Designer MA

Yuka Takahashi is an industrial designer with a Master of Arts degree from Aalto University in Finland. Specialising in product, furniture, and spatial design, she is committed to sustainable design and engages in material experimentation. Yuka is also passionate about promoting design literacy through international workshops, seminars, and exhibitions focused on sustainable practices.

Her career began with a Bachelor of Arts in industrial design from Kobe Design University in Japan. She was the sole in-house industrial designer for a Japanese tool manufacturer, where she created a range of successful products launched before moving to Finland in 2002. In 2007, she co-founded HARNI-TAKAHASHI LTD. DESIGN AND ARCHITECTURE with Prof. Pekka Harni. Notable works include the limited-edition MOON tableware set for Arabia Finland. Her achievements include the EcoDesign award and recognition for her furniture piece ADB&B as "The Most Interesting Product" at the 2016 Habitare furniture fair in Helsinki.

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Guest Editorial:

Embracing Inclusion, Protection, and Empathic Resonance Through Design, Architecture, and Art

In approaching the concept and practice of Design for All, the themes of Inclusion, Protection, and Empathy are vital for creating environments where vulnerable populations can thrive. The commitment of designers, along with active community engagement and empathy for diverse backgrounds, significantly enhances quality of life and contributes to a better society as a whole.

This editorial synthesizes insights from five distinct yet interconnected articles that explore how various organizations and initiatives support these themes through design, architecture, art, with community engagement. The authors—architects, designers, and an artist—are based in Finland and Japan, each contributing unique perspectives and experiences on these critical issues.

The principle of accessibility asserts that designs should be usable by people of diverse abilities without special adaptation or modification. (William, 2010) However, many issues arise when products and services are created without considering the user's voice, often resulting in costly corrections. By anticipating diverse users and understanding their needs and physical characteristics during the planning stage, mistakes can be avoided, ensuring offerings are usable by all.

Today, design development methods, including inclusive meetings, participatory workshops, and empirical research, are increasingly

utilized in the processes of design, service, and architecture.

Successful examples and their impacts are highlighted in the articles by architects Saija Hollmén, Jenni Reuter, and Helena Sandman, which outline the creation process of safe spaces for women's education in Tanzania, as well as in service designer Kirsten Sainio's article, which addresses the challenges and solutions on transitioning from institutional care to community-based housing for individuals with disabilities in Finland.

The guest editor introduces the history and success of an outstanding inclusive handicraft organization in Finland. From Japan, Professor Jiro Sagara shares valuable insights on temporary housing for natural disasters in Japan. The guest editor, who endured the earthquake disaster in Kobe in 1995, appreciates its relevance with personal empathy. Finally, artist Hisako Inoue presents a unique exploration in Tokyo, demonstrating how inclusive workshops can bridge diverse backgrounds through scented memory.

These endeavors underscore the importance of collaboration and innovation in addressing the needs of vulnerable populations. As we move forward, it is essential to continue fostering societies and environments that celebrate diversity, promote equity, and empower individuals to thrive within our communities.

I would like to express my gratitude to all the wonderful contributors who have enriched this edition.

Guest editor, Yuka Takahashi

Lidwell, William, et al. Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design.
Quarto Publishing Group USA, 2010.

Hoshikawa, Yasuyuki. Accessible Design No Hassō. [The Idea of Accessible Design]. Tokyo, Iwanami Shoten, 2015.

"The Eidd Stockholm Declaration 2004." EIDD - DfA Europe, 17 May 2024, https://dfaeurope.eu/what-is-dfa/dfa-documents/the-eidd-stockholm-declaration-2004/.

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Annansilmät-Aitta:

A Century of Craftsmanship with Inclusion for the Visually Impaired

Yuka Takahashi

Abstract

This article explores Annansilmät-Aitta, a Finnish handicraft store established in 1919, which has a long-standing commitment to supporting individuals with visual impairments.

Originally founded to create job opportunities for this community, the organization has evolved over the past century to offer high-quality handcrafted furniture and interior objects that are produced and beloved in Finland. Annansilmät-Aitta not only serves as a distributor for crafters but also sources materials and provides training and teaching opportunities, facilitating social inclusion for visually impaired individuals.

The article highlights the organization's rich history, its renowned products, and its collaborative efforts with various associations. It also addresses current challenges, including the lack of young people in the workforce of craftsmen members and funding issues, while noting the potential for international market possibilities.

This article is based on interviews with Simo Parviainen, the sales manager of the organization, and two of the skilled artisans, underscoring the importance of preserving traditional handicrafts and fostering new talent in the field.

Keyword: ***Visually impaired, Handicraft, Artisans, Finland, Inclusion, Nordic Design, Tradition***

Introduction

This article introduces an outstanding inclusive organization in Finland that supports individuals with visual impairments through handicrafts. It highlights the organization's rich history, renowned products, and collaborations with various associations, while also addressing current challenges. Insights are based on interviews with interviews with Simo Parviainen, the organization's sales manager, and two skilled artisans.

Annansilmät-Aitta

Annansilmät-Aitta is a Finnish handicraft store that has been operating for over 100 years since its establishment in 1919. The organization focuses on supporting crafters with visual disabilities and fostering job opportunities through traditional handicrafts. Their most famous products include rattan furniture, baskets, and various household brushes and sauna products made from high-quality raw materials.

While many disability-supporting handicraft organizations exist worldwide, Annansilmät-Aitta stands out for its extraordinarily beautiful and practical products, which reflect a high level of Nordic design tradition and craftsmanship. These items are cherished and passed down through generations in Finnish homes and summer houses. Today, the business entity is owned by the Helsinki and Uusimaa Visually Impaired Association, the largest association of its kind in Finland, with roughly 2,300 members. Various regional associations also support local visually impaired people, offering a

range of services under the Finnish Federation of the Visually Impaired.

Annansilmät-Aitta serves as a sales channel for both consumers and wholesale clients while also functioning as a material distributor, sourcing high-quality raw materials from around the world for crafters. Additionally, it provides teaching and training for crafters with visual impairments in collaboration with a network of associations. These crafters have varying degrees of visual impairment and reside throughout Finland, with the majority supplying to Annansilmät-Aitta located in Southern Finland. Their conditions range from low vision to partial sight and complete blindness.

Most crafters are independent contractors rather than salaried employees, allowing them to work flexibly within this region. Their non-exclusive contracts enable them to sell their products independently to their customers while also supplying Annansilmät-Aitta, which sells approximately 75 to 80% of their handicraft items.

History of the Store

The first store in Helsinki was established by the Blind Association of Tampere in 1919, originally named Sokeain Käsityökauppa, which translates to "The Blind Crafts Store" and located on Laurinkatu. Prior to this, already similar shops had been set up in Tampere and Vyborg. The Helsinki Society for the Blind acquired the business in the early 1920s, and in 1924, the store relocated to Annankatu in Helsinki, where it operated until 2010. At its peak, the stores were located in major cities across southern and central Finland, including Tampere, Jyväskylä, Vaasa, Turku, and Hämeenlinna, including three locations in Helsinki. The name Annansilmät-Aitta was adopted in the late

1990s as a more appealing alternative for the store and organization evoking images of a begonia flower and a traditional Finnish multi-purpose granary.

"This is the best-selling chair we have," Simo Parviainen notes and continues
"In the 50s and 60s, these chairs were very popular in Finland. After the Second World War, many people became blind due to the conflict and engaged in this type of handicraft work."

Lumikenkä chair
photo ©ANNANSILMÄT-AITTA

Following the completion of the Iiris Centre building in Helsinki, which houses the headquarters of the Finnish Federation of the Visually Impaired, Annansilmät-Aitta moved to new premise there in 2004, including a compact warehouse and workshop space for crafts. The Iiris Centre itself is a spacious facility that serves as a service and activity hub for individuals with visual impairments situated in Itäkeskus, Helsinki.

In the last several years, those stores have mostly closed their doors, with only one showroom remaining in the Iiris Centre. The primary direct-sales channel has shifted to the online store, which Simo Parviainen regrets, as many customers prefer to touch and try

products before purchasing. When items are available only online, even with an emphasis on durability, customers cannot physically test them. The higher prices associated with handcrafted items made from quality materials may lead customers to hesitate compared to cheaper, mass-produced alternatives.

Juttu stool, designed in 1961 by the internationally renowned Finnish designer Eero Aarnio

Annansilmät-Aitta showroom in Iiris center in Helsinki

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Timeless Treasures: The Revival of Furniture Heritage

In recent years, the furniture repair service at Annansilmät-Aitta has gained popularity. This trend indicates that even durable products from the 1950s and 1960s or later, often handed down through generations, can show signs of wear and tear after decades of use. Nevertheless, many people are eager to care for and preserve these cherished items. Numerous chairs, tables, and swings have been skillfully restored and revitalized by visually impaired artisans.

Left: Old chairs and tables waiting to be repaired.
Right:Different type of brushes. Photo: Yuka Takahashi

Future of Organization: Challenges and Opportunities

Thanks to its long-standing activities and traditions, the organization has established a well-functioning system that supports visually impaired crafters and artisans without barriers. However, it faces various challenges common to any business, including those unrelated to visual disabilities.

Currently, the ageing of members and funding issues pose significant challenges to the organization's future development. Advancements in digital technology and equipment have significantly enhanced the lives of individuals with visual impairments, providing access to communication tools such as computers and smartphones with accessibility features, in addition to optical devices. The IT revolution and changes in work styles over the past few decades have created more versatile job opportunities for young people in this community. While this is a positive development, fewer young individuals are showing interest in training for and pursuing careers as craftsmen. Additionally, the rising average age of the organization's members is partly due to many individuals losing their sight as they age, often requiring them to change jobs and start new careers. The organization, indeed, welcomes individuals from diverse backgrounds and situations.

This current situation may have made government support more hesitant than in the past. On a positive note, there is potential for international market expansion, with customers from countries like Japan, France, and Germany showing interest in importing

their high-quality, authentic products. However, without adequate funding, it becomes challenging to educate and promote training for young people, hindering their sustainable development and continuity.

In my interviews with the artisans at Annansilmät-Aitta, when I asked, "Do you like your work?" the response was a firm "Yes." One of the brush artisans, Arto Rantanen, smiled and said, "I have been making hundreds and thousands of brushes over my 33 years of work. If I didn't like it, I wouldn't have done it!"

Arto Rantanen, demonstrating how he crafts brushes using various tools.
Photo: Yuka Takahashi

Handicraft is not an easy profession and requires a certain amount of training; however, it is a fulfilling career that offers the joy of creating useful items, and visual impairment is not a barrier.

One of the skilled artisans, Jarno Maja, is busily working on building new furniture and making repairs at the Iiris Center. He is also proficient in using a sewing machine to create cushions for the chairs, among other items.
Photo: Yuka Takahashi

Providing opportunities for younger people to experience this work may significantly influence the emergence of future masters in the craft, while seeking potential public funding can ensure the sustainable continuity of this esteemed tradition.

Conclusion

Annansilmät-Aitta has played a vital role in supporting individuals with visual impairments in Finland for over a century. By providing job opportunities, high-quality handcrafted products, and a platform for social inclusion, the organization has not only preserved traditional handicrafts but also fostered a sense of community among its crafters. Despite facing challenges such as an ageing workforce and funding issues, Annansilmät-Aitta continues to adapt to the changing market landscape, including a shift towards online sales. The commitment to quality and craftsmanship remains evident in their beloved products, which

reflect a rich heritage of Nordic design tradition. As the organization plans for the future, it is crucial to cultivate new talent, seek potential public funding, and explore international market opportunities to ensure sustainable continuity. Through the dedication of its team and the passion of its artisans with visual impairments, Annansilmät-Aitta stands as an exceptional example of the enduring value of Finnish traditional handicrafts and the importance of inclusivity in the work community in Finland.

References:

"Annansilmät-Aitta" Annansilmatkauppa, 2023, www.annansilmatkauppa.fi/. Accessed Nov. 2024.

"Annansilmät-Aitta on Elinvoimainen Satavuotias/ Airut." Virpi Jylhä, 16 Oct. 2019, www.airutlehti.fi/2019/airut-10-2019/annansilmat-aitta-on-elinvoimainen-satavuotias/. Accessed Nov. 2024.

"Iiris Center", Iiris.fi, 3 July 2020, www.iiris.fi/en. Accessed Nov. 2024.

"Finnish Federation of the Visually Impaired" Nakovammaistenliitto.fi, 4 Sept. 2019, www.nakovammaistenliitto.fi/en. Accessed Nov. 2024.

"Helsinki and Uusimaa Visually Impaired Association." Hun.fi, 5 Oct. 2020, hun.fi/en. Accessed Nov. 2024.

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Saija Hollmén, Architect, D.Sc., Professor of Practice,
Jenni Reuter, Architect, Associate Professor,
Helena Sandman, Architect, D.A.

For Hollmén Reuter Sandman Architects, sensitivity towards users, materials, and site-specific interventions are the means of architecture. The focus is on both environmental and aesthetic sustainability. Environmental sustainability is achieved by using local, recycled, and renewable materials as much as possible and designing site-specifically according to the local climate. Aesthetic sustainability is born from functionality, culture, how the building fits into the environment, and how the plan follows the local spatial hierarchy. Their projects have been honoured with both national and international awards and have been

published and exhibited widely.

Architects Saija Hollmén, Jenni Reuter, and Helena Sandman began their collaboration in 1995 with the Women's Centre project in Senegal. Their last joint project is the Lyra Hostels in the Southern Highlands of Tanzania. In 2007, they founded Ukumbi, the Finnish chapter of Architecture Sans Frontieres, to provide architectural services to communities in need. The work of Ukumbi continues.

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HOMES FOR GIRLS

Saija Hollmén, Jenni Reuter and Helena Sandman

The hostels are designed as atrium buildings, to create a safe space for the girls.
Photo: Lyra in Africa

Abstract

The non-governmental organisation Ukumbi (Architecture sans Frontieres / Finland), founded by architects Saija Hollmén, Jenni Reuter, and Helena Sandman, collaborates with local non-governmental organisations to improve living conditions. Together with the NGO Lyra in Africa, they improve educational opportunities for girls in rural Tanzania through safe, eco-friendly

hostels for secondary school girls who face challenges related to long travel distances and unsafe living conditions. Since 2018 they have built several hostels across the Southern Highlands of Tanzania, using sustainable building methods such as interlocking stabilised soil blocks (ISSB). This article explores the work of Ukumbi, the impact of its hostel projects on girls' education, and the sustainable design strategies they have employed to enhance gender equality and education in rural Tanzania.

Keywords: ***Ukumbi, sustainable architecture, girls' education, Lyra in Africa, interlocking stabilised soil blocks (ISSB), hostels, Tanzania, gender equality, low-carbon design, eco-friendly construction***

Secondary school girls in the countryside in Tanzania is in urgent need of hostels close to the schools.
Photo: Helena Sandman

Introduction

Access to education is a critical factor in the development of societies, and for girls in rural areas, it is especially important for ensuring gender equality, empowerment, and future economic independence. However, in countries like Tanzania, girls face numerous challenges when it comes to attending school, especially in remote rural regions. The lack of nearby schools forces many girls either to walk long distances, often up to 30 kilometres, or to rent a room in a village nearby, which can expose them to dangers such as harassment and early pregnancies. Such risks contribute to higher dropout rates.

