OUT AND ABOUT
WITH UNIVERSAL DESIGN

THE THING ABOUT UNIVERSAL DESIGN IS THAT YOU ONLY NOTICE WHEN IT IS NOT THERE EXPLAINS **JANE BRINGOLF.**

Heavy doors, steep steps with no handrail, nowhere to sit, no shade to walk under, and inadequate lighting to see signage or read a menu are things most of us have experienced. As we get older, these things begin to matter more. And if you have problems with mobility and use a wheelchair or walking aid, or if you are blind and use a cane, the issues are magnified. And let's not forget parents with strollers and shoppers with trolleys. A poorly designed environment creates an unequal environment – unequal for people who cannot easily get out and about. So why does this happen?

Urban designers don't set out to create exclusion in their designs. Too often they think universal design is about disability access standards and can be left to an access consultant to work out later. There could be several reasons for this. First, universal or inclusive design principles, if included at all in study programs, are an elective sitting outside the mainstream topics in architecture and design. Second, a belief that applying the Standards Australia's Access to Premises Standard will take care of any access issues and that will be enough. Third, and most importantly, is attitudes towards people who are not seen as "The Normals". This attitude is often formed from misinformation about the number of people affected (see Disability statistics page 23). But universal design is more than that.

Public space is everywhere: around housing developments, commercial precincts, tourist attractions, recreation spaces, sporting venues, transport hubs, parks, playgrounds, and shopping centres. If each of these is considered separately, we end up with a piecemeal approach to inclusion, and that can create barriers to participation. For example, a cinema might have well designed access from the street or car park, flexible seating for patrons with mobility aids, closed captioning and audio descriptions of the movie, and an accessible website. This means wheelchair users and people who are blind or deaf are catered for. But if there is no footpath outside their house, no accessible bus, and just one missing kerb ramp along the journey, this can be a sufficient barrier for a wheelchair user or someone with a shopping trolley to be excluded, or at the very least, substantially inconvenienced.

Universal design is about joined up thinking. It is also about thinking differently for differences and dignity for all. So what is universal design and how does it apply to the built environment? Sometimes the best explanations for universal design are to say what it is not.

Universal design is not another name for compliance with standards for access for people with disability. These standards are based on disability discrimination legislation and provide designers with specifications and minimum requirements that are mandatory. They are only part of the process of designing inclusively. Also, it is possible to meet all the technical standards but end up with patches of inaccessibility.

Universal design does not "dilute" a design; it does not involve a series of compromises to the detriment of the original design concept. But if designing for diversity is left to the end of the design phase, it may well end up with compromises, such as a ramp that negatively affects the aesthetics of the design.

Universal design is not something just for people with disability and older people. Designing with the whole population in mind benefits everyone. Low floor buses, automatic doors, level access, good lighting, and well placed seating, all add to everyone's convenience.

So, what is universal design? It is a concept. It is not a design type. It aims for social integration and inclusion, social identity, social participation, and health and wellness. It responds to the context to which it is being applied and that includes the design of services. It is making things easier to use, healthier and friendlier, according to Steinfeld and Maisel in 2012.

Many people quote the classic seven principles of universal design that were coined in the 1990s. Design understanding has moved on and these principles are better expressed through Steinfeld and Maisel's 8 Goals of Universal Design. Below are some examples of how they apply to the built environment.

Body Fit: Accommodating a wide range of body sizes and abilities. Doorways, corridors and pathways need to accommodate people walking and wheeling with socialisation in mind. A narrow footpath does not encourage two pram pushers to walk side by side in conversation, or to walk with a small child. Too many footpaths and walkways are constructed with the notion that all people walk alone.

Comfort: Keeping demands within desirable limits of body function. Heavy door closers are a regular complaint on public toilets. Door closers can be set to close at a resistance level that it doesn't require one's full body weight to open. Seating with backrests is more comfortable and armrests help people to rise to a standing position. Dual height drinking fountains cater for adults, children and wheelchair users. Long winding ramps are not a good alternative to

PEDESTRIANS FIRST
A MIX OF INFRASTRUCTURE, ACTIVITY, AND PRIORITY

steps. It takes a lot of effort to reach the entrance for the wheelchair user or pram pusher.

Awareness: Ensuring that critical information for use is easily perceived. The application and positioning of easy to read signage will assist newcomers and others with cognitive difficulties to know where they are and where they are going. Lighting without glare both day and night will also assist with reading signs, timetables, instructions and menus. Walkways need lighting to encourage use after dark.

Understanding: Making methods of operation and use intuitive, clear and unambiguous. For people who are deaf or hard of hearing, or people who are blind or have low vison, understanding what is going on around them can be difficult. Deaf people cannot hear emergency announcements, and blind people cannot see signs. Tactile markers and street signs help people who are blind, and LED emergency displays help people who are deaf. They also help everyone when the sound of the public address system is distorted or unintelligible.

Wellness: Contributing to health promotion, avoidance of disease and protection from hazards. Providing separate paths for cyclists and pedestrians is becoming more important for encouraging active travel and exercise. Improving the overall look of the environment with trees, planters, seating and public art gives a greater sense of wellbeing. Socialisation is important for wellbeing. Casual socialisation in pedestrian areas can be achieved with strategically placed seating with

INFRASTRUCTURE	ACTIVITY	PRIORITY
ENSURE A PHYSICAL SPACE AND DESIGN THAT PROMOTES WALKING	BRING PEOPLE AND ACTIVITIES CLOSE ENOUGH TO WALK IN SAFE AND LIVELY ENVIRONMENTS	GIVE PREFERENCE TO WALKING, CYCLING, AND TRANSIT OVER PRIVATE CARS
1 Footpaths are sufficiently wide, in good condition, clean, unobstructed, and protected	4 A mix of activities and services activate the street from morning to night, making it safer and more interesting to walk	7 Transport, such as bike share, bus, rail and rapid transit are reachable by foot
2 Pedestrian Crossings are accessible for all pedestrians, safe to cross, and sufficiently wide	5 Street vendors and footpath amenities, such as seating, shade, lighting and garbage bins attract more users and activate footpaths	8 Small street widths are easier to cross
3 Traffic lights give priority to pedestrians to cross first and limit wait time, while ensuring enough time for all to cross	6 On-street parking, that is well-managed and well-priced, can calm traffic, while creating a buffer between moving vehicles and the pedestrian realm	9 Slower speeds for traffic, by both design and enforced speed limits, make safer and more enjoyable walking environments

Adapted from
www.itdp.org/walk

protection from the elements.

Social Integration: Treating all groups with dignity and respect. This goal can particularly apply to people with disability, children and older people. Providing the best possible access to, and within a precinct, is the first step to providing dignity for people with physical disabilities. Often less considered are those with invisible disabilities such as brain injury or dementia, mental health issues, or chronic disease. Everyone should be able to go shopping and have a cuppa at the café, go to work, or play in the playground, on an equal basis.

Personalisation: Incorporating opportunities for choice and the expression of individual preferences. Asking the community where they would like seating to be placed or what

areas they would like for open space is part of personalising an area for the local residents. Street art and novelties, such as lampposts with knitted covers, add to the local flavour.

Cultural Appropriateness: Respecting and reinforcing cultural values, and the social environmental context. Designers need to consider the diversity of the local social and physical landscapes. The design of the development or precinct should allow for people to gather and participate in ways that suit their culture. Public art and performance spaces are part of this, as well as maintaining key social heritage venues or replicating them in some form.

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