



Accessible Environments

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Universal design embraces principles which are dedicated to being **inclusive** and not exclusive.

I'm OK — You're OK!

Universal design means it's OK for everybody – disabled or able-bodied

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There is a worldwide movement which seems to be slowly gaining momentum. Called universal design it is interested in exactly the same principles as I am. It embraces environments, products and communication.

As an architect I am interested in being involved in designing successful environments which suit the broadest range of people. It is this, universal design, which embraces principles which are dedicated to being inclusive and not exclusive. Another absolute non-negotiable is that 'usability and aesthetics are not mutually exclusive'.

From the start universal design looks at how to make the design work beautifully and seamlessly for as many people as possible. It seeks to consider the breadth of human diversity across the lifespan to create design solutions that work for all users: mothers with pushchairs, elderly people, overweight people, people with luggage, pregnant women, people suffering from fatigue or trauma, convalescent people.

Architecture holds up a mirror to society; so now there is an opportunity for contemporary building design to reflect the strong ground swell that exists for the interests of all members of society,

including those physically, sensory, or cognitively disadvantaged in some way. In so many cases the impairment is not the primary handicap; it is the assault course represented by the built environment that poses the greatest threat to independence and full social integration.

Each of us feels empowered if we have options. When you have no choices there is no freedom.

It has been worked out that the main principles which need to be incorporated in universal design are:

* **Equitable Use:** The design does not disadvantage or stigmatise any group of users.

* **Flexibility in Use:** The design accommodates a wide range of individual preferences and abilities.

* **Simple, Intuitive Use:** Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills or current concentration level.

* **Perceptible Information:** The design communicates necessary information effectively to the user, regardless of the ambient conditions or the users' sensory abilities.

* **Tolerance for Error:** The design minimises hazards and the adverse consequences of accidental or unintended actions.

* **Low Physical Effort:** The design can be

used efficiently and comfortably, and with a minimum of fatigue.

* **Size and Space for Approach and Use:** Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of the user's body size, posture or mobility.

Many of the products now in general usage by the public, were originally considered as assistive devices: runflat tyres, email, chairs with wheels, suitcases with wheels, the tip-up rubbish vehicle, voice activated software, lever taps and many more. This appears to be the secret of acceptance in that it's not perceived as a device for disabled people. Even spectacles are now a fashion accessory, and a lanyard around your neck for your cellphone is considered practical. Mobile phones were not invented for disabled people, but were certainly not invented because we needed to always have communication 24/7; Yet now we've found dozens of uses which fit into those seven principles.

It is actually a very exciting field which should gather momentum. If we can incentivise people as to the advantages of integration and the mainstreaming of disabled people we will hopefully be successful. Environments which are suitable for disabled people are eminently suitable for able bodied people.

Most people will at some stage of their lives be disabled even if only temporarily, so the environments will be beneficial to a larger range of people than is generally supposed. Inevitably there are disabled people who require a helper, but the ethos of our wonderful Constitution is that as many people as possible should be freed from the chains of needing care and being dependent and being able to join the mainstream, and even become tax payers. That doesn't always sound like a privilege, but it beats standing on the sidelines watching life go by!

The built environment professionals are the most suitable to deal with accessibility issues in and between buildings. If easy accessibility is built into the concept of the development there will be no need

to get someone in afterwards to 'fix' it.

The jockey who rode SeaBiscuit was blind in his right eye, and would have been excluded from riding if it had been discovered. His motto was a quote from Shakespeare "Sweet are the uses of adversity". SeaBiscuit himself had a mental impairment in that he didn't like being alone, and insisted on selected company: a cart horse and a dog to share his accommodation.

I look forward to the time when no architect has to be reminded about the soundness of accessible environments, especially in South Africa where we know

that segregation is never equal or fair.

"When I am working on a problem, I never think about beauty. I think only of how to solve the problem. But when I have finished, if the solution is not beau-

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Botanic Gardens Durban: the 'sensory' garden emphasises the attraction of beautiful things even if you are vision impaired. Everyone touches this stainless steel structure of a garlic plant. (It could have been placed slightly lower as no one can reach the top to complete the exercise, right). The textures on the paving give orientation, and the venue is used for functions as it is paved. Note the height of the beds of aromatic plants with a handrail as guidance (left).