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Calling a Spade a Shovel: Universal, accessible, adaptable, disabled – aren't they all the same?

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Abstract
Promoting the efficacies of universally designed built environments has been one of the ongoing quests of disability and ageing advocacy groups, and more recently, governments. The underpinning principle of universal design is inclusiveness – that is, to design across the population spectrum for people of all ages, abilities and backgrounds. This means ensuring architectural features do not inadvertently become architectural barriers to inclusion in everyday social and economic life. The drive for social and economic inclusion for people with disabilities has recently moved up the political agenda and new policy directions at national and state levels are emerging. Political will is a necessary but insufficient condition to guarantee inclusion if industry does not understand what constitutes inclusiveness in design, and does not understand the differences in terms used in the built environment in relation to inclusion, disability and ageing. Using the NSW Government's recent call for tenders for social housing, and an academic paper as examples, this paper discusses how using various terms such as accessible and adaptable interchangeably might defeat the objective of inclusion, and how the misuse and confusion in terminology hinders not only the uptake of universal design in a practical way, but also stymies academic debate on the topic.

Keywords: Universal design, inclusive design, housing, terminology, ageing, disability

Introduction

A rapidly ageing population and the desire of people with disabilities to live in the community have engendered a new lexicon of housing types. Evolving from a different perspective each term is given a particular meaning by various stakeholders resulting in their inconsistent and interchangeable use. The confusion caused by the application of this new lexicon has the potential to minimise the desired effects, as well as increase construction costs particularly when mistakes need rectification. Individual local government regulations also interpret the lexicon variously which has led to inconsistent application within and between local government areas. Consequently, built environment practitioners spend additional time researching each project's individual construction details in an attempt to meet all federal, state and local requirements. In the academic community the situation is little better. There is no agreed set of meanings for each of the terms and researchers have defaulted to compiling their own meanings for their research projects. With no reliable framework, industry is further hindered rather than helped, and academic debate is stymied when there is no agreement on terms. Based on a literature review, terms are discussed in an attempt to clarify the root of the confusion. By understanding how some of the terms emerged, industry and academia are better placed to minimise the confusion and devise appropriate solutions. This paper uses two examples to demonstrate the practical problems and academic issues terminology confusion has created, and offers some options for a way forward.

Language and thought

The way we apply language reflects and shapes our view of the world (Resnick, 1991:8). This phenomenon is demonstrated by the move to encourage gender neutral language so that women are not implicitly or explicitly depicted as being lesser persons than men. People with disabilities, however, have yet to reach the goal of having neutral language applied to them or their situations.

Architectural drawings for public buildings use terms such as 'disabled toilet', 'disabled ramp', and 'disabled parking'. In spite of such toilets, ramps and parking places being fully operational, in this context 'disabled' has become a common usage short form for 'items for people with a disability'. The more grammatically correct form, 'accessible' toilet, ramp, and parking, is not chosen over 'disabled'. Such labelling entrenches community attitudes of separateness, and of 'otherness' and othering because it is focused exclusively on people with disabilities (Goldsmith, 2000). Every time a wheelchair user diverts to use a separate (disabled) ramp entry when the rest of his or her party uses the steps, a silent yet powerful reinforcement of separateness and 'othering' occurs. Choosing to identify the attribute of the user (disabled) and not the product or building feature (accessible) is a very public announcement of a separate group needing separate facilities (Goldsmith, 1997, 2000). Nevertheless, 'access' and 'disability' have, through common usage, become a twin set of associated ideas. While the association of ideas can aid understanding, it can also perpetuate stereotyping. The pairing of access and disability continues to stereotype people with a disability as 'others'. This association has led to further associations so that anything deemed to be useable by a person with a disability has become a 'disabled' product. This association now reaches across all terms for 'other' housing - accessible, adaptable, universal, seniors living – to name a few. Consequently the labelling is unlikely to be changed unless there is a paradigm shift from a separatist approach of 'us and them' to a 'one population' inclusive approach (Bringolf & Schraner, 2009). It is, however, only the lack of acceptance of population diversity that has caused a new lexicon and any need to debate terminology.

An overview of terms

> If and when human diversity becomes a natural starting point for architectural design all special terms will vanish, and so they should. In the end, one could say that there are only two types of design: bad design and good design (Wijk, 2001:28.17).