In response to these challenges Lyra in Africa, has initiated a series of projects aimed at constructing safe and sustainable hostels for girls. Hollmén Reuter Sandman Architects, as a team within the Finnish chapter of Architecture Sans Frontieres – Ukumbi NGO – has designed a model of a hostel building that meets the girls' needs. The hostel provides the girls with a secure environment where they can focus on their studies, leading to improved academic performance and a higher likelihood of completing their education. This article explores the architecture, sustainability, and social impact of the hostels in Tanzania, examining how architecture can act as a tool for empowerment and community development.

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Currently, the sixth hostel of the Ukumbi model is being constructed in the Southern Highlands of Tanzania.
Photo: Saija Hollmén

Body of the Article

A Collaborative Mission

Ukumbi, established by the architectural trio Saija Hollmén, Jenni Reuter, and Helena Sandman, is rooted in the belief that architecture can be used as a force for social good. Since the beginning, Ukumbi has collaborated with local NGOs in various countries, including Tanzania, to design architecture that addresses pressing social issues. In the case of their partnership with Lyra in Africa, the goal has been to tackle the high dropout rates among secondary school girls by providing them with safe, environmentally sustainable hostels where they can live and study.

Lyra in Africa, an organisation focused on empowering rural communities in Tanzania, provides the necessary funding for hostel construction, while Ukumbi offers architectural expertise. Since 2018, this collaboration has resulted in the completion of five hostels in the Southern Highlands of Tanzania, in locations such as Nyang'oro, Ilambilole, Ifwagi, Mseke, and Maduma. Each hostel follows a similar design template that has been adjusted based on local needs, building site, and a number of girls ensuring consistency in safety, functionality, and environmental performance.

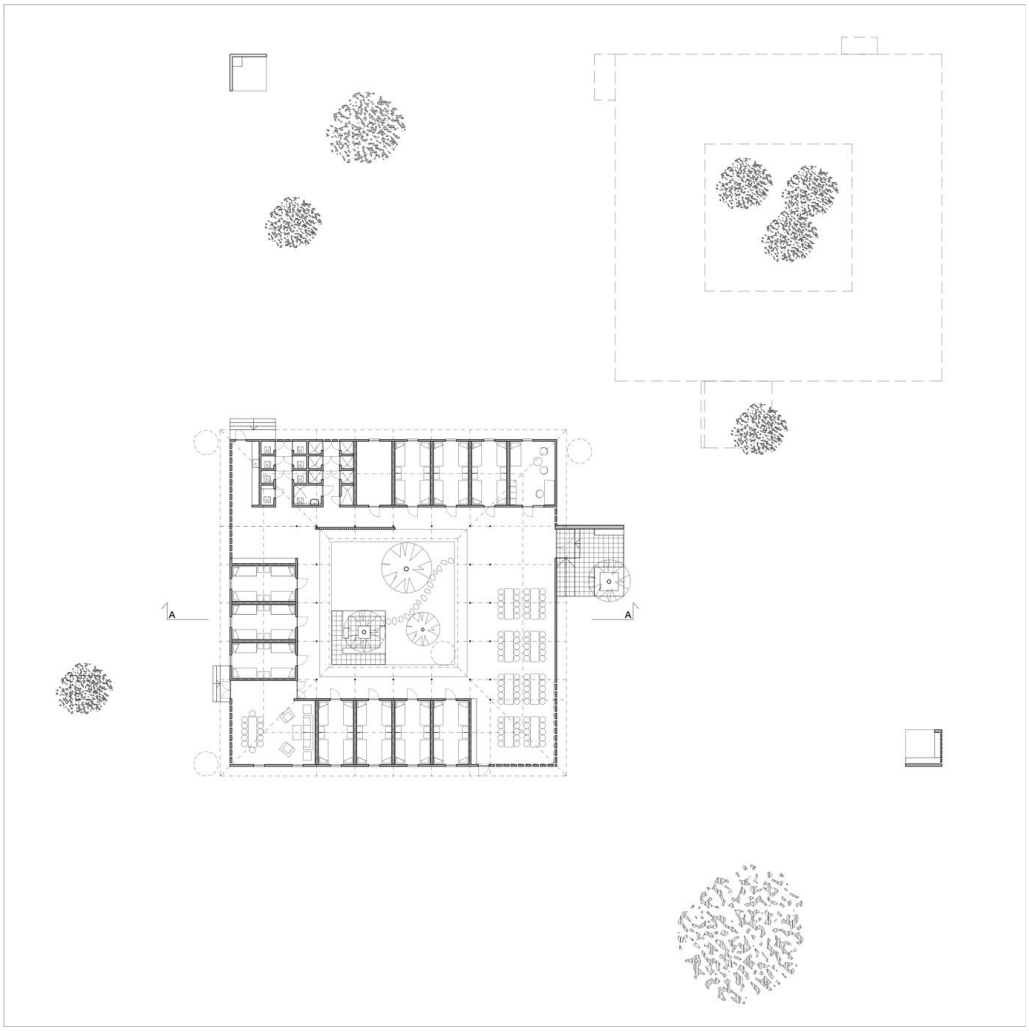
The design was developed in collaboration with a group of school girls and teachers.
Photo: Jenni Reuter

Safe Hostels

For many girls in rural Tanzania, attending school presents significant challenges. Due to the scarcity of schools in these regions, some students must travel vast distances daily. This journey is not only exhausting but also dangerous, with girls often facing the risk of harassment or other forms of violence. Additionally, living alone in rented accommodations near schools can expose them to exploitative situations, leading to early pregnancies and the subsequent termination of their education.

The Tanzanian government's policy, which expels pregnant girls from school, exacerbates the problem, contributing to low secondary school completion rates. As of 2018, only 6% of girls in rural Tanzania were enrolled in higher secondary education, with just 1% completing it. Research by Lyra in Africa has shown a clear correlation between levels of education and the likelihood of

early pregnancy: 52% of adolescent girls with no education are pregnant or have given birth, compared to just 10% of those with a secondary education.



8 girls share rooms but there are common spaces to hang out and do homework in the hostels. Plan drawing by Hollmen Reuter Sandman Architects

Sustainable Architecture

A key feature of Ukumbi's hostel designs is their use of Interlocking Stabilised Soil Blocks (ISSB). These eco-friendly bricks are made primarily from local soil, with a small amount of

cement (5-10%) added to stabilise the mixture. The bricks are compressed manually in a block press and air-cured, making them a low-cost, low-carbon alternative to traditional fired bricks or a concrete construction, which are environmentally damaging. ISSB construction reduces both the carbon footprint and the financial costs of building the hostels. The method also aligns with Ukumbi's focus on local engagement, as the manual labour involved allows communities to participate directly in the construction process. Local villagers contribute materials for the foundation and provide labour, fostering a sense of ownership over the hostels and encouraging long-term maintenance and care.

The girls live in the hostels during the week taking care of their laundry. Photo: Helena Sandman

Culturally Appropriate

Ukumbi's architectural designs are characterised by their sensitivity to local culture and environmental conditions. Before

developing each hostel design, the architects conducted workshops with the each girl who would be using the facilities. Their input was crucial in shaping the design of the hostels, ensuring that the buildings felt like home while meeting the students' needs for safety and study space. The hostels follow a courtyard-style layout, which is common in Tanzanian domestic architecture. This design creates a protected inner space where the girls can engage in social activities, study, and relax. Each hostel houses 96 girls, with shared bedrooms for groups of eight. The hostels also feature communal areas for studying, a kitchen, bathrooms, and spaces for laundry. The buildings are designed to be energy-efficient and environmentally friendly. Solar panels provide lighting and rainwater harvesting systems help mitigate water scarcity, an important consideration given the region's limited access to clean water.

Impact

The construction of safe hostels has had a significant positive impact on the academic performance of the girls living in them. A study conducted by Lyra in Africa over four years showed that girls who lived in hostels consistently outperformed their peers on national exams. The additional time they had to study, along with the safe and supportive living environment, contributed to higher academic achievements. Beyond education, the hostels have played a crucial role in empowering young women by reducing the risk of early pregnancy and providing them with the opportunity to pursue further education. Since the start of Lyra's hostel

construction program in 2012, over 2,500 girls have lived in these facilities without a single reported pregnancy. This starkly contrasts with the situation in schools without hostels, where 118 girls dropped out due to pregnancy between 2012 and 2019.

The broader impact of Ukumbi's work can be seen in the growing sense of ownership and empowerment among the communities involved in the construction and maintenance of the hostels. By involving local villagers in the design and building process, Ukumbi has helped foster a culture of sustainability and self-sufficiency, ensuring that the hostels will continue to serve future generations.

The buildings are built in Interlocking Stabilized Soil Blocks that are easily produced by the village using local clay.
Photo: James Kasela

Future

Despite the success of the hostel project, challenges remain. Rural Tanzania continues to face high levels of poverty, and the costs of maintaining the hostels can strain local communities. Furthermore, access to secondary education for girls remains limited, with only 26% of rural girls enrolled in lower secondary schools as of 2018. Ukumbi and Lyra in Africa are committed to expanding their work to reach more communities. Plans are underway to construct additional hostels, including one currently in progress in Msanga with the goal of ensuring that more girls have the opportunity to complete their education in a safe and supportive environment.

The buildings are planned to be affordable and easy to construct. Photo: Helena Sandman

Conclusion

Ukumbi's collaboration with Lyra in Africa exemplifies how thoughtful, sustainable architecture can address pressing social issues, such as access to education and gender equality. By designing eco-friendly hostels that provide girls in rural Tanzania with a safe space to live and study, the NGO's have not only improved educational outcomes but also contributed to the empowerment of young women and their communities. The use of local materials and labour, combined with a commitment to environmental sustainability, ensures that these hostels will continue to benefit future generations. This highlights the transformative potential of architecture when it is guided by empathy, cultural awareness, and a deep commitment to social justice.

Jiro Sagara, PhD
Professor emeritus of Kobe Design University

Jiro Sagara is a product designer with a strong interest in Universal Design and accessible design. From 1977 to 1998, he worked at the Hyogo Rehabilitation Center and the Hyogo Institute of Assistive Technology, where he dedicated himself to improving the quality of life and independence of people with physical disabilities across a wide range of fields. In 1995, he participated in support activities and reconstruction planning for refugees of the Great Hanshin-Awaji Earthquake, focusing on individuals with disabilities and elderly citizens.

In 2000, Sagara became an associate professor in the Department

of Product Design at the School of Design, Kobe Design University, and was promoted to professor in 2004. He served as chief director of the Rehabilitation Engineering Society of Japan (RESJA) from 2011 to 2014. In 2011, he contributed to the development of proposals for emergency temporary housing and led on-site services with RESJA volunteers and university students to improve living conditions in temporary housing in Natori City. He took initiative in Gensai Design and Planning Competition as one of the boards of the Society of Arts and Design Fusing with Science and Technology from 2012 to 2022.

Sagara has also researched and developed systems to support the independent life for early stages of dementia, working with occupational therapists to create cues for managing home equipment, environments, and schedules since 2012.

Sagara retired from Kobe Design University in March 2024 and was honored with the title of Professor Emeritus.

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Inclusive Emergency Temporary Housing Design with GENSAI Principles

Creating a Temporary Community for All Refugees in the Event of a Major Disaster

Jiro SAGARA, PhD
Professor emeritus of Kobe Design University

Abstract

Japan is frequently struck by earthquakes and faces annual typhoons. In recent years, the country has also experienced severe regional heavy rains and flooding. In such major disasters, victims lose their lives, properties, and homes. All victims, particularly vulnerable groups such as people with disabilities, children, and the elderly, require habitable emergency temporary housing provided by the government, where they can live for a certain period during the recovery process.

The author has two key experiences in improving the habitability of emergency temporary housing: during the Great Hanshin-Awaji Earthquake in 1995 and the Great East Japan Earthquake and Tsunami in 2011. Based on these experiences, he proposes better emergency temporary housing designed with Universal Design principles. Disasters, whether natural or man-made, such as war or civil unrest, can happen anywhere in the world. It is crucial to

adopt a spiral-up approach through continuous practice and experience, guided by Universal Design principles.

Keywords: ***Emergency Temporary Housing, disaster, earthquake, Universal Design,***

Background

Japan is well known for its frequent earthquakes because the islands are located on the edges of four continental plates. As a result, there are many active volcanoes which provide hot natural water called onsen (spa). Earthquakes under the sea can cause tsunamis, such as the Great East Japan Earthquake in 2011.

Recently, we have also experienced heavy rains concentrated in limited areas where multiple cumulonimbus clouds rapidly form in a line. This phenomenon is called a linear heavy precipitation band.

During the summer season, several typhoons strike Japan, especially the islands of Okinawa, Kyushu, and Shikoku. These heavy rains can cause landslides, river floods, and the collapse of bridges.

Weather-related disasters can be partially predicted, but most disasters strike suddenly, impacting our lives and properties. In such events, the most affected are often people with

disabilities, children, and elderly citizens, collectively referred to as vulnerable people.

Not only Japan, but many countries and regions around the world, may be struck by natural disasters such as earthquakes, tsunamis, typhoons, cyclones or hurricanes, heavy rainfalls, and volcanic eruptions. Additionally, man-made disasters can disrupt the ordinary lives of citizens.

In the event of a major disaster, many families lose their homes. Therefore, emergency temporary housing should be provided to refugees until they can recover their lives and rebuild their homes. How can we make temporary housing more comfortable? This proposal suggests building and operating them according to Universal Design principles, based on experiences from the Great Hanshin-Awaji Earthquake in 1995 and the Great East Japan Earthquake in 2011.

The “GENSAI” Design

"GENSAI" is a Japanese word composed of two characters: GEN (減), meaning to reduce or scale down, and SAI (災), meaning disaster, trouble, difficulty, or cataclysm. Another related term, which is more commonly known, is "BOUSAI," composed of BOU (防), meaning to prevent, protect, or guard against, and SAI.

Examples of earthquake disaster prevention measures include

building reinforcement, damping systems, and seismic base isolation. Similarly, huge tide embankments serve as disaster prevention for tsunamis. These measures are designed based on estimated scales of disasters, but if the actual scale exceeds the estimation, they may not be effective.

Many families in Japan keep emergency supplies (e.g., bottled water, batteries, dried or instant foods, a whistle, aluminum-coated thin film, hygienic goods, a generator, a radio, a rope, etc.) stored in a bag out of sight. However, disasters often occur when interest and awareness have waned, rendering some supplies useless. People may also forget the existence or proper use of these emergency supplies. The disaster happens suddenly and then destroys a person's daily life, however, people must keep daily activities in extraordinary circumstances.

"GENSAI" refers to the mitigation of damage or casualties caused by disasters, and the "GENSAI Design" involves creative activities aimed at addressing four stages of disaster countermeasures: first, gathering information and evacuating or rescuing family and neighbors; second, improving convenience in shelters or emergency temporary housing; third, developing better reconstruction plans; and fourth, sharing experiences and preparing for future disasters (Sagara, 2017). Consequently, both BOUSAI (disaster prevention) and GENSAI (victims or damage reduction) measures must be considered to effectively prepare for disasters.

