

Ergonomics in Design for All/ Newsletter

Dear Members and Friends of the International Ergonomics Association (IEA),
Ergonomics in Design for All Technical Committee,

Welcome to our twenty first newsletter:
it includes also a focus on inclusive architecture for atypical people

Have a look at it, enjoy it!

With very best wishes, I wish you good luck with your work,

Isabella T. Steffan

IEA Ergonomics in Design for All TC
Past Chair

AWARDS

THE UIA FRIENDLY AND INCLUSIVE SPACES AWARDS 2023

By **Isabella T. Steffan**, IEA Fellow, UIA-AfA Italy

The UIA has launched the 4th edition of its Friendly and Inclusive Spaces Awards. Organised by its Architecture for All Work Programme (AfA), the Awards were established to promote inspiring buildings and sites that have created socially sustainable environments through high quality architectural design.

A special award is also given for evidence-based design research that makes a significant contribution to improved quality of life through facilitating a better understanding of human-centred design and its application to the design of the built environment.

Timeline

19 January 2023: award launch
13 February 2023: deadline for questions
17 February 2023: deadline for answers
15 March 2023: deadline for submission of entries
18 May 2023: Announcement of winners
2-6 July 2023: UIA World Congress of Architects

Eligibility

Built works must have been completed since 30th November 2016.
Research must have been completed since 30th November 2016.
Projects that have previously been submitted may be submitted only one additional time.

[**View the Award Page**](#)

Award categories

New buildings
Refurbished existing buildings, including historic buildings
Public and open spaces
Research undertaken by architect(s) on universal design

Awards

The Jury may award a Medal to the Global Winners in each of the 4 Categories, together with up to 3 Honourable Mentions in each Category. Global Medal Winners will be invited to the [UIA World Congress of Architects](#).

How to participate

Applicants are invited to register on the UIA Awards Platform in order to submit their projects. Participation is free of charge. Please send your questions to awards@uia-architectes.org.



FOCUS

INCLUSIVE ARCHITECTURE FOR ATYPICAL PEOPLE

By **Allen Kong**, Life Fellow RAlA, AKA Director, Co- Director Architecture for All Work Programme, *Australia*

Examples of inclusive architecture for atypical people, often go unnoticed by the wider architectural profession. Architecture at its best responds and anticipates community needs and so has moved from the 20th century vision of modern western architecture, as the sure expression of the values of that time, to one to respond to the individual challenges laid down by the changing values of our society. Architects have understanding on both the physical well as the psychological factors however arguably seek novel “wow” factors which are often antithetical to nurturing and inclusive architecture. Recently within society there has been a surge in interest and desire of how to address the requirements of people with atypical needs. Proponents have revisited techniques briefing and engagement techniques that draw out the underlying needs and desires from the users, advocates, and other stakeholders to form a comprehensive brief and reference point as the design develops. The latest catchphrase is co-design, the most recent concept a lineage of participatory design thought of stretching back at least to 1970's as an effort to create more successful projects. Participatory design- pre-design briefing - consultative design- user centred design are all similar methods of informing the design brief. With any project the co-design concept of teaching the skills of design within the time scale of a project design and documentation phase is at best dubious and devalues the designers' skills and plays down the depth of technical knowledge involved in a building project.

The response to Country or place spirit and community informs the essence of the design and an essential part of the health and wellbeing defining a person place and value to a community. The implementation involves openness and deep listening to potential residents and their advocates who often intrinsically understand the needs and frailties of the potential resident.

Staffing economies dictate the concept of grouping people together to facilitate the delivery of services in some form of group living.

Conventionally, design for individual or group accommodation reflects the preconceived cultural idea of the house or home and that a small group of people exhibiting atypical needs would be able to adapt to living in a share house environment or in larger groups for economies of scale.

Architects principally work within their own culture and within the cultural lineage of architectural schools and styles. Current architectural schools and styles are as universally pervasive as any colonising force or ways of thinking.

To continue to think outside of that paradigm is to also recognise the differences in yourself as an architect or designer.

Here we will discuss design process of three AKA projects Wintringham Port Melbourne Hostel (1992-1996) Odyssey house Family Units (2000 - 2012) and Potter Street Redevelopment (2011).

The Port Melbourne Hostel for particularly vulnerable elderly individuals who would otherwise be homeless; The Odyssey House Family Units for individuals receiving therapy for drug and alcohol addiction and their families; and the Wallara-Wintringham Potter Street Redevelopment, for individuals with disabilities and their elderly parent carers.

These projects are typified by the care and support that the Organizations exhibit towards their clients. This is not to say that in the past organisations do not believe they were providing proper care for the people in their institutions as a reflection of the change of community attitudes, although the expression of care then is different to that we think that is appropriate today.

The fundamentals of the projects as inclusive places are similar that they are meaningful, legible, and manageable environment appropriate to the abilities and needs of the residents. They are familiar in context and aesthetic. They allow for the self-regulation of the psychological and physical needs of proximity and control of personal interactions defined by spatial arrangements.

While the three projects all have varying priorities, they can all be described as therapeutic communities – Port Melbourne has individuality with familiar setting. Odyssey House emphasises the individual's responsibility within a community and Potter Street wider flexibility for individuals within the community.