Society is yet to accept diversity as a normal part of the human condition and several different terms have evolved to deal with this, some of which have passed into the realms of social incorrectness - 'handicapped' being one example. Terms fall into one of two main categories: those with roots in legislation and disability rights, and those that focus on design outcomes and processes rather than any specific group of people.

Accessible

In relation to the built environment, the term accessible is viewed as "something to do with people who are disabled" (Wijk, 2001:28.4). Disability rights legislation has captured the terms accessible and accessibility and enshrined them in statutory instruments (for example Disability Discrimination Act, 1992). They are now technical terms that refer to disablement, particularly in relation to public buildings and spaces (Ostroff, 2001; Goldsmith, 2000). The association of disability and accessibility in the public environment has also entered the language of private and public housing and 'accessible housing' has emerged. Although accessible products and environments focus exclusively on accommodating functional impairments, they often accommodate many users (Goldsmith 2000), low floor buses being one example.

Visitable

Originating in the United States, visitability is a home that can be visited by a wheelchair user (Maisel, 2005). It means they can enter the home, utilise the living area, visit the bathroom and perhaps stay overnight. A home designed on visitability guidelines does not necessarily provide for the full needs of a wheelchair user, such that they will be able to live in the home permanently (Maisel, 2005). In England and Wales, Part M of the building regulations aims for similar conditions to the voluntary visitability code in the US (Imrie, 2004). Visitability is a rights-based approach to providing equitable access at a family and neighbourhood level.

Adaptable

The aim of adaptable housing is to design features that facilitate easy and cost effective modification to suit the changing needs of residents over time (Royal Australian Institute of Architects, 2005). As a policy response to a rapidly ageing population and to facilitate ageing at home, adaptable homes are generally targeted towards people aged over 55 years. Consequently, adaptable dwellings are sometimes referred to as 'seniors housing' or 'pensioner housing' adding yet more terms to the mix. Adaptable features generally offer greater amenity for all occupants - families and individuals alike – as well as ease of modification at a later date. Concepts of adaptable housing are therefore included in yet another concept, 'flexible housing' which also acknowledges cultural aspects (Fien et al, 2007) as well as adjusting to the changing needs of occupants over time.

Usable

In simple terms, usability describes how well the design of the environment enables functioning, performance and well-being from the user's perspective: it is based on a person being able to competently accomplish a task without undue effort or inconvenience (Iwarsson & Stahl 2003:60; Steinfeld & Danford, 2000). Task accomplishment includes all daily living activities, such as pouring water from a jug and making a telephone call, and participating in social and economic activities. Usability is not about rights or design outcomes. Being based on anthropometric principles, usability can however, inform designs and guide design processes (Steinfeld, 1997). While accessible, adaptable and visitable are measured against codes or norms, usability is measured against the person's ability to use a product or environment.

Universal design

Universal design does not focus on any 'type' or group of persons, but considers the population as a whole, designing for the widest number of people possible regardless of age, ability or background. 'Inclusive design' and 'design-for-all' are other terms used in the UK and Europe respectively which mean universal design in intent and purpose. Given the underpinning principles to create products and environments that are inclusive, non-stigmatising, and usable to the greatest extent possible by the

greatest number of people, it logically includes features that are accessible, adaptable, and visitable. As a design philosophy based on inclusiveness rather than a design type or typology, universal design allows scope for aesthetics and creative flair, and for "mediating extremes without destroying differences in places, experiences and things" (Bill Stumpf & Don Chadwick cited in Bringolf 2005:3). Universal design aims to include people with disabilities, but unlike accessibility it is not *exclusively* for people with disabilities. Nevertheless, business surveys carried out in the UK found a misconception that universal design was a "code-word for designing for the elderly and disabled only" (Keates, et al; 2000:3).

Disability and disabled

Goggin and Newell succinctly define disability as: "Impairment is the bodily dimension, whereas disability is what society makes of someone's impairment" (2005:28). The World Health Organisation (WHO) defines disability as an "umbrella term for impairments, activity limitations and participation restrictions" (2002:2). Implicit in the WHO's definition is that activity limitations and participation restrictions are due to environmental and contextual factors that exacerbate bodily impairments (WHO, 2001). There is general agreement that the social context and the built environment can be enabling or disabling, and that disability is not solely a personal attribute (see for example, Goldsmith, 1997, Imrie and Hall, 2001, Steinfeld and Danford, 1999, Shakespeare, 2008). As discussed earlier, however, the 'disabled' label is now a common usage short form for anything that has a design focus on impairment signifying that 'disabled people need disabled things'. People with a disability do not need a toilet with a disability, they need an accessible toilet.