The emergency temporary housing in 1995

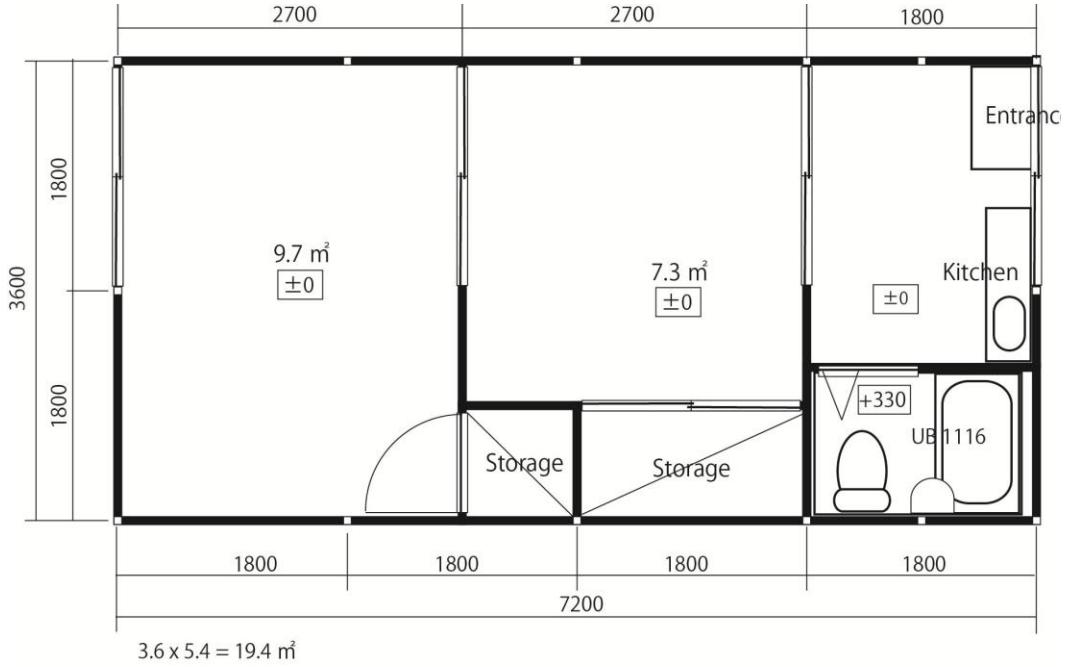

Figure 1. Emergency temporary house in the Great Hanshin-Awaji Earthquake in 1995

Under the Disaster Relief Law of Japan, the prefecture of the affected area can provide free emergency temporary housing to refugees (Cabinet office of Japan, 2020). This includes free rental houses in undamaged areas, including outside the prefecture, or prefabricated houses in open areas. The basic prefabricated temporary houses come in three sizes: 19.8m² for singles or couples, 29.7m² for standard families, and 39.6m² for large families. The standard size includes two bedrooms, a kitchen and dining area, a toilet, and a bathroom, as shown in Figure 1. A total of 48,300 emergency temporary houses were provided in the damaged area and around, including imported prefabricated houses (Cabinet office of Japan, 2018). The average cost for a standard house is capped at 2.4 million JPY. As these are temporary houses, the duration of residence is limited to two years by law,

although some, such as those used after the Hanshin-Awaji earthquake, were occupied for over four years.

Figure 2. Inverted U- shaped gutter placed at the entrance of emergency temporarily house (upper photo from Kobe city website of archives). Easy steps made by volunteers, and resident tried up and down frequently (below)

These houses are typically built as flat row houses in open fields. By law, the floor level must be at least 450 mm above the ground, so each house is equipped with steps at the entrance. If the site is sloped, the floor level increases progressively from one house to the next. In 1995, some temporary houses had floor heights over 700 mm and featured inverted U-shaped gutters at the entrances. One resident with Parkinson's disease stayed indoors all day after moving in. Volunteers built gentle stairs for him, and he repeatedly walked up and down them with a smile, as shown in Figure 2. Additionally, the bathroom, including the toilet and washstand, had a step of more than 300 mm to accommodate the drain trap and piping of the factory-made unit bathroom. This step was a significant problem, especially for the elderly. The Hyogo Institute of Assistive Technology designed a simple wooden stool to ease the step, and they published a booklet on how to make it and other useful ideas (Hyogo Institute of Assistive Technology, 1995). During the summer holidays in 1995, some high school students made these stools and delivered them to elderly residents in temporary houses. After the Niigata Earthquake in 2004, ready-made wooden stools were provided to every temporary house.

As emergency temporary houses were supplied gradually, families with elderly members or persons with disabilities were given priority. This often-disrupted community ties and led to isolation (Hyogo Institute for Traumatic Stress, 2004). In response, a group home type of temporary housing for single elderly individuals was proposed and built in several locations in Kobe. This new concept proved successful and was later adopted in public apartment houses for restoration as corrective housing.

The emergency temporary housing in 2011

After the Great East Japan Earthquake and Tsunami, around 53,000 emergency temporary houses were built. Most refugees had lost their homes to the tsunami, so the sites for these temporary houses needed to be away from coastal areas. Typically, temporary houses are prefabricated, but the demand exceeds the providers' capacity. Given the area's rich wood industry, traditional wooden construction was also used. Additionally, new ideas, such as using cargo containers for structures, were adopted.

Figure 3. Ramp and flat deck type entrance and gentle stairs type entrance (Upper two). Flat access toilet and step to bathroom (below two)

FOR EXAMPLE, ONE EMERGENCY TEMPORARY VILLAGE IN NATORI CITY, MIYAGI, HOUSED REFUGEES FROM THE YURIAGE COMMUNITY, AS SHOWN IN FIGURE 3. THE AUTHOR AND COLLEAGUES FROM THE REHABILITATION ENGINEERING SOCIETY OF JAPAN (RESJA) VISITED IN LATE MAY TO INTERVIEW RESIDENTS WHO HAD MOVED

THERE A FEW WEEKS EARLIER. THE TOILET ROOM WAS SEPARATE FROM THE BATHROOM WITH FLAT ACCESS FROM THE DINING ROOM. THERE WAS A 300 MM LEVEL DIFFERENCE BETWEEN THE BATHROOM AND DINING ROOM, BUT A STEP EASED THE GAP. THE VILLAGE HAD SEVENTEEN BUILDINGS, EACH WITH SIX DWELLINGS IN A ROW, AND ONE MEETING FACILITY. TWO BUILDINGS FEATURED FLAT DECKS WITH RAMPS AT THE END. THE STAIRS FOR EACH DWELLING WERE GENTLE AND DESIGNED WITH CONSIDERATION FOR WINTER SNOW. GRAB BARS WERE INSTALLED AT THE ENTRANCES, TOILET ROOMS, AND BATHROOMS OF ALL DWELLINGS.

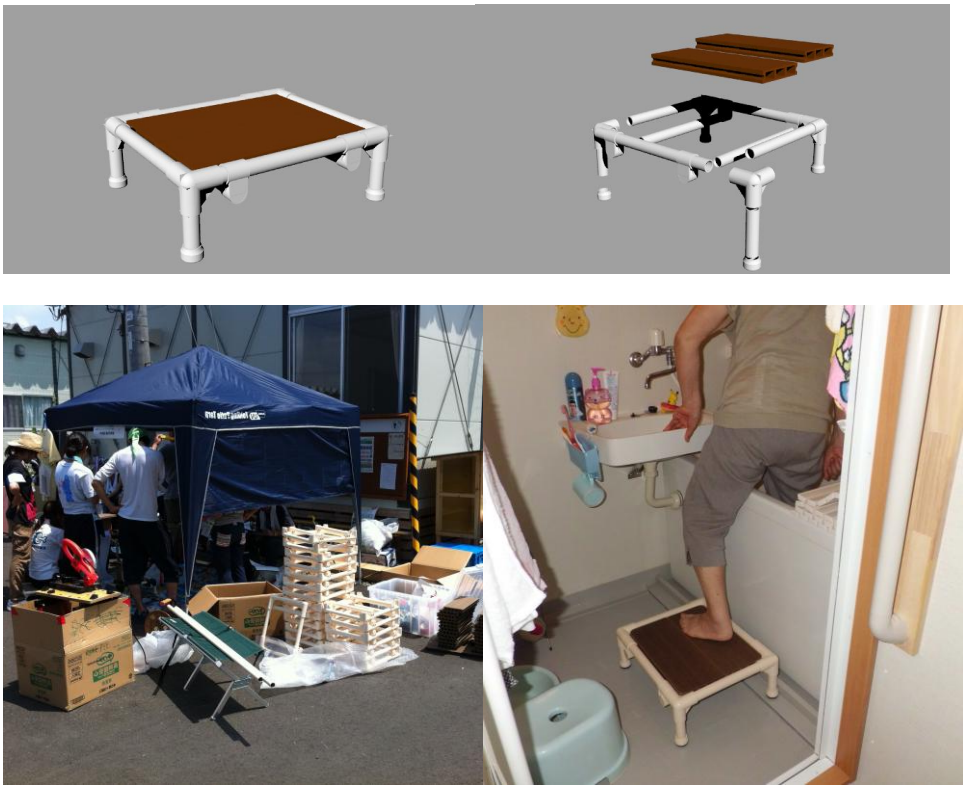

Figure 4. CG of Designed step (upper Left), and its construction (upper Right), on -site service (lower left and one trying step for Bathtub (lower right)

STRANGELY, A WHEELCHAIR USER WHO NEEDED A RAMP LIVED IN A BUILDING WITHOUT ONE, LIKELY DUE TO MISCOMMUNICATION BETWEEN THE CONSTRUCTION AND WELFARE DEPARTMENTS.

Overall, the quality of these houses was an improvement over those built-in 1995. However, refugees faced daily life challenges. Many had previously lived in large detached houses and used low bathtubs, making the bathing process difficult, especially for the elderly. Japanese people traditionally love bathing in tubs filled with hot water and washing their bodies outside the tub. The RESJA addressed this need by designing stools for the bathroom floor. The author designed the stools and estimated the materials required. The Yazaki Kako Corporation contributed most of the materials. In August, students from several universities and RESJA volunteers visited again, making stools and other devices according to residents' needs (Sagara et. al, 2012), as shown in Figure 4. While this was a small-scale support effort, it is important to accumulate and share each experience and piece of know-how.

Prospects and Conclusion

Tohoku district where the Great East Japan Earthquake happened, experiences extremely cold winters with heavy snowfall. To address this, additional features were installed in temporary housing, such as heat insulation, dual-pane windows, windbreak rooms at entrances, paved pathways, gutters, and second air conditioners. As a result, the average cost of these temporary houses reached 6 to 7 million JPY (Cabinet office of Japan and Ministry of Land, Infrastructure and Tourism, 2024). Many of these homes were used for over ten years, highlighting the difficulty of rebuilding one's home after a major disaster, not just for the elderly but also for younger generations.

Given the high costs and extended use, more durable solutions, such as compact residences that can be expanded later, should be considered. Japan has a long history of public baths, and onsens are a popular retreat. While it is desirable for each temporary house to have a bathroom, this may be impractical for smaller units. The author suggests constructing public baths within community halls in temporary villages and equipping each house with showers. This arrangement would serve not only for bathing but also as a communal space for residents to interact and monitor each other's well-being. Figure 5 presents a prototype design for a universally accessible public bath, suitable for wheelchair users and individuals with hemiplegia who can walk. While basing in a tub is common in Japan, Nordics love sauna, and Germans enjoy spas. Some Asian countries also have public baths.

Following the 2011 disaster, the national government reformed the rules for emergency temporary housing. Alongside standard prefabricated houses, traditional wooden construction and cargo container homes became official alternatives. More durable housing options were also introduced, including wooden flat-type houses

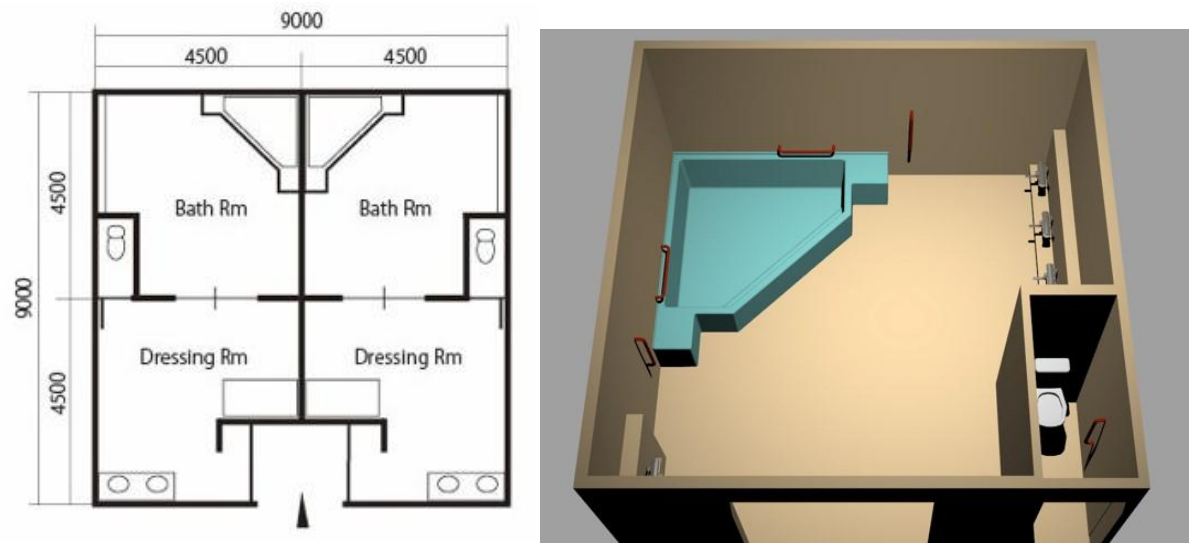

Figure 5. Prototype Drawing and CG of proposal of Public Bath in the Emergency Temporally Community

intended to create new villages and detachable wooden houses for families wishing to return home (Cabinet office of Japan and Ministry of Land, Infrastructure and Tourisms, 2024). These homes were built on new sites with stable concrete foundations, while others were constructed on pine piles.

Emergency temporary houses were subsequently provided in Kumamoto (2016), Fukuoka (2017), Okayama, Hiroshima, Ehime (2018), and Hokkaido (2018) after the 2011 disaster. On January 1, 2024, the Noto Peninsula was struck by an earthquake, and emergency temporary houses are currently being provided. In this case, 5% of the units will be specially designed for wheelchair users, and a quarter of the emergency temporary houses will be detached wooden houses that can expand later (Ishikawa prefecture, 2024). Despite these unfortunate events, Japan continues to learn from them, gradually strengthening its society through the spiraling-up strategy of Universal Design.

References

Jiro Sagara. (2017, March 26), WORKING GROUP. 9: GENSAI DESIGN, CUMULUS KOLDING 2017. https://cumluskolding2017.org/working-groups/ (visited on 26th Oct. 2024)

Cabinet office of Japan. (2020). PDF of Outline of Disaster Relief Law. https://bousai.go.jp/oyakudachi/pdf/jyuujo_a7.pdf (visited on 26th Oct. 2024)

Cabinet office of Japan. (2018 February 14). PDF of the process of emergency temporary housing in the Great Hanshin-Awaji Earthquake. https://www.bousai.go.jp/kaigirep/kyuujorenkei/miyagi_hyogo_1/pdf/shiryo04_2.pdf. (visited on 26th Oct. 2024)

Hyogo Institute of Assistive Technology. (1995). Manual for reform or devices for emergency temporary house. https://assistech.hwc.or.jp/pdf/publication/kasetsu.pdf. (visited on 26th Oct. 2024)

Hyogo Institute for Traumatic Stress. (2004). Post-disaster temporally housing. https://www.j-hits.org/document/hanshin-awaji/page2.html. (visited on 14th Aug. 2024)

Jiro Sagara, Tamotsu Imura, Etsumi Okigawa and Taizo Yoshida. (2012, July 24-26). Problems and some proposals to the temporary dwellings built after the disasters. i-Create 2012, Singapore

Cabinet office of Japan. (2013). PDF of the outline of emergency temporally housing. https://www.bousai.go.jp/kaigirep/kentokai/hisaishashien2/wg/pdf/dai1kai/siryo4.pdf. (visited on 26th Oct. 2024)

Cabinet office of Japan and Ministry of Land, Infrastructure and Tourism (MLIT). (2024, Feb. 27). PDF of the counter plan of guaranty homes for victims, and latest condition of housing support program for the victims, and related information. https://www.cbr.mlit.go.jp/kensei/jutaku_seibika/r05/pdf/20240227_shiryo1.pdf. (visited on 14th Aug. 2024)

Ishikawa prefecture. (2024). About the temporary dwellings for the 2024 earthquake in Noto peninsula. https://www.pref.ishikawa.lg.jp/kenju/saigai/r6oukyuukasetsujyuutaku.html . (visited on 26th Oct. 2024)

Kirsten Sainio

MA Industrial and Strategic Design

Kirsten is a service designer and user experience researcher with experience in co-creation and participative processes. Her expertise has been the conceptualization of new forms of community living for the social housing sector and inclusive living concepts for the disabled. Her work has included building platform models for shared neighborhood services, improving the conceptual design and the user experience of buildings and neighborhood block units.