As these projects cater for a larger number of unrelated people, they do not have the luxury of designing for a single person or either a relatively homogenous single group. Therefore, each of the projects carefully tune the buildings in terms of control of light, sound, smells, orientation and wayfinding, textures, familiar aesthetic. Simply, that these elements should not be the sources of negative stimulation – the fresh air, natural non glare light, non-glare and natural, artificial lighting also non glare and sufficient, spaces that are quiet and dissipate unwanted noise or sounds.

Briefing

Each Project engaged with stake holders at the briefing stage.

Port Melbourne was an informal process one on one with potential residents who were at the time residing in a budget residential hotel located in a declining industrial section near the Yarra River. It was informal as we understood that these people had frequently been interviewed and it was difficult for most to completely articulate their own needs. There was a large degree of understanding brought to the process by advocates –who knew these residents very well. We were not introduced as architects the resident only knew we were a part of management our approach was to just listen and engage but without any indication that we were planning to build and new home for them.

The **Odyssey House** briefing and design on the other hand as their inhouse process had quite formal meeting and round table discussion as part of their therapy program. The briefing for the family units was brought in as part of the process so all of the potential residents and facilitators – who largely were also past residents and graduates of the Odyssey Program had round table discussion on the meaning and needs for the future residents and the solutions they required how they would fit with in the community and respond to the needs individually and as a group.



Odyssey House family Units - Photo: Martin Saunders

The **Potter Street** program began as the aged care and the younger people's accommodation being separate entities. As the project developed it became apparent that there were more synergies between the services the environmental requirements were not mutually exclusive. So, some facilities and staffing could be shared. The description of the Potter Street services could appear institutional however the support services were designed to meet the real current needs of all the residents and the village- like spatial planning allowed flexible use in that each person having a way of self-managing and self-regulating their social and emotional needs with in the private and communal spaces. Each of these projects has a nuanced approach to the physical and psychological needs of their residents supporting individual frailties in a way that their security and cultural safety and allow staff to manage the positives in a person's life rather than mediating the negatives.

Port Melbourne relies on a deliberate low key and familiar and contextual approach to the forma and materials – which makes the building more acceptable both to the Neighbours and emphasises that the resident and their home is a part of the neighbourhood. Windows doors and other features are easily discerned both visually and cognitively. Additional small highlight windows provided additional natural light from above which reduced the potential glare factor from the windows. Verandas provided further softening and protection from harsh light while also providing an outside sitting space.

Odyssey House is deliberately non familiar to emphasise the regeneration of the person's life – that takes a person away from their old life. The large irregular volumes with acoustic strawboard lining on the ceilings to dampen noise and create very quiet rooms. The curvy mud brick wall also makes soft surfaces and quieting the rooms. Small roof lights increase the natural light internally and reduces any glare factor from the windows The layout allows for family groupings and with generous bedrooms and hall ways to allow a variety of interpersonal space requirements.



Potter Street Eunice Seddon – Photo: Allen Kong

Potter Street had many challenges. The grouping of many people with varying needs on one site had a high degree of personal and interpersonal issues. Furthermore, the management constraints of travel distances and staffing locations for aged care facilities made another level of confounding briefing requirements. Environmental sustainability design responses were woven into the solutions. Key is the circulation by veranda which allows all unwanted noises and smells that are often associated with residential facilities to be replaced without door fresh air node garden fragrances. Verandas and light from many sides removed issues of glare. Generous spaces and alternate circulation routes both provide variety of garden experience wayfinding cues and healthy environment.

The holistic approach to architecture and health that is advocated by AKA is drawn from the author's Chinese, Palawa, Scottish, English ancestry, based on an inalienable understanding of the living spirit relationship and the reliance between all.

Further details can be found in the publication *Developments in Neuroethics and Bioethics Neurodivergence in Architecture* edited by Anthony Clarke, Jos Boys, John Gardiner

BOOKS

Design for All – Design for Disabled: How important is anthropometry?

Authors: Gunther Paul, Isabella Tiziana Steffan, Nana Itoh, Richard Bowman, Bruce Bradtmiller.
Work, October 2022, IOS Press DOI: 10.3233/wor-211106

A lack of user information prevents application of design standards to assistive technology. Without a standard to measure user data of disabled people, product design of disability products will continue to fail international product design standards.

In the absence of adherence to design standards, disability products will continue to lack certified quality, suffer from limited usability, and their procurement will cause systemic high cost due to an increased risk of incorrect prescription.

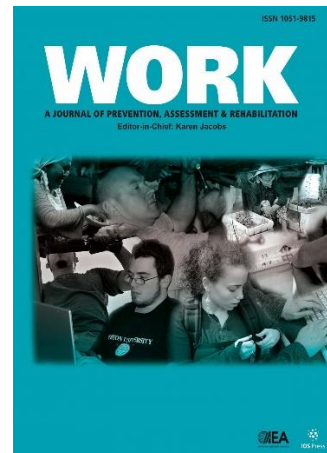
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You can find information about objectives, domains of interest, members of the TC here:

<https://iea.cc/member/ergonomics-in-design-for-all-eindfa/>

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