A universal mix-up

The word 'universal' is applied to various things: metaphysics, philosophy, mathematics, linguistics and cosmology, among others. The rule of word association (Davis, 2003) means that without any other reference point, one or other of the established usages of universal are likely to be employed. Therefore the understanding of universal design is left open to many interpretations based on the reference point of the interpreter. In establishing what we mean by a word, it is sometimes helpful to describe what it is not in order to provide a contrast for comparison (Hartnack, 2005:156),. However it can further entrench existing stereotypes and prevailing community attitudes – in this case the division between designs for 'us' (non-disabled) and designs for 'them' (people with a disability).

Although the philosophy of universal design is inclusiveness, the concept cannot be explained without identifying who is currently excluded. Consequently the term 'universal design', together with terms such as 'accessible', 'adaptable' and 'inclusive', has become a euphemism for 'designs for disability' (Bringolf & Schraner, 2009). In spite of its intentions, in the eyes of the community, universal design operates from a standpoint of difference, namely disability and ageing, rather than inclusion, which is why Margaret Wylde (2008) argues that universal design is a brand that is difficult to sell even to older people who would be the largest group of immediate beneficiaries.

The classic definition of universal design is a statement of philosophy rather than a call to action or a method of implementation:

> Universal design is the design of products and environments to be useable by all people, to the greatest extent possible, without the need for adaptation or specialized design (Center for Universal Design, 1997).

As such, it is a call for a paradigm shift in design thinking where the end users' comfort and convenience are considered paramount. Universal design is not a product or set of specialised designs: it is a design process – designing universally – for the whole population. The application of universal design across all design endeavours is therefore left largely in the hands of designers, who are under pressure to provide design solutions for their clients as well as comply with a plethora of regulations. If new concepts such as universal design are not presented in a usable format (Bringolf, 2008), they are unlikely to be integrated into design practice as a general schematic (Afacan and Erburg,

2008).Critics claim the seven classic principles of universal design (Center for Universal Design, 1997)fail to provide sufficient information. Consequently Steinfeld and Danford (2006) reviewed them in a manner that ties them to the International Classification of Functioning, Disability and Health (ICF) (World Health Organisation, 2001, 2002). The ICF is one possible route for academic consistency and will be returned to later, but first, the practical consequences of terminology confusion are highlighted using two examples, one from industry and one from academia.

Two examples of terminology confusion

Example 1: A state housing instrumentality

Using the logic of Wijk (2001) and Goldsmith (2000) the process of 'othering' people with a disability and older people has led to the various terms and types, which in turn, has caused confusion. This was made apparent in the 2009 call for tenders for social housing, which was part of Housing NSW Stimulus Package stemming from the Commonwealth Government's Nation Building and Jobs Plan. Consequently Housing NSW was compelled to work within very short timeframes.

The tender document describes six types of housing in its list of Definitions and Abbreviations in the Statement of Requirements: "adaptable housing, disabled (fully accessible), general housing, pensioner housing, universal design principles, and visitable" (Housing NSW, 2009:1). Table I shows the housing types as they appear in the document's Statements of Requirements: terms and explanations. This document introduces the prospective tenderer to the basic requirements.

Table I: Housing NSW: terms and explanations

Term	Explanation
Adaptable Housing	A housing unit meeting performance requirements of AS 4299, with circulation and floor space to AS1428.1, including floor area allowances for accessible bathroom and kitchen, however fitted out with standard fixtures and fittings
Disabled (Fully Accessible)	A Housing unit complying with floor space requirements of AS 1428.1 and designed and fitted out for people with disability to meet user specific requirements.
General Housing	All housing other than SEPP – Housing for seniors or people with a disability.
Pensioner Housing	SEPP – Housing for seniors or people with a disability
Universal Design Principles	Design in accordance with the Landcom 'Universal Housing Design Guidelines' document dated May 2008.
Visitable	A Housing unit (as per AS4299) that has at least one wheelchair accessible path of travel to the living area and to toilet that is either accessible or visitable.

Source: Housing NSW, Request for Tender, land and multi-unit development, RES466, Statement of Requirements, March 2009a (page 1).