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Designing Supported Living Environments for and with Disabled Individuals

Kirsten Sainio

Abstract

This article explores the evolution of supported living environments for disabled individuals in Europe, focusing on the shift from institutional care to inclusive, community-based housing. Supported by key policy changes, such as the UN Convention on the Rights of Persons with Disabilities (CRPD) and European Disability Strategies, this transition underscores a commitment to autonomy, inclusion, and person-centered care. In Finland, the development of a Supported Living Network concept offers an example of these principles in action, with housing provider Setlementtiasunnot leading initiatives that integrate individuals with disabilities into diverse residential communities.

Through participatory design workshops involving architects, social workers, caregivers, and future residents, this project identified recurring challenges, including safety concerns, inadequate support, and social fears, which were addressed using a variety of support actors within the community. The approach combined structural design and support services, leveraging both personal interactions and assistive technology to create a robust support network. Emphasis was placed on social cohesion, inclusion, and shared spaces to foster a sense of belonging and community among residents.

The workshop methods used in this project not only facilitated solutions to practical challenges but also served as effective communication tools, demonstrating the importance of equity, mutual understanding, and collaboration in inclusive housing design. As technologies like video calls and AI continue to advance, they offer further potential to support autonomy and connection for disabled individuals. The Supported Living Network model has been recognized for its contributions to disability inclusion and community-based living and provides insights into how small design changes, hands-on participatory processes, and dedicated community roles can reshape supported living environments.

Keyword: ***Supported Living Networks, Community living, Co-housing, Co-creation, Special User research, Inclusion, Service Design***

Introduction

In recent years, housing for people with disabilities in Europe has shifted significantly from institutional care toward inclusive, community-based living. This shift has been driven by human rights advancements, evolving policies, and innovative co-creation processes involving individuals with disabilities in housing design.

Transition to Community-Based Housing

Historically, people with mental disabilities in Europe lived in large, institutionalized facilities with minimal autonomy. This began to change in the late 20th century as awareness of human rights and quality-of-life concerns grew. In the early 2000s, the European Union started directing EU Structural Funds toward closing down large institutions and establishing community-based housing alternatives,

including small group homes and independent living options. This was bolstered by the 2006 UN Convention on the Rights of Persons with Disabilities (CRPD), which asserts the right to independent living and community inclusion. Ratified by all EU member states, the CRPD catalyzed policies emphasizing community-based housing as a central goal.

The European Disability Strategies have reinforced these commitments, promoting affordable housing, equal opportunities, and self-determination in community living. Current policies also stress high-quality, person-centered care, social integration, and combating stigma through education and awareness.

Despite improved policies, many individuals with mental disabilities face stigma, which can affect their quality of life and opportunities for social integration. Social education campaigns and mental health awareness initiatives continue to be important to support community acceptance.

Social Housing as a Chance for Innovation

Working in the social housing sector as an in-house service designer for a social rental housing developer in Finland, I was fortunate to be part of the development of inclusive living concepts. I planned and facilitated co-creation workshops for user research purposes. In city planning and architecture processes from initial idea to implementation and use are slow and iteration cycles can take years still, I believe user experience methods are very relevant to improve and learn from previous building projects.

A rental housing developer has the advantage of experiencing the usability of their building portfolio, they get feedback through maintenance and through their residents and can use it to iteratively improve their future buildings by informing the hired planners and architects. If not for dedicated resident design choices, user-centred design in this case is for the improvement of future residents' quality of life.

At my employer Setlementtiasunnot, 20% of each building was allocated for special housing units the purpose of these were decided in collaboration with the city well-fare services and funding agencies. The different social tenant groups were ranging from wheelchair-bound disabled, intellectually challenges persons, persons in drug rehabilitation among others. Each building was included the service of a community coordinator, employed by Setlementtiasunnot and included in the monthly rent, this was usually a trained social worker nurturing the building community, supporting tenants and connecting them to the services of the neighbourhood. The apartments buildings were usually planned as part of a city block and the close connections to the neighbouring buildings was an important part of the conceptualization. In many cases collaboration between block partner developers was made mandatory by the city planning office. The size of a block allows for the sharing of services and spaces and can add amenities to affordable housing that are too expensive otherwise.

Supported Living Networks

When planning an inclusive apartment building with a fifth of the apartments ear-marked for mentally challenged persons, Setlementtiasunnot applied the idea of supported living networks early on. That means that the apartments for the special tenants are

mixed among different floors of ordinary apartments and should not be distinguishable from the outside thus avoiding the placement of the special resident apartments into clusters as much as possible, as it leads to stigmatization. The distribution of apartments also increases the overall diversity of direct neighbours and offers the chance for inclusion.

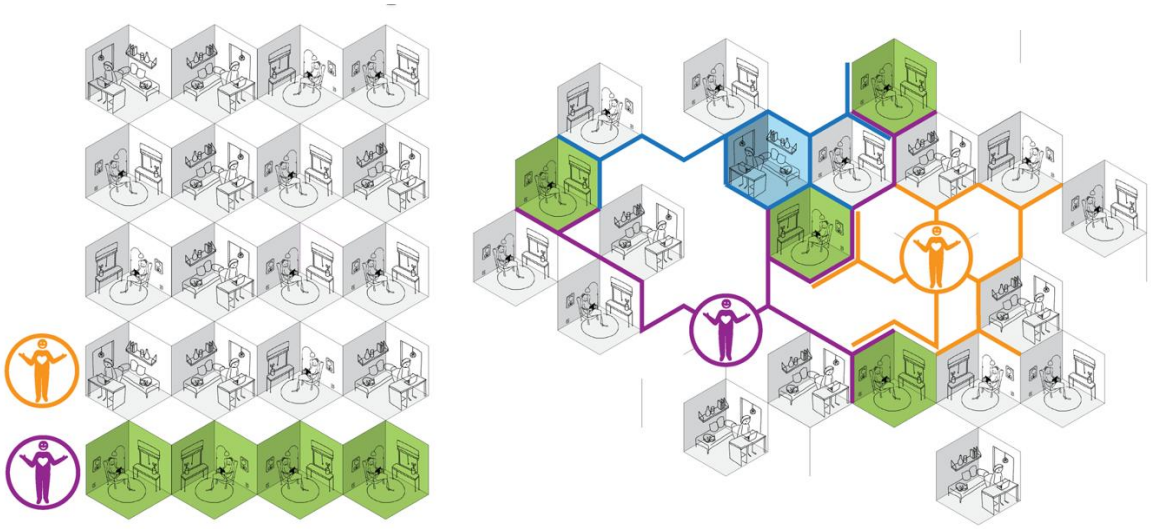

Image: From a group home on the left (apartments for the disabled in green) towards a Supported Living Network on the right, with supporting staff actively connecting neighbours

These apartments are homes to their residents and should not resemble institutionalized living. Collaborating with support service providers and cities' social councils to make living networks the new normal in assisted living was and is important, because the shift from institutionalized living is at the same time a disruption of the service provider's business model. As one anonymous participant of one of our workshops put it: First and foremost, this is a person's home and not a caregiver's workplace. Groups Homes are the most common form of disabled housing, where the disabled are living in groups sharing kitchen and bathrooms. Care providing services would build their own facilities and offer places to live to disabled persons, making

sure their services can be run as lean as possible, while reducing the disabled residents right to for self-determination.

Co-creation with Community Principle

As a service designer my task was to find a way to include participatory design into the planning process that consisted of an inclusive ideation workshop in the early planning stage of a building, and an architecture evaluation council before the finalization of the architectural drawings.

Among the participants of these workshops were the project architects, construction manager, landscaping architect, people from the city planning department, facility managers, social welfare workers, community coordinators, tenants of existing similar buildings, possible community members of the new building area, and special user group members and their care givers. Giving all these people voice in the workshop and seat them in small groups at mixed tables is a first step to inclusion.

The Living Concept that grew out of these workshops and strengthened the building portfolio and brand and made the company into a leading partner for community-based living in Finland. By focussing on pathways and common areas of the block it is possible to offer spaces for community growth as an extension to the personal home. Sharing common spaces in the neighbourhood allows for different uses of the spaces, instead of building 3 similar multipurpose common rooms it is possible to build e.g. a gym, a library and a communal kitchen, thus offering more quality of life.

Addressing Fears Together

The challenges that people with intellectual disabilities bring to the workshop table are often social in nature, and although the Ideas Workshop breaks down some barriers and is usually positive in nature, a sense of despair or fear of possible isolation can develop or return later. This was the case with a group of social workers and parents of young, mostly intellectually disabled people who were about to move out of their family home to live independent adult lives. While most of the disabled themselves were eager to stand on their own two feet like any other young person, there were concerns about their safety and health that needed to be addressed.

We did just that in a 'what if' workshop. We invited people with disabilities, their carers, and parents, the council's social services, the architects and construction managers, and the community coaches. The plans for this particular building included a supported living network of 14 apartments and a group home for 8 severely disabled people who would not be able to live independently. In total the building has 103 apartments.

Participants were divided into small mixed groups of four to six people. The first task of this workshop was to create a support group. A support group is personal and flexible, members change, and the group can grow over time. The most important thing is to have trusted people in the support group. We all have a support group, but we rarely think specifically about the members. By mapping this out in a small group we see a bit of overlap, most support groups include family members and close friends, but for disabled people they also include carers. The template given to the group included the

community coordinator and the social worker but was otherwise open for development.

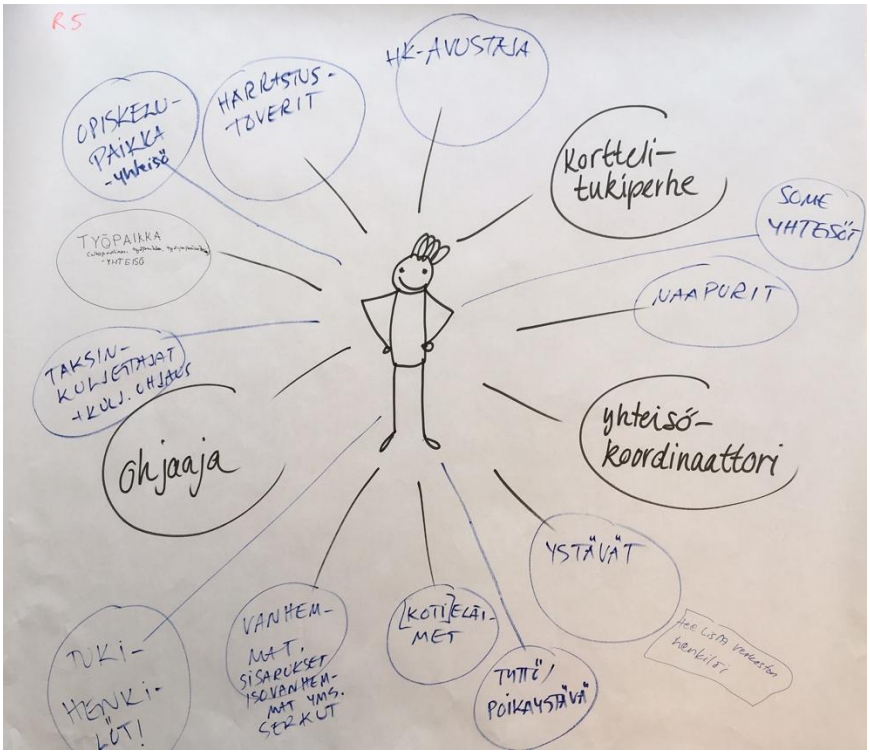

IMAGE: Support group map, listing all the actors who are supporting an individual (parents, partner, friends, neighbour, online friends, personal carer, classmates, workmates, hobby friends, taxi drivers, pets)

The next mapping exercise asked for worst-case scenarios in three key areas that had been identified as important in previous discussions: concrete safety and health risks and less concrete fears were to be documented on sticky notes. Safety can mean different things to different people. What are the dangers of living at home alone and what are the things that can make you feel unsafe? Health and taking care of your health is important. What are the risk factors in this area? Taking daily medication and looking after your own diet or fitness are important steps for everyone in becoming independent. Everyone has fears, which can include fear of loneliness, fear of getting lost, fear of the dark, etc.

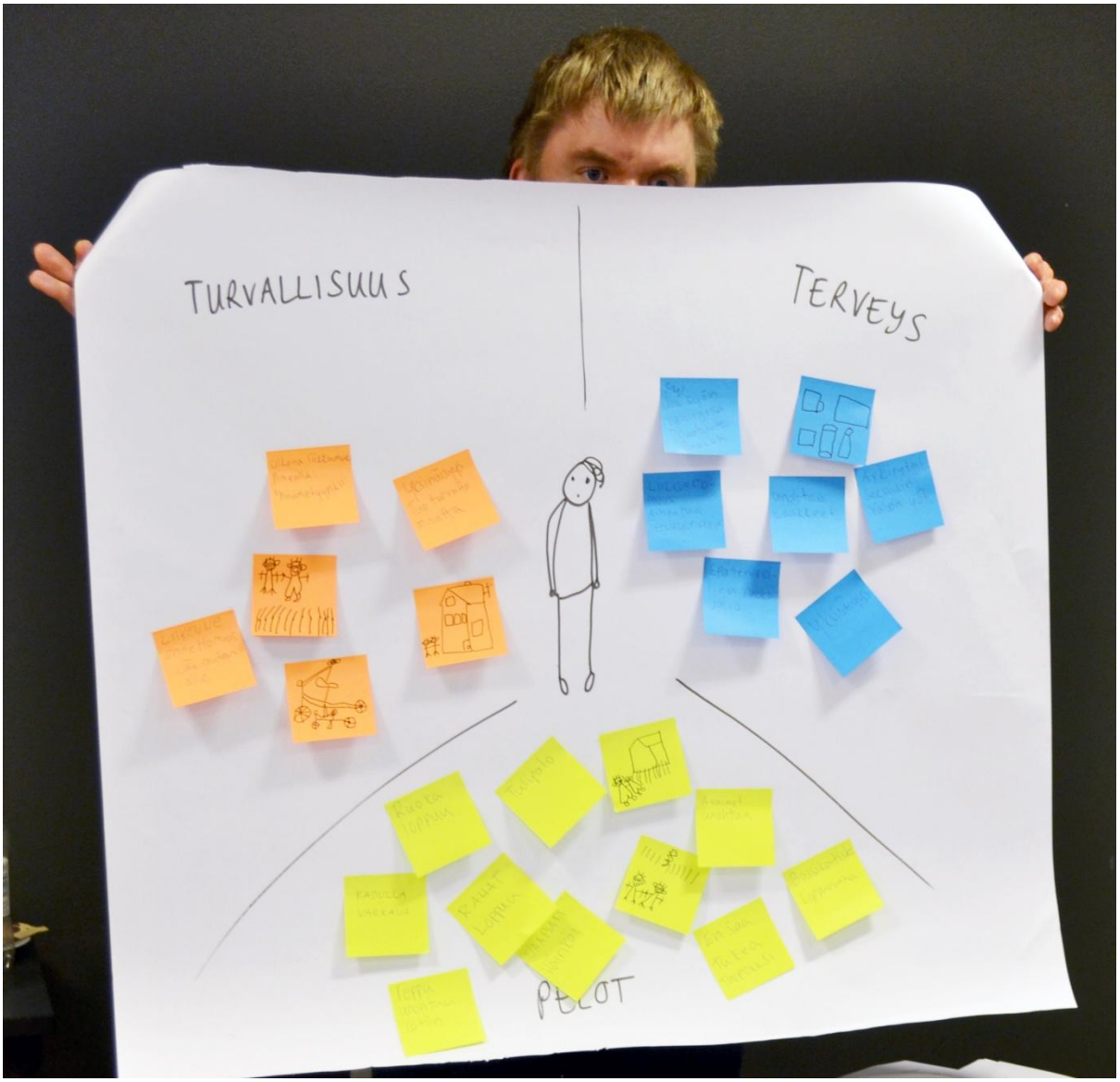

IMAGE: A participant holding up their group's list of safety risks, health risks and fears

As a break, we assessed some of the fears and risks in the room by measuring them on a scale. I had taped a long line across the room and marked one end of the line with 'harmless' and the other end with 'very dangerous'. We organised one risk or fear per group according to its level of danger, taking one risk at a time, and each participant placed themselves on the tape line according to their own opinion. We found that a risk is not equally dangerous for everyone. For the risk

of a fire in the building: all participants agreed that fires are very dangerous, and all went to the same end of the line. Other risks, such as "forgetting to take medication", depended on how important the medication was to the person. This exercise was only meant to break up the tense risk thinking during a break and get everyone out of their seats. But it also made it visible that we all have fears and risks, and that there are risks that are a danger to the community and other risks that are very individual.

