

UNIVERSAL DESIGN IS NOT JUST 'ACCESS'

By George Xinos

Universal design represents a paradigm shift in all areas of design, certainly not exclusive to that of the built environment. It is an approach to design which enables use by the maximum possible number of users. Design traditionally has considered 'accessibility' a method of simply adding a set of features to an otherwise 'inaccessible' building or product. The term accessibility is often used to describe the fulfilment of measurable requirements and not necessarily how a building works for a wide range of users. Complying to the provisions of the BCA or an Australian Standard is an example of this, and this in itself presents as a stigmatising and segregating practice given that certain 'additional' features are identified with a distinct group of users. Accessible sanitary facilities and accessible car spaces are often labelled 'disabled' toilets or 'disabled' car spaces in general building nomenclature and rhetoric, which in itself is ambiguous and highly stigmatising.

The term Universal Design and what are now considered the seven principles defining Universal Design were first coined by Cornell and colleagues at The Centre for Universal Design – North Carolina State University (1997). These principles are outlined in the table below:

The principles identified are broad in nature and certainly not prescriptive, which can be of benefit

for designers in developing novel solutions which go beyond the current concepts and expectations of 'accessibility', however they may also give rise to a number of other difficulties. One such difficulty is not having objective measures to compare design solutions to. Another significant issue is the designers' awareness and understanding of the needs of a wider user group.

The standards associated with 'access' in Australia are developed by applying empirical data centered around research conducted on a sample representing 80% of the population. A large range of stakeholders is also represented during their development, inclusive of representative bodies of people with disabilities, building associations and consumer groups. While they do not provide evidence and solutions for all, they may however provide a knowledge base and extensive principles which can assist and provide guidance and inspiration for designers to draw upon when attempting to design Universally.

The Disability Discrimination Act (DDA) requires that premises and services need to be equitable and non-discriminatory and therefore suggests a likeness with the overriding principles of Universal Design whereby separate features are not provided for different user groups. An obvious example includes that all entries (not one alternative

entry) are designed without a step and an opening width which is accommodating for a greater group of users, be it a 20 year old athlete, an 80 year old man who uses a walking aid or 45 year old man who uses a wheelchair. Omissions from this however include the 35 year old woman who has a double pram to negotiate through the door. Even though it is clear that the former would benefit from the wider doorways required by the wheelchair user, her needs have not been specifically considered other than through standardised building tolerances inherited through traditional building practices.

Many architects and designers have long considered the regulatory frameworks such as the BCA and Australian Standards as a set of constraints that can stifle creativity rather than consulting them and drawing inspiration from them in creating more usable environments which challenge formal and traditional architectural concepts while continuing to contest the stereotype that 'accessibility' does not correspond with high aesthetic standards. By nature the best examples of Universal Design are those which are seamless and 'invisible', complementing aesthetics and not differentiating between any user. **A**

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PRINCIPLE	DEFINITION
1. Equitable Use	The design is useful and marketable to people with diverse abilities.
2. Flexibility in Use	The design accommodates a wide range of individual preferences and abilities.
3. Simple and Intuitive Use	Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.
4. Perceptible Information	The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
5. Tolerance for Error	The design minimizes hazards and the adverse consequences of accidental or unintended actions.
6. Low Physical Effort	The design can be used efficiently and comfortably and with a minimum of fatigue.
7. Size and Space for Approach and Use	Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Chart courtesy of Blythe-Sanderson Group