Apart from the ambiguous explanations, it should be noted that Australian Standard AS1428.1 (*Design for access and mobility*) is a standard for public buildings and facilities. It has detailed instructions regarding the fit out of public toilets and bathrooms, leading to the aesthetically unpleasant and institutional ambience. The adaptable housing standard, AS4299, unlike AS1428 is not called up by the Building Code of Australia and therefore has the status of a guide. Nevertheless local regulators sometimes include the standard in their development control plans. Contained within the tender document are several proforma schedules that tenderers complete when submitting their proposal. Schedule 3 invites the tenderer to summarise the number and type of units they propose to build and introduces more terminology. 'Seniors Living' appears to replace 'Pensioner Housing', universal housing has disappeared from the options, and 'disabled' units are to comply with a standard for public access (AS1428.1), not the needs of individual users. Table II shows the list of housing types as shown in the Returnable Schedule 3.

Table II: Housing NSW: Returnable Schedule 3 – Summary of Project

Type of units to be built:	Type of Unit	Number of Units
▪ Seniors Living ▪ General living ▪ Disabled Units (compliant to AS 1428.1) ▪ Adaptable Units (compliant to AS 4299) ▪ Visitable Units (compliant to relevant provisions of AS 1428.1 and AS 4299)		

Source: Housing NSW, Request for Tender, land and multi-unit development, RES466, Returnable Schedules, March 2009b (page 5).

The twelve page Returnable Schedule 8 – Project Supplement, provides prescriptive detail of the design and construction elements required to meet each of the housing types listed in Schedule 3. This is where it becomes increasingly complex with application of further terms. Table III draws together the terms used in the three sections of the tender: the Statement of Requirements, Returnable Schedule 3 and Returnable Schedule 8, demonstrating the inconsistent and interchangeable use of terms. The punctuation and italics are replicated as shown in the tender document, but some extra bullet points were added here for reader clarity.

Table III: Comparison of terms used in three different sections of Housing NSW's tender document

Statement of Requirements	Returnable Schedule 3	Returnable Schedule 8
Adaptable Housing	Adaptable Units (compliant to AS 2499)	• Adaptable dwellings • All dwellings designated as "adaptable"
Disabled (Fully Accessible)	Disabled Units (compliant to AS 1428.1)	• Disabled dwellings • *Disabled Dwellings* • Disabled dwelling/units • "disabled dwellings" (i.e. for people with disabilities) • Dwellings for the disabled • Dwellings for disabled • Modified Dwellings for the disabled
General Housing	General Living	• General housing • *General housing*
Pensioner Housing	Seniors Living	• Seniors' Living SEPP • Seniors Living SEPP – Housing for Older People and People with Disability • Seniors Living SEPP or Disabled • Seniors Living SEPP dwellings designated as "disabled" • Seniors Living SEPP that are not "disabled" • Aged and disabled dwellings
Universal Design Principles		
Visitable	Visitable Units (compliant to	• Seniors Living SEPP visitable

	relevant provisions of AS 1428.1 and AS 4299)	dwellings

Source: author

The inconsistent application of terms is not just an issue for Housing NSW (see for example, *Seniors Living Policy,* 2004*; A guide for councils,* 2004; and *State Environmental Planning Policy,* 2005), and it is clear from the three tables that there is a need to simplify housing types. The inefficiencies are self evident. It is little wonder that the built environment industry considers anything to do with ageing and disability to be problematic (Imrie, 2003). Also notable in Table III is the absence of any reference to universal design principles in the schedules, yet this has the potential to solve the complexity of the myriad of housing types.

Example 2: A housing research project

An ageing population is the focus of the AHURI Positioning Paper, *Dwelling and land use by older home owners* (Quinn, Judd, Olsberg & Demirbilek, 2009). This research project has six aims and number 5 is to: "Establish the costs and benefits of adaptable and universal housing design and propose an economic model to assess the consequences for older Australians if these are not adopted now" (Quinn et al, 2009:1). The research team add to adaptable and universal three others - accessible, flexible and visitable approaches (2009:x). Whilst the authors' definitions are more complex than necessary, focusing on when and where the terms should be expressed as proper nouns or common nouns. For example, "Universal Design, Universal Housing Design – with a capital 'U'" refers the reader to the classic definition formulated by the Center for Universal Design (1997). The definition of Visitable, "...- with a capital 'V'" explains briefly the three key features and then includes other design features synonymous with the adaptable housing standard. This is where it becomes more confusing as adaptable is imbued with two meanings where: "...- with a lower case 'a'" adaptable is described as being able to make changes to the home, but "...[t]o avoid confusion, this design approach is referred to as 'flexible design' for this project". 'Adaptable' as a proper noun, according to the authors, refers to the adaptable housing standard (Standards Australia). On page 6 the authors visit the terms again explaining that universal design considers the widest range of ages and abilities, that adaptable design is generally aimed at the older population, and that visitable design is focused on features for wheelchair access. Flexible design is defined as being able to change the size of rooms to suit changing household requirements and interests (referred to earlier as adaptable housing with a lower case 'a'). The authors, in summing up, mention the "confusion and disagreement within government, the industry and advocacy sectors about the design paradigms (and terminology) for supporting ageing in place" (Quinn et al, 2009:135).