The next task moved to more solution-oriented thinking, a fear and risk solution matrix. Participants started with the most worrying risk from their sticky note collection and placed it at the top of the matrix. Here they think about: when and where this risk situation will occur; and then go through the remaining 3 steps of the matrix:

- Who could help in this situation (think of support group members)?

- Can technology help in this case?

- How can this risk situation be avoided?

IMAGE: A group working on the risk solution matrix

The purpose of this risk assessment was to identify potential situations that could arise in everyday life and determine who could help or provide solutions in each case. The supporting actors were categorized as the resident, the block (including the community coordinator and neighbors), the supporting caregiver, and external assistance. Recurring risks and fears were gathered from the raw data and grouped into themes. The main themes identified were:

- **Unexpected changes and events**
- **Small everyday difficulties, routines, and habits**
- **Frightening individuals**
- **Insufficient support**

Solutions were developed for each of these situations. Often, the resident can act as the problem solver, sometimes with the aid of technology. In many cases, someone from the block network can provide support. The combination of a strong neighborhood community, the community coordinator, and assistive technology can free up the primary support staff's time for more critical or urgent tasks.

The final task of this intensive workshop was to revisit the support network identified in the first task and consider how its members could function effectively as a cohesive network. Who are the most important links? Are there any missing connections? What should be the role of each member? What are the best tools to support the network? Do these tools already exist, or should new ones be developed?

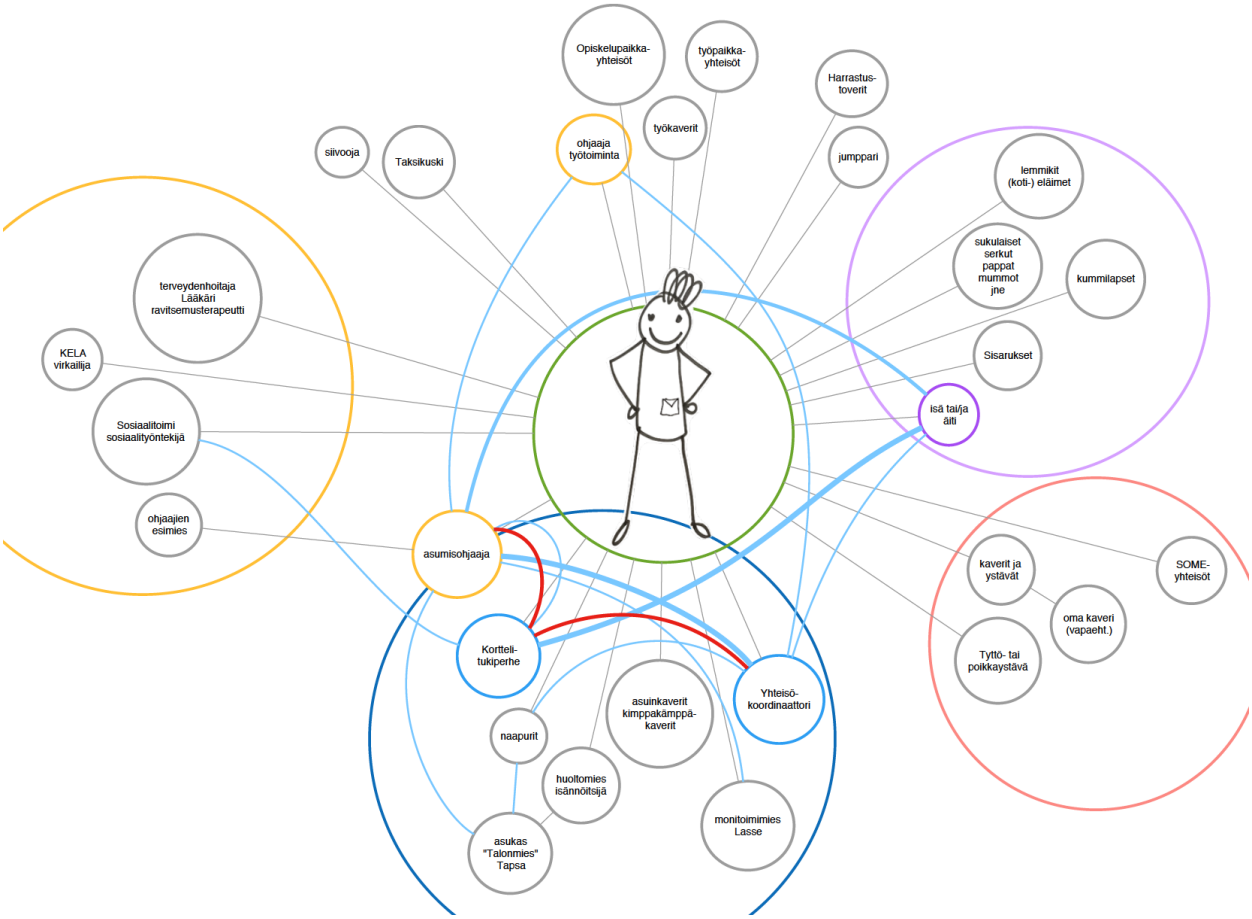

Image: The visual analysis of all the groups support networks. The supporting actors where categorized and the importance of connections between them was reflected in the thickness of the connecting lines.

A major challenge will be coordinating the support network. The carer will remain the primary support person, as they possess the necessary skills and experience for the role. The community coordinator will serve all residents in the block, acting as a community builder to ensure that everyone feels included. Additionally, a support neighbor could offer more personalized outreach to residents with developmental disabilities, although participation should be voluntary.

Collaboration as Communication

This workshop may not have resulted in significant architectural changes; from the outside, the building resembles any modern apartment block. However, it did foster a more assured move toward supported living networks for the housing provider, the city's social services, and the residents and their families. The participatory risk assessment empowered disabled individuals and their families, making them feel seen and engaged in the process. Such methods not only generate solutions but also serve as vital communication tools, illustrating that inclusion starts with genuine encounters and collaboration.

Community-based living began here, with shared spaces that encouraged collective ideas and joint problem-solving. By exchanging experiences in this manner, all participants could shift their perspectives, providing planners with valuable insights into residents' daily lives. The planning phase for this building commenced in 2015, workshops were conducted in 2016, and the building was completed in 2019, just as I transitioned to other tasks. From what I've heard, the tenant community is quite active. The Supported Living Network solution and community-based concept received recognition from The Finnish Association on Intellectual and Developmental Disabilities in 2021.

Since 2016, much has changed, and revisiting the workshop material prompted me to reflect on the role of assistive technologies. Most participants mentioned using Skype as their primary connection method. Today, video calls have become more mainstream and user-friendly, facilitating connections with family and friends, especially

since the pandemic. Seeking advice or support through a quick video call has become commonplace. AI and other smart technologies continue to evolve, providing practical assistive solutions for disabled individuals.

Another notable shift since 2016 is the growing awareness of mental health and neurodiversity in mainstream discourse. Stigmatization surrounding mental health is gradually receding as empathy increases, fueled by collective experiences of mental health challenges and disabilities. We are moving closer together as a society, and mainstream norms are diversifying, slowly diminishing their conforming influence.

Nonetheless, there remains potential for improvement, and effective solutions do not always necessitate sophisticated technology. Engaging in equitable, open interactions, coupled with hands-on tasks utilizing pen and paper, can substantially advance any project's trajectory.

Refereneces:

Lecerf, M., Understanding EU policies for people with disabilities, EPRS, November 2023, https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698811/EPRS_BRI(2021)698811_EN.pdf

Setlementtiasunnot, Asumisen tekoja -palkinto on myönnetty Setlementtiasunnot Oy:lle ja sen Härmälänrannan tukiasumiselle Tampereella, link obtained October 2024 https://setlementtiasunnot.fi/asumisen-tekoja-palkinto-setlementtiasunnot-oylle/

Hintsala, S., Sipilä, J., Sainio, K., Asuminen arjen keskiössä : Asuntoverkoston yhteiskehittämisen opas, Asumisen rahoitus- ja kehittämiskeskus, March 2015 https://julkaisut.valtioneuvosto.fi/handle/10138/153634

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Hisako Inoue ***(Photo:Yumiko Utsu)***

Hisako Inoue creates interactive installations and workshops and produces communication programs, and exhibitions based on the concept of the relationship between memory and smell. Her representative workshops include "Kunkun walk," in which participants enjoy the environment, culture, and history through the memory of smells at educational institutions, museums, libraries, botanical gardens, corporations, parks, and airports in Japan and abroad.

In 2024, she did exhibitions and workshops at Aomori Contemporary Art Center [ACAC] + Hirosaki University, ONO POINT ART SPACE (Yokohama), Tokyo University of the Arts + YAU (Tokyo). In 2023, Yokosuka Museum of Art, Steering Committee for Supporting Children with Disabilities. In 2022, Tokyo Shibuya koen-dori Gallery, Chiba City Museum of Art, Mori Art Museum and others. In 2017, "Library of Smell" at

Museum Villa Stuck in Munich (collaboration: Mika Shirasu + Takuro Shibayama). In 2019, developed the olfactory workshop program "Smelling our way through the zoos" in collaboration with WWF Japan and Japanese zoos. This program won the Good Design Award 2019. In 2018, "Library of smell" was the finalist at The Art and Olfaction Awards 2018 in London.

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Tracing My Memories through Smell Documentation of an Inclusive Program and Its Current Development

Hisako Inoue

Abstract

The inclusive program "Tracing My Memories through Smell" was held at Tokyo Shibuya Kōen-Dōri Gallery over four days, from May to June 2022, and was followed by a two-week exhibition. The program brought together participants from diverse backgrounds—including those who were sighted, blind, hearing, and deaf—to explore "memories of smells" unique to each individual. By bridging generational and gender divides, participants were encouraged to share their experiences while respecting each other's perspectives and sensitivities. Through this collaborative process, ten participants created personal "Scented Life Timelines," tracing scent-related memories from birth to the present. The project concluded with an exhibition featuring the completed timelines alongside corresponding fragrant items. The exhibition allowed over 560 visitors to engage with the participants' work and reflect on the connection between their own lives and scents. This paper presents the process and results of our project, while exploring the potential and future growth of inclusive recreation programs.

Keywords: ***Inclusive, Workshop, Timeline, Smell, Memory, Communication***

Introduction

I create multi-sensory artworks that explore the theme of smell and memory. From May to June 2022, I organized an inclusive art program titled "Tracing My Memories through Smell" at Tokyo Shibuya Kōen-dōri Gallery. The project fostered dialogue on equal terms between people with and without disabilities, encouraging mutual respect for each individual's sensory experiences. It transcended generational and gender boundaries, allowing participants to learn from each other's life stories while creating their own personal "Scented Life Timelines."

The workshop, attended by ten participants of various ages, focused on sharing unique life experiences, from birth to the future, and creating individual timelines. Later, we held an exhibition featuring the timelines, paired with fragrant items representing each participant's life journey. This exhibition attracted around 560 visitors, offering them the opportunity to reflect on the connection between scents and life. This paper examines the process and the outcomes of the program, discussing the potential of such work and the challenges of fostering an inclusive society.

1. The Purpose of the "Scent and Memory" Inclusive Program

1-1. The co-development and Implementation

Since 2003, I have co-developed and implemented programs with special-needs schools, museums, and local government-affiliated NPOs, where people with diverse physical sensitivities could recall and share memories through scents. In February 2020, the Tokyo Shibuya Kōen-dōri Gallery, a Tokyo-based facility specializing [1] in Art Brut exhibitions and inclusive programs, was established. After the COVID-19 pandemic, the

gallery began full-scale operations in October 2021, at which point I was invited to co-develop a program focused on scent and memory. After six months of preparation, we held the workshop "Tracing My Memories through Smell" from May to June 2022, followed by the exhibition.

1-2. The Concept

In the 1960s, American psychiatrist Dr. Robert Butler introduced "reminiscence therapy [2]," a psychological method that uses familiar objects, music, and photos to help people recall and share past experiences. It can be said that my scent-based program applies a similar approach. Smell is a unique sensation. Olfactory experience is visceral and cannot be shared with others. In developed countries, where people tend to process information more quickly through sight and sound, vocabulary to express smells is often limited. To convey an olfactory experience, one must recall and verbalize past scent memories. Since smells cannot be directly shared, the ability to describe them holds the key to communicating the experience. The workshop's goal was for participants of various ages from 10 to 60 to look back on their daily lives, recall certain smells, and create a scent-based timeline, fostering new perspectives on their lives. Furthermore, through the subsequent exhibition, we provided visitors with an opportunity to reflect on their own lives, passing the memory baton even further.

1-3. The Program Preparation and Implementation

Following the 2021 pandemic, hybrid education, combining remote and in-person classes, became common in educational institutions. This program was implemented in both formats. Online participants were paired with on-site staff who provided the necessary support, watched the monitors, supplied

their mentees with additional visual information, and bridged communication gaps between the members. Because we utilized a variety of fragrant items, we were able to share interesting differences between the reactions of the participants at the venue and the sensations created by the online distance.

Depending on the members' physical condition and their milieu, the way to manage the support system differs between face-to-face and online sessions. For instance, when we held the inclusive program "The Story of Smell [3]" online in 2021, audio-based communication with visually impaired participants worked well. They did not feel any gaps between activities as long as they did not change their position or use items. On the other hand, supporting deaf participants during online sessions required more visual support than in face-to-face programs. If the program exceeds three hours, the organizer will need at least two sign language interpreters (* the same applies to in-person sessions) and text support to reduce fatigue and burden for the sign language interpreters. In addition, participants are encouraged to use multiple tabs on their screens, such as a tab to see the sign language interpreter and read captions fixed with a pinning function and a tab to monitor the progress of the entire program. The latter makes them more heavily equipped compared to face-to-face sessions.

For "Tracing My Memories through Smell," we set up an operational system to foster close cooperation among four facilitators, two sign language interpreters, three gallery staff members, two video staff members, and the instructor (Hisako Inoue).

The four facilitators held a training session two weeks before the program to simulate the sensory experience of not being able to see and hear. Training methods included, for instance, walking with eyes covered, assisting those who were walking blindfolded, and sharing activities that could not be visualized. In addition, participants learned how to perform activities and provide assistance in situations where loud music was played and surrounding sounds were blocked out.

Two sign language interpreters, Yūko Setoguchi and Misa Wada, who are well acquainted with working within the context of an art project, were asked to participate in the group work as part of the team to facilitate the participants' conversations.

The program also emphasized the importance of archiving the process and invited photographer Aoi Kudō and filmmaker Hideto Miyuki to document the event. Staying close to every participant, they did not miss a moment of importance and created a wonderful record of the event. Considering the unfolding events, Mr. Miyuki developed and kept in mind multiple plots during the shooting, each time setting up a key person of the day. Three months after the end of the program, the entire process was condensed into a 40-minute archival video that captured the vivid expressions of the participants.[4]

1-1 Self introduction time

1-2 Dialogue with a remote participant about smell

1-3 Group activity Facilitate dialogue through written communication

Photo1 : Team Meeting (program Day 1.)

Photographer : Aoi Kudo/Tokyo Shibuya koen-dori gallery exchange program [Tracing my memory through smell] Offer : the same gallery

1-4. The Communication Rules

During the workshop, we established five communication rules: (1) Avoid using vague terms like "this" or "that." (2) Do not speak and listen when someone else is talking. (3) Introduce yourself before speaking. (4) Work with sign language interpreters and speak slowly. (5) Use written notes to aid conversation. We checked various aspects of the venue, including tactile maps and seating arrangements, to ensure an inclusive experience for all participants.

In addition, each time before welcoming participants and conducting the activity we checked various aspects of the venue, including making sure there was a tactile map of the venue that could be experienced through the sense of touch, verifying the configuration of the venue and positioning the sign language interpreters, caregivers, and service dogs, placing staff members where their voices could be easily heard, carefully checking the viewing angles for the cameras and planning the flow with the shooting director and the photographer. Becoming aware and reflecting on one's unconscious behavior in daily conversation provided a valuable experience in fostering compassion for others.

2. The Workshop Process

2-1. Four Days of Reflecting on Life Together

It is difficult for participants who have never met each other before to suddenly open up and foster conversation. Therefore, the four-day process was carefully planned so that participants could recall their memories naturally through dialogue, using smell as a communication tool.

Day 1: May 7, "Talking about Smell." Participants warmed up their sense of smell and introduced themselves while drinking original medicinal tea prepared by Maho Suetsugu, a Chinese herbal medicine pharmacist. The guest speaker, Mika Shirasu, an Olfactologist, led a lecture on the science of smell, using fragrant items to explore the unique way each person perceives scent. Participants then created "sensory sheets" to analyze their impressions, sharing personal memories tied to the scents they had brought from home. As the discussions unfolded, the tension in the hall gradually dissolved, and

the personalities and sensitivities of each participant came into view, bringing the first day to a close. (Photo.1), (Photo.2)

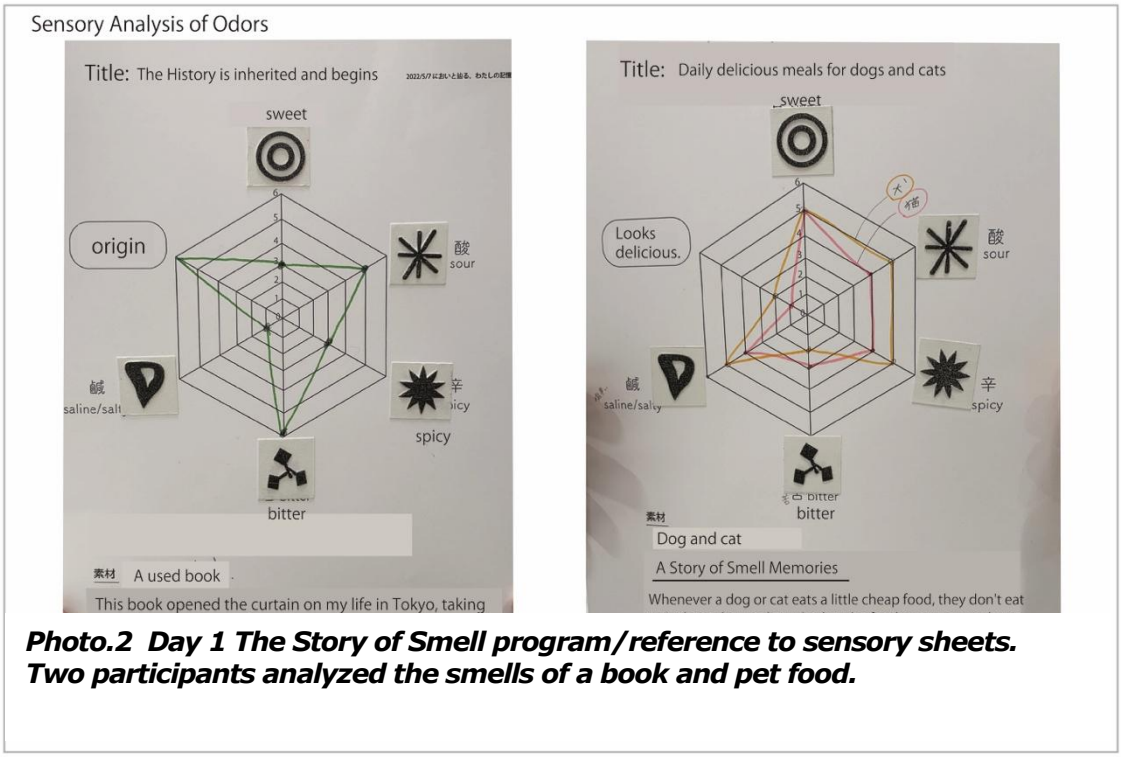

Photo.2 Day 1 The Story of Smell program/reference to sensory sheets. Two participants analyzed the smells of a book and pet food.

Day 2: May 14: "Life is Smell, Life is OO." Participants reflected on the smells they had encountered throughout their lives, from birth to the present. They shared memories of significant moments, discussed the smells associated with these milestones, and began creating their own personal "Scented Life Timeline."

Day 3: May 21: "Mini KUNKUN Walk" and exhibition preparation. As this was a one-day program, the morning session took participants outside the gallery for a "scent walk" through the streets of Shibuya. In the afternoon, they resumed working on their timelines.

Day 4: June 11: Preparing the space for the "Tracing My Memories

through Smell" exhibition. All participants worked together to set up their own exhibits.

Throughout these four days, scent became a medium for emotional release and connection between participants. Every session ran over time as conversations flowed well beyond the program's scheduled end. Witnessing the participants' converse freely, feeling a deep sense of connection, and being in a space filled with laughter created a truly blissful experience.

2-2. The Scented Life Timelines

Recalling memories of smells and verbalizing life experiences requires a considerable amount of time. Group discussions were organized in pairs of three to four participants, who were encouraged to gently reflect on their pasts, sharing memories such as the scents of their favorite childhood items or the nicknames their families used for them. Each participant recalled scent-related situations from different life stages—ages 0, 3, 5, childhood, adolescence, adulthood, the present, and the future—and handwrote them on "chronology cards." For visually impaired participants, staff members took dictation and compiled their responses. Of course, participants were not required to discuss anything they felt uncomfortable disclosing or did not wish to share. They were encouraged to write about topics such as insightful hobbies they were passionate about, which helped illuminate their lives, or from the perspective of an imaginary person. While a fictitious chronology may seem to lack authenticity, it still captures genuine experiences from the perspective of an individual's inner life, such as memories of scents and scenery. We welcomed this approach as a mirror that fully represents the person's life.

The maximum number of episodes included in the chronology was set at 25. The design was created to allow each participant's contributions to fit onto a piece of tapestry measuring approximately 75cm wide by 120cm long, using a font size of 32 points with a maximum of 250 characters for each decade, resulting in a total of 6,350 characters. However, more than half of the episodes overflowed into dense narratives surpassing the character limit. Ultimately, everything was adjusted to fit dimensions exceeding 210cm in length. (Photo.3)

3. The Results and Future Prospects

The timeline's length is not solely determined by age; it reflects how people live daily. Every unique life is a magnificent journey filled with joy, anger, sorrow, highs, and lows, navigating various conflicts to embrace the present. Among the participants in this year's event were individuals who shared their experiences of losing their eyesight in later life, those who have navigated a journey between life and death and are now living resiliently, young caregivers who had forged a new future through their experiences, and those striving to achieve their dreams. For all of them, the project created a unique opportunity to share their own biographical stories and to see them in a new light as if they were truly transformative events or miraculous encounters.

Participants also shared their reflections on the quality of the workshops. One remarked, "It was fascinating to see how the walls around my heart were torn down with each session, shifting my perspective to a more positive one as I looked back at my life through the lens of scent." Another participant expressed, "I felt a strange sensation as if I were experiencing reincarnation; my memories were awakened, allowing me to relive them through a simulated experience. When I read the timeline

for the future in 2076, I realized that I would no longer be in this world, and I felt the joy of honestly passing the baton to the future."

Photo.3 : [Tracing my memory through smell] exhibition at the venue Photographer : Aoi Kudo / Tokyo Shibuya koen-dori gallery exchange program [Tracing my memory through smell] Offer : the same gallery

Conclusion

After the exhibition, visitors remarked, "It was a wonderful exhibition that deeply captured each person's story and a moment in their life, making me believe that 'smell' could change the world—from the individual to others, to society, and across different cultures," or "The chronology of each individual felt like reading a novel." Hearing this, I felt we had truly succeeded in touching people's hearts and passing on the baton of memory to others.

In June 2021, to eliminate discrimination against people with disabilities Japan revised the Law and set a new goal to create a society where all citizens, regardless of disabilities, respect each other's personality and individuality and support one another.[5] I believe the inclusive art program "Tracing My Memories through Smell" has brought us closer to this goal by promoting diversity and raising awareness for the future (Figure 3). Since 2023, I have expanded my activities beyond the art field to include regional projects, implementing programs in collaboration with the Yokohama City Welfare Council and special-needs schools, as well as an inclusive "Smell and Memory" program with Kazo City in Saitama Prefecture.

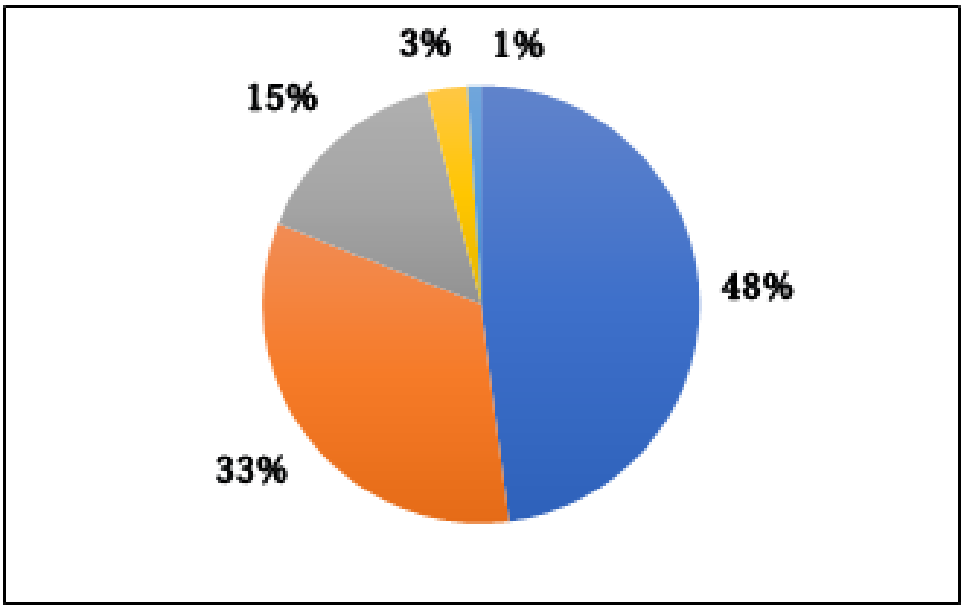

Figure 3: Are you interested in the potential of art in a symbiotic society (10 respondents) Breakdown: 48% very much, 33% yes, 15% no, 3% not much, 1% no
(Produced and provided by Tokyo Shibuya Koen-dori Gallery)

If we can create a society where everyone communicates in diverse ways—such as viewing sign language as common knowledge, a foreign language

to be learned, or considering becoming someone's eyes a normal part of daily life—and if we foster an environment where individuals support one another without labeling it as a disability, we can cultivate a more prosperous culture and contribute to a more symbiotic society. I will continue our efforts to ensure that the program "Tracing My Memories through Smells" remains a catalyst for raising awareness in people's hearts and minds.

Acknowledgements:

The Tokyo Shibuya Kōen-dōri Gallery, Tokyo (The Museum of Contemporary Art Tokyo, the Tokyo Metropolitan Foundation for History and Culture)

Yuri Yoshida

Kaoru Ōuchi

Masaki Unozawa

Department of Art and Design, the Musashino Art University

Olfactologist:

Mika Shirasu (Specially Appointed Assistant Professor, Graduate School of Agricultural and Life Sciences, The University of Tokyo)

Photographer: ***Aoi Kudō***

Filmmaker：***Hideto Miyuki***

Staff: ***Emi Hayashi, Shoko Aoki, Kotoka Hidano, Yui Itomi***

Sign Language Interpreters: ***Yūko Setoguchi, Misa Wada***

Props: ***Kampo Life Design (Maho Suetsugu)***

10 participants

Translator: ***KUZMINA EKATERINA, Naoko Hatta***

References

1. Tokyo Shibuya Kōen-dōri Gallery, Wākushoppu hōkoku tenji "Nioi to tadoru, watashi no kioku" [The Report Exhibition "Tracing My Memories through Smell"] [website in Japanese], https://inclusion-art.jp/archive/event/2022/20220612-135.html

2. The Japan Foundation for Aging and Health, Kaisōhō [Recollection Method] [website in Japanese], https://www.tyojyu.or.jp/net/byouki/ninchishou/kaisou.html

3. Nioi no hanashi [The Smell Talk] [website in Japanese], https://smell-conversation.jimdofree.com

4. "Nioi to tadoru, watashi no kioku" ākaibu eizō ["Tracing My Memories through Smell" Archival Video]. YouTube, uploaded by Tokyo Shibuya Kōen-dōri Gallery, 1 September 2022, https://youtu.be/d-KSF4vbF48.

5. In 2021, Revision of the Law for the Elimination of Discrimination against Persons with Disabilities in Japanese cabinet office. https://www8.cao.go.jp/shougai/whitepaper/r05hakusho/gaiyou/h01.html

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Letter from the Chairman's Desk By Sunil Bhatia PhD

Wishing you Merry Christmas and Happy New Year 2025

I was selected for sensitive responsibility for the government and was asked for medical examination for my body from government-appointed doctors. The doctor found I am colour blind for a specific colour and recommended for rejection of my candidature as per the government guidelines.

He explained your eyesight is normal but this job is colour sensitive and your eyes are not equipped to absorb such colour of light.