As there is no agreement on terms, providing definitions is understandable and desirable, but avoiding terms, preferring to rely on descriptions instead, does little to solve the issue. The authors' survey questionnaire was distributed across Australia via the National Seniors magazine, *50 Something* (Judd et al, 2009). Definitions were provided to survey participants without using 'universal', 'adaptable', or 'visitable'. For the purposes of the survey, the terms were interpreted in a way that relates to the participant's current situation. Hence, question 16 asks the level of importance of: A) having a home that meets their needs without modifications being required or could be modified easily; B) moving to a home that is specially designed for older people; and C) being able to visit the homes of family and friends. The initial analysis of this section of the survey presented at an AHURI seminar interpreted question 16 as "Attitudes to housing design approaches" where: A) is Universal; B) is Adaptable; and C) is Visitable (Judd et al, 2009: slide 30). Surely a home that will not need modification or can be modified easily fits the definitions of Adaptable (and adaptable) and to some degree Visitable, as well as Universal? Whilst the issue of terminology confusion is perhaps appropriately dealt with by avoiding labels in this instance, the phrasing in the questions supposes hypothetical reasoning with scant and ambiguous information. The intent is commendable, but any kind of modelling requires clarity of terminology, especially for comparisons between studies.

Establishing the terms and their definitions may provide a basis for cost benefit analyses within a single study, but without agreed terminology it is not possible to make comparisons between studies.

The capacity to develop more influential arguments is therefore reduced. Whilst there is merit in seeking the housing desires of older homeowners, research that focuses solely on the housing needs of older people, without reference to the whole population of which they are part, the research has the potential to perpetuate the phenomenon of othering, in this case the 'special' needs of older people.

The Problems

According to the Australian Bureau of Statistics, in 2003 one in five people, or almost four million Australians, reported having a limitation or impairment that restricted carrying out an everyday activity. Just over half the people aged 60 years or more and nine out of ten 90 year olds reported living with a disability. Alarmingly, of those who provide informal or family care to people with a disability or an older person, 40% reported having a disability themselves (Australian Bureau of Statistics, 2003). Given the prevalence of disability, it is difficult to see how such a large group could be ignored in product and building design.

Disability, permanent or temporary, can occur at any time in life (Bickenbach et al, 1999:1183) and a home that is already set up to accommodate a range of needs not only avoids the cost of extensive modifications (Bickenbach et al, 2003:294), it allows an individual (and their family) to remain in familiar surroundings at a time when stability is of utmost importance. The time to embark on organising major modifications is not during a health crisis. Wheelchair users' abilities vary greatly and not all features of a public toilet/bathroom are needed in all homes designated as 'disabled' in social housing. Rather, the fit-out should suit the current occupant to allow for maximum independence and convenience (Landcom, 2008).

Creating more housing types to suit categories of persons not only compromises occupant functionality, it also perpetuates stereotyping (Goldsmith, 1997; 2000). The very notion of 'disabled units' implies that all people with disabilities live alone and the needs of other family members are irrelevant. The assumption that all wheelchair users live alone has caused a preponderance of one-bedroom dwellings as 'wheelchair homes' and consequently only those who want to live alone will take up such places (Stewart, 2004:152). Consequently, the live-alone stereotype is reinforced because those who need a family home will not be found in such dwellings.