I was disappointed with this new development because the specific nature of light was the reason for rejection.

I realized I was groping in the dark room to avoid hindrance on my way that could hurt as I stepped for existence. I felt normal as an electric bulb lights the dark room.

I realized the light has guided me to select those jobs where colour sensitivity is not required and living in the dark is much more difficult. I realized light is guiding the traffic. Red means stop, green- move, and yellow -be careful in crossing.

I went to a restaurant and noticed there was an ultraviolet mosquito repellent that was trapping the insects because of its light. A TV program was showing a program of bullfighting where a matador was placing a red colour of cloth in front of the bull's eye that was blocking sight and disturbing him, in an attempt to clear visibility was hitting the cloth.

There was news on TV where the terrorists hiding in house and surrounded by police. They had announced to surrender and come out of the house. They placed a high beam searchlight focussing toward the entrance to make them temporarily blind. In case their intention was not fair at least police can counter them during temporary blindness.

A spy was placed under high voltage light and not allowed to sleep and that psychological pain made him confess what authority was interested in.

Light character is shadow surfaces as it faces some opaque block. The same problem of shadow was faced by surgeons who were disturbing him to see the area of operation due to the shadow of their own hands. Scientists designed light bulbs arranged in such a way, that light does not make shadows even the block is facing. It was the product of surgery light that was guided to perform without any issue of shadow. During wartime government used to advise the citizens to light their houses at night in such a way that should not be visible to the enemy from a distance. The enemy could make the people live by following light from their houses and that will help in target bombing. It was the light that was guiding the bombers. With the advancement of

technology such actions of keeping the dark are no longer required. Bombers can make the habitants live in clusters because of energy level is dense and equipment can locate levels of infrared presence.
It is the light that has made a thin line of day and night. People can work day or night with equal effort, and enjoy games of the day at night.

The world never sleeps. It is light that has changed our thought process and lifestyle and enjoy more freedom compared to our ancestors without oil lamps to electric bulbs. Thanks to that person who made the first fire torch for holding in hand for light. He used fire property of heat and light in such a way it changed human life forever. It is made secure and safe and keeps away enemies with the art of management of fire. The design of the oil lamp is not accidental but a well thought out design where a wick made with cotton has one end dipped in stored oil to help in burning with low intensity for not generate a high level of heat and the other end has fire for light. Other side the fire kiln has a high intensity of heat by burning logs for cooking where the light was controlled by enclosing fire as the design of the chamber helps in channelizing the heat in a concentrated and focussed manner. These two concepts changed the face of human development and laid the foundation of modern civilizations.

The absence of light and presence patterns helps design the desired picture elements (Pixel) in the computer and guides the users in drawing the desired picture.

In medical science use of light as a laser for surgery is extensive but that light is guided by the surgeon, not a product that guides the uses.

I am grateful to the Guest Editor(s) Industrial Designer Yuka Takahashi and Harni- Takahashi for making this special issue a great successes story and their passion ,dedication for perfection is clearly reflected and they justify their role as Guest Editor.

With Regards

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91-11-27853470®

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Forthcoming Issues

Year 2025 declared as Women's Designer

January 2025 Vol-20 No-1

Dr Sharmistha Banerjee

She is an Assistant Professor at the Department of Design and Associate Faculty at the Centre for Disaster Management and Research, Indian Institute of Technology Guwahati. She specializes in Design for Sustainability. As co-founder of the Sustainability and Social Innovation Lab at IIT Guwahati, she leads initiatives on transforming consumption and production systems through sustainable product-service system design interventions. The lab participates in the global Learning and Education Network in Sustainability (LeNS), a consortium of more than 150 universities

across the globe, focusing particularly on design of sustainable distributed economy solutions.

Her research and development work primarily focusses on:

SDG 12 (Responsible Consumption and Production) through her role at the Department of Design

SDG 11 (Sustainable Cities and Communities) through her role at the Center for Disaster Management and Research.

Feburary2025 Vol-20 No-2

Dr Natasha Poggia

Natacha Poggio is a design educator, Fulbright Scholar, TEDx speaker, Climate Reality Leader, and passionate advocate of design for social and environmental change. She is an Associate Professor of Design at the University of Houston-Downtown. Prior to that position, she taught at Lamar University and the Hartford Art School, University of Hartford, in the United States, and at the Universidad de Buenos Aires, in Argentina.

March 2025 Vol-20 No-3

Dr Dolly Daou

24 years of global leadership experience initiating and developing industry-research strategies, research centres, and projects for medium-large organisations and for higher education programs in: Australasia, Europe, and the Middle East. I am Citizen of the Year 2024 received at the Kingston Community Awards. Also, I was a finalist for Kingston Women of the Year Award for the category of STEM education. I deliver workshops to organisations and institutes combining industry and academic bespoke design methodology to develop system and mission-driven strategies and transform research into actionable outcomes. I have also been the Chair of Food Think Tank Working Group at Cumulus Association since 20019. Based in Melbourne, I led the Head of Master of Design: Art and Technology at NACAA (the first joint Sino-French School of Design in China) and I have established and led the Interior Architecture Program at Swinburne University of Technology and implemented its transition. My career path led me to France, where I expanded my area of expertise leading the Food Design Lab working with the industry and policymakers on mission-driven strategies that comply with current

government, academic and business outcomes. visit my website for further details: https://dollydaou.org/

April 2025 Vol-20 No-4

Valerie Fletcher ***has been executive director since 1998 of the Institute for Human Centered Design (IHCD). Fletcher writes, lectures, and works internationally. She generates opportunities for IHCD and has broad oversight of all consulting and design services. She created the IHCD User/Expert Lab which has over 400 people engaged in the evaluation of places, products, and services. Her current research focus is generating data to inform inclusive designing for the Black, Indigenous, People of Color (BIPoC) and for people with a spectrum of brain-based conditions.***

Fletcher's career has been divided between design and public mental health and she is the former deputy commissioner of the Massachusetts Department of Mental Health where she oversaw the largest participatory planning process ever undertaken in a state mental health system. She was Principal of Fletcher Studio Design from 1978-1985.

She is councilor for the International Association for Universal Design (IAUD) in Japan. She has created an international universal design benchmarking project for the government of Singapore. She serves as

Trustee of the Boston Architectural College. Fletcher has a master's degree in ethics and public policy from Harvard University. The Boston Society of Architects awarded her the Women in Design award in 2005. The Helen Hamlyn Research Centre at the Royal College of Art in London named her Inclusive Design Champion 2022.

May 2025 Vol-20 No-5

Debra Ruh*:*

Advocate for Inclusion and Technology for Good

Debra Ruh is a globally recognized market influencer and advocate for the inclusion of people with disabilities. With over 500,000 followers on social media, she is among the top 2% of voices on LinkedIn, making her a powerful voice in the spheres of technology for all (Tech4All), technology for good (Tech4Good), and AI for good (AI4Good).

Debra has spoken at numerous multinational corporations, the United Nations, and the World Bank, emphasizing the importance of accessible technology and inclusive practices. She has authored three impactful books on disability inclusion and the role of technology in creating a more equitable world. She also a speaker for US State Department.

As the founder of Ruh Global IMPACT, a think tank focused on disability inclusion, Debra has driven forward-thinking initiatives and fostered global dialogues on these critical issues. Additionally, she co-

founded Billion Strong, the world's first grassroots identity organization for people with disabilities. Billion Strong aims to unite the global disability community, enhancing their visibility and support network.

Debra's efforts are rooted in her belief that technology can and should be a force for good, creating opportunities and breaking down barriers for all. Her work continues to inspire and lead the way toward a more inclusive and accessible world.

June 2025 Vol-20 No-6

Maria Kaplan

Mara Kaplan is a national expert and trailblazer in the realm of creating inclusive spaces for people of all abilities and ages to truly belong. As the lead consultant for PlayPower on inclusion, Kaplan pioneers initiatives shaping the future of playground equipment and play spaces nationwide. Her journey began as a parent advocating for her son with disabilities, leading her to establish an indoor inclusive play haven and serve as the executive director of the Center for Creative Play for over a decade. Kaplan's impact extends through her consultancy "Let Kids Play," where she conducts dynamic workshops, collaborates with landscape architects, and works with community groups on designing playgrounds while also developing online training on inclusion and child development. Through her unwavering dedication, Kaplan continues to transform communities and champion inclusivity across the country.

July 2024 Vol-20 No-7

Prof Brigett Wolf

Brigitte Wolf is a retired professor of strategic design and design theory focussing on sustainability. Her background is in industrial design and psychology. She held a chair at KISD (Cologne International School of Design), Wuppertal University and the German University Cairo, Egypt. In addition, she was guest lecturer at universities in Cuba, Brazil, Argentina and Iran. Recently she has been conducting seminars at ecosign/Academy in Cologne and supervising PhD students at Wuppertal University and the University of Teheran.

August 2025 Vol-20 No-8

Shannon Iacino is a Professor of Industrial Design and Design for Sustainability at Savannah College of Art and Design. Her work specializes in leveraging technology to advance the principles of the

circular economy and design for social good. With a background in sustainable design and emerging technologies, Shannon integrates innovation and ecological responsibility into her teaching and research. Her work emphasizes creating systems and products that minimize waste, promote resource efficiency, and address societal challenges. Through interdisciplinary design projects, Shannon collaborates with students and communities to develop impactful solutions that balance technological advancement with sustainable practices.

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New Books

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it is available on www.morebooks.de one of the largest online bookstores. Here's the link to it: https://www.morebooks.de/store/gb/book/design-for-all/isbn/978-613-9-83306-1

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HOW WE LIVE: Through the Products that We Use

Authored by : Sugandh Malhotra,

Professor, IDC School of Design, IIT Bombay (INDIA)

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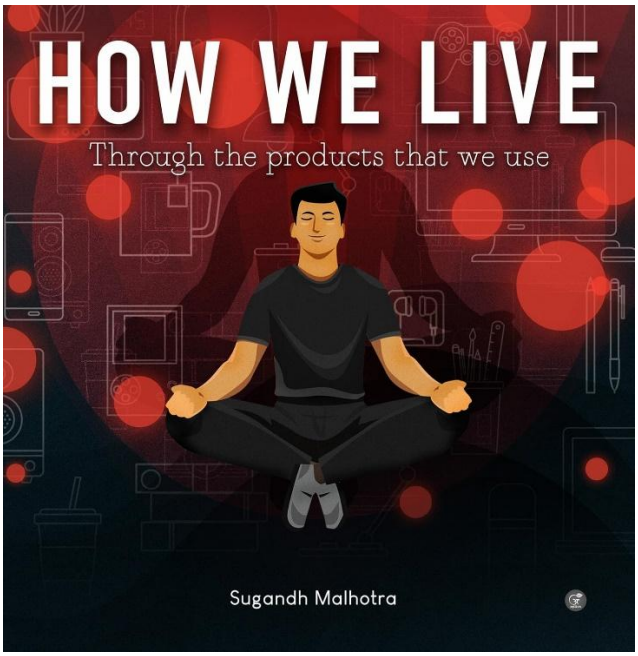

Products tell stories about their users, their likes, tastes and journeys. 'How We Live' book aims to outlay, document and study the used products and create a persona of the users through a brief narrative. This visual documentation book is an excellent resource to observe and acknowledge the subtle differences in choices that are driven by nuances other than personal preferences.

Available at: Amazon.in, Amazon.com, Astitva Prakashan

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MOVE MUMBAI: Kaali Peeli and Beyond

Authored by : Vivek Kant, Sugandh Malhotra, Angshuman Das, Tekhenutso Theriah

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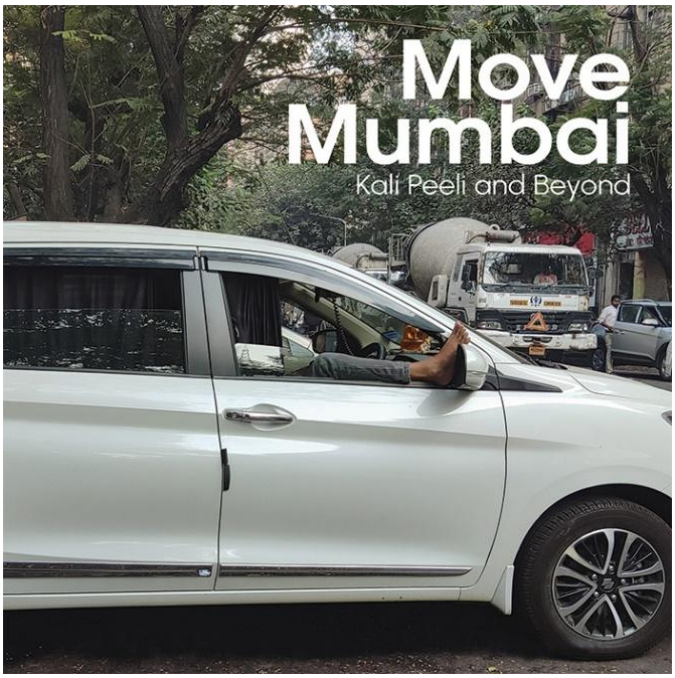

Move Mumbai" is an incredulous yet everyday traffic story from the streets of Mumbai captured through a series of photographs. We closely observe how Mumbaikars use their vehicles, and live with and around them. From cab drivers to bus passengers, from goods carriers to bikers, to children, and pedestrians, Mumbaikars encounter hundreds of vehicles daily while commuting between any two places whether they may or may not be in one themselves. While a two-wheeler motorbike is designed to carry two people. Mumbaikars still manage to fit multiple, especially younger children, in ways that a designer would typically not envision. This reflects in certain ways the economic constraints faced by many Indian families, the cultural value placed on integrated family living, and their resourcefulness. This is one of the many ways in which the city dwellers have appropriated vehicles. We hope that the readers relook at these everyday images with a new pair of eyes to understand the seemingly mundane yet incredulous images of the mobility of Mumbaikars.

Available at: Amazon.in, Amazon.com, Astitva Prakashan

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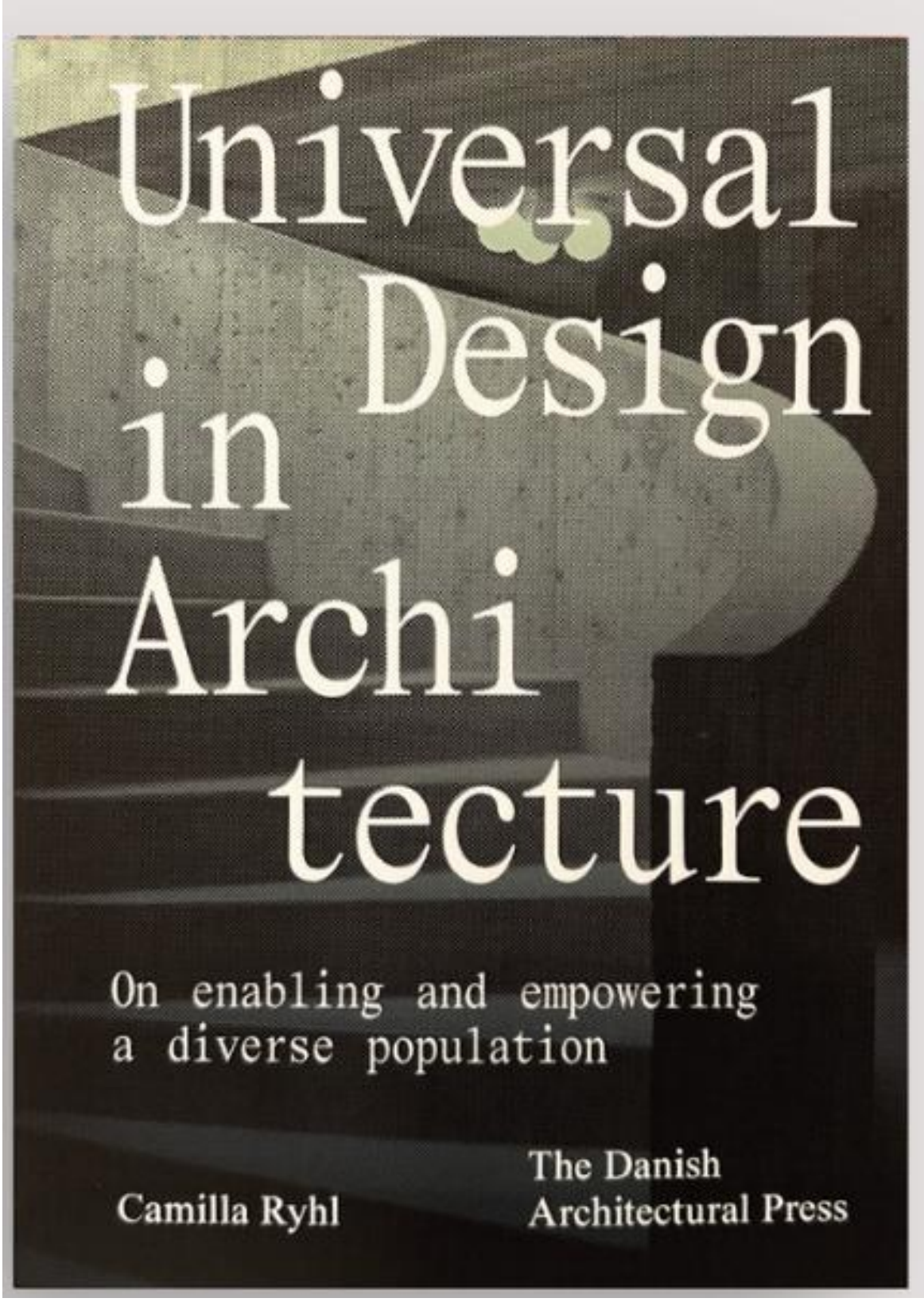
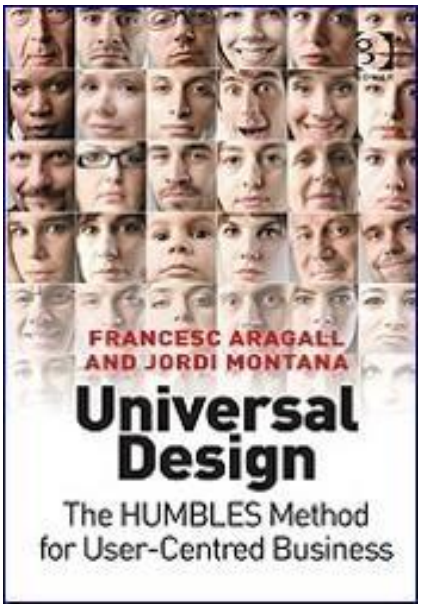


Universal Design: The HUMBLES Method for User-Centred Business



"Universal Design: The HUMBLES Method for User-Centred Business", written by FrancescAragall and Jordi Montaña and published by Gower, provides an innovative method to support businesses wishing to increase the number of satisfied users and clients and enhance their reputation by adapting their products and services to the diversity of their actual and potential customers, taking into account their needs, wishes and expectations.

The HUMBLES method (© Aragall) consists of a progressive, seven-phase approach for implementing Design for All within a business. By incorporating the user's point of view, it enables companies to evaluate their business strategies in order to improve provide an improved, more customer-oriented experience, and there by gain a competitive advantage in the marketplace. As well as a comprehensive guide to the method, the book provides case studies of multinational business which have successfully incorporated Design for All into their working practices.

According to Sandro Rossell, President of FC Barcelona, who in company with other leading business professionals endorsed the publication, it is "required reading for those who wish to understand how universal design is the only way to connect a brand to the widest possible public, increasing client loyalty and enhancing company prestige". To purchase the book, visit either the Design for All Foundation website

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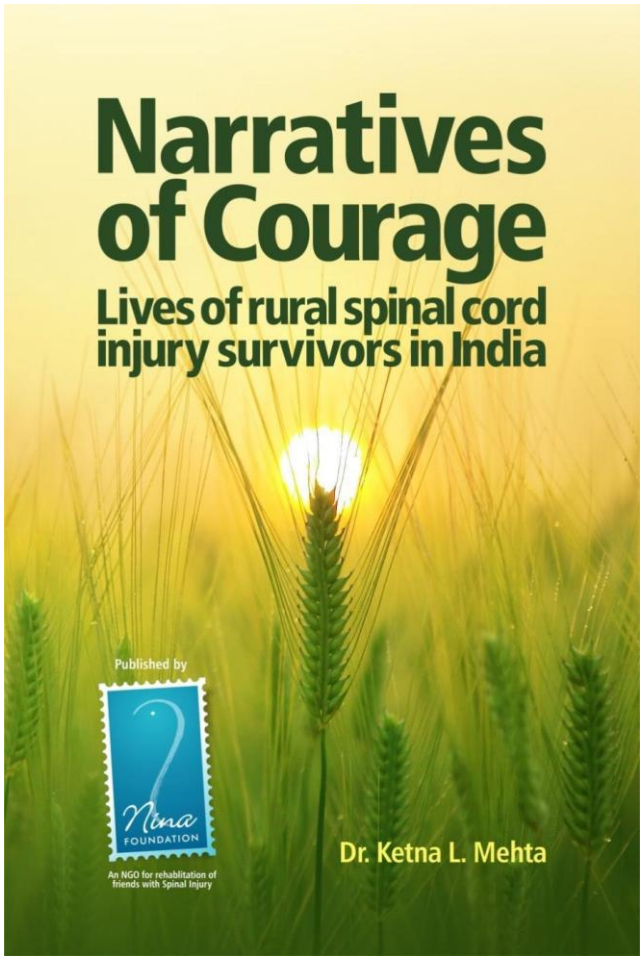

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NOW AVAILABLE
Case Studies in Applied Behavior Analysis for Individuals with Disabilities (Second Edition)
Keith Storey, Ph.D., BCBA-D
Linda Haymes, Ph.D., BCBA-D
This book responds to a critical need for highly qualified personnel who will become exemplary professionals because of their advanced knowledge, skills, and experiences in working with students and adults that have varying disabilities, including Autism Spectrum Disorders (ASD). Since Board Certification for behavior analysts was introduced, there has been an expansion of training programs in Applied Behavior Analysis to meet the demands from school districts, health insurers, and families. In spite of these developments, a case studies book has not been available that uses the Behavior Analyst Certification Board Task List, Fifth Edition (BACB) guidelines for educating individuals receiving their BCBA, or for those in the field such as teachers, and service providers. The goal of this book is to fill that need. In this newly revised second edition, eighteen case studies are provided—case studies with complete analysis, case studies with partial analysis, and case studies without analysis. The format, readability, and detailed description of instructional methodology makes this text a valued resource for instructors and behavior analysts responsible for improving the skills of people with disabilities.
Charles C Thomas, Publishing is proud to announce the release of this second edition.
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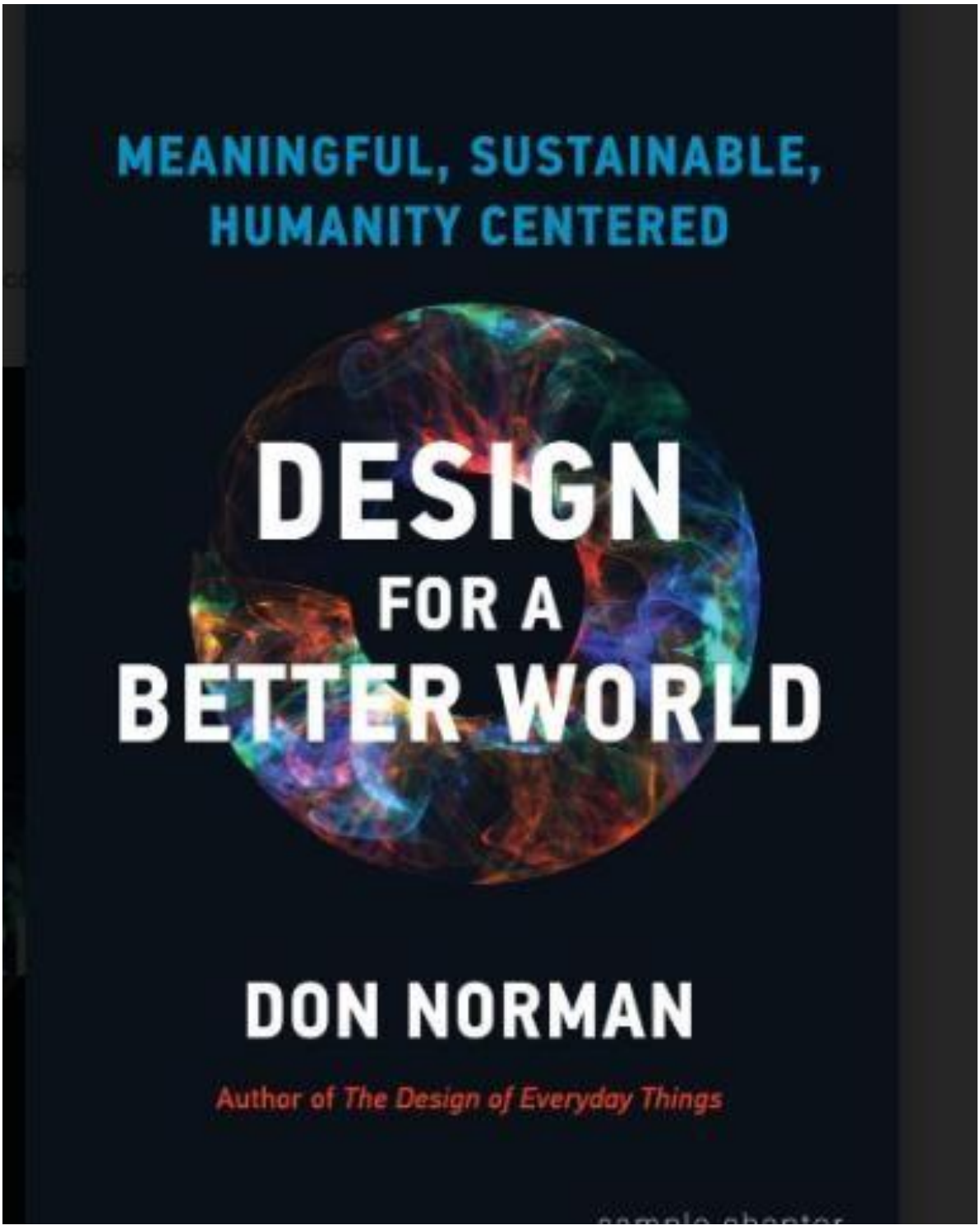
MEANINGFUL, SUSTAINABLE,
HUMANITY CENTERED
DESIGN
FOR A
BETTER WORLD
DON NORMAN
Author of The Design of Everyday Things

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News

Book Review: Combining Sustainability and Smart Growth A review of The Sustainable Urban Design Handbook, by architects Nico Larco and Kaarin Knudson.

More than one book has sought to create lists of pro-walkability and pro-smart growth policies. But in The Sustainable Urban Design Handbook, Nico Larco and Kaarin Knudson seek to combine this idea with sustainability (or, in plain English, environmental protection) by listing dozens of urban planning policies that both improve the physical environment and make cities more walkable and/or transit-friendly. For example the book has chapters not only on issues traditionally associated with the smart growth movement (such as zoning, transit and street design), but also on traditional

environmental issues such as stormwater runoff and wildlife preservation. This book has a few other unique features: Rather than merely listing policies, the authors describe the cost and difficulty of each option. For example, in a section on "Multimodal Street Design" the authors describe pedestrian-oriented design as "[l]ow-medium cost and low difficulty" in undeveloped areas, but "[h]igh cost and high difficulty" in already built-out areas. They explain that in the latter type of place, retrofitting wider streets might require "traffic engineering and changes in intersection design." In each chapter, the authors describe a "typical approach" and then critique that approach. For example, in the "multimodal street" section they point out that American streets are typically "designed almost exclusively to the needs of automobiles." They add that this policy is inequitable because of its negative impact upon nondrivers, and propose that streets "should be narrow to control traffic speeds." The authors are willing to discuss tradeoffs. For example, in a chapter on public transit, they write that transit agencies have a choice between ridership and coverage goals. Some cities might choose to "provide everyone with some level of transit service, which is critically important for those with no other options." On the other hand, a transit agency seeking to maximize ridership will place "frequent service along dense, high-population corridors." A city that follows this policy can afford to "serve more people with more frequent service and lower operating costs per rider." Similarly, if government protects habitat by limiting development in urbanized areas, it risks "push[ing] development to the periphery of urban areas... This can increase travel distances, promote car use, and increase stormwater runoff." The authors recommend that zoning should keep vulnerable populations away from polluting land uses such as transportation

corridors and heavy industry, but add that such polluting land uses "can contribute significantly to local economies and employment." The authors are sensitive to regional differences. Rather than consistently endorsing or attacking tall buildings, they suggest that taller buildings are especially beneficial in hot areas. They explain that cities often suffer from an "urban heat island effect" as buildings trap heat, but that taller buildings mitigate this effect in hot climates, because "taller, narrower streets shade the public realm and minimize the reflected heat trapped within urban areas." On the other hand, cold climates might require "bulkier buildings that minimize the amount of exposed building envelope" which in turn might "limit the amount of daylight that reaches building interiors… [which] increases the need for energy to power electric lighting."

The authors explain the relationship between status quo policies and their negative environmental impacts. For example, municipal laws requiring landowners to create large parking lots for shops and offices create large amounts of impervious surface that in turn increase stormwater runoff.

One part of this book may be outdated. The authors argue that development should be pushed away from flood-prone areas into "areas with low flood frequency." But flooding is no longer limited to coastal areas. For example, in 2021 rainfall created flooding in Forest Hills, a neighborhood in Queens that is so far inland that it was almost unaffected by Superstorm Sandy (a 2012 storm that primarily affected coastal areas). . If floods happen even in places like Forest Hills, is there any reason for government to pick and choose between risky places and supposedly non-risky areas?

(courtesy: Plaintezen)

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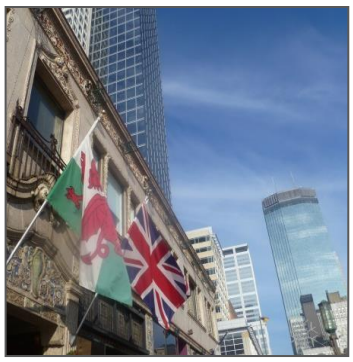

Programme and Events

The submission deadline for the 2025 edition is September 30, 2024, with a late deadline of February 28, 2025. The judging period will take place from April 1st to April 15th, 2025, with the winners announced on May 1st, 2025.

Entries Open: August 13, 2024

Entries Close: December 6, 2024

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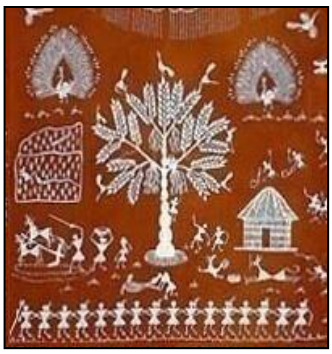

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