Without a shared understanding and consistent application of terms, theory-building and practical application is hindered. Iwarsson and Stahl (2003) point out that there is a tendency to assume various actors within and between disciplines apply teh same meanings to words when this may not be the case. Nevertheless, they use them to frame policy documents and official reports. The ICF emphasises that the first step in theory development is the definition of concepts (WHO, 2001). Practice is influenced by unchallenged assumptions "while norms and codes of practice take precedence and guide decision making and action" (Iwarsson and Stahl; 2003:58). Steinfeld and Danford (1999) make the additional point that without well-developed theory community norms and industry codes of practice not only guide research, but also the approach to and biases within research. A standpoint of a 'normal' population brings about different results to a standpoint of 'one whole' population (Bringolf and Schraner, 2009).

Solutions

> There are only two kinds of people in the world: those with a disability and those yet to have a disability (Judy Heumann, Advisor, Disability and Development , The World Bank, cited in Bringolf, 2005).

If industry and academia share the same lack of acceptance that impairment is an intrinsic part of being human, technical responses will only be partial because they leave intact "the social and attitudinal relations that influence the form and content of design" (Imrie 2004:282). Where accessibility is tacked-on to inaccessible buildings it draws attention to a person's impairment and

further stigmatises them. Accessibility acknowledges disability rights, but does not address social inclusion. Universal design has the potential to address inclusion, but as argued here, has been subverted from its paradigm of inclusiveness to fit the prevailing paradigm of exclusion and otherness. This means social and political programs need to be developed alongside technical solutions to bring about attitudinal change so that the concept of universal (inclusive) design can be further developed (Imrie, 2004:282).

Solutions for industry

Universally designed homes minimise the need for occupants to move house when situations change, and they obviate the need to quarantine 'special' housing. Terminology for housing types can be limited to descriptions of the dwelling - detached, terraced, one bedroom, two storey, and not the potential occupants - disabled, senior, family. In terms of seeking solutions, Landcom, the New South Wales state government land development corporation, has been proactive.

The Landcom *Universal Housing Design Guidelines* provide both the underpinning principles of designing universally, and practical examples of how easily they can be incorporated into new dwellings (Landcom, 2008). The Guidelines also address industry resistance to change, which is largely based on an assumption that universal design will cost more (Imrie & Hall, 2001). Landcom carried out extensive analyses of codes and regulations, and conducted several industry consultations that identified twelve key structural and spatial elements critical to ensure future flexibility and adaptability of the home (2008:7) as shown in Table IV. Landcom also established that the arguments about additional cost were unfounded. Consequently, if designers change their paradigm, universally designed homes can be easily achieved. Furthermore, this makes it possible for universal design to be the foundation of design.

Table IV: Landcom's Key Universal Housing Features

Direct and level access to the home
Space for car parking
Wide front door
Wide internal doors
Wide corridors
Main facilities on the ground or entry level
Circulation space in the living room
Space in the bedroom
Bathroom designed for easy and independent access
Enough space in the kitchen
Enough space in the laundry
Low window sills

Source: Landcom Universal Housing Design Guidelines (2008)

The Landcom analysis shows that utilising principles of universal design precludes the need for the myriad of housing types for the many and varied needs of occupants. Whilst such homes may not meet all the needs of particular individuals all of the time, they provide the structural framework such that modifications to fixtures and fittings are easily and cost effectively implemented to suit individual requirements as and when the need arises. The answer could be as simple as making Landcom's twelve features the new design standard – as standard as having doors and windows which are already universal features of every home. Where it is not possible to include all features, some are still advantageous - it is not an 'either/or' exercise. The need for special housing would no longer be necessary (or at least minimised) and neither, therefore, would an analysis of cost differences. More

importantly research into greater amenity and usability for everyone would become the focus (see Steinfeld, 1997: Steinfeld & Danford, 1999).

Solutions for academia

Universal design enjoys neither consistent application nor shared understanding in Australia. The ICF classification system (WHO, 2001) and the work of Steinfeld and Danford (2006) might offer a framework for discussing terminology. The ICF also provides a stronger platform from which universal design can be more fruitfully examined. Agreement is required on a) whether so many different types of housing are needed, especially when one might be sufficient, and b) if more than one is needed, what they should be. Even if industry cannot agree on terms, it behoves the academic community to provide leadership on this issue. The starting point might be something as simple as a workshop to start the agreement process. In the longer term, perhaps it is time for Australia to have its own 'centre for inclusive design' as a national reference point for information, education, research and policy development on the topic rather than referring to international centres (for example USA, Ireland, UK, India, Norway).

Summary

Whilst designing universally can be achieved with a little extra thought and virtually no extra cost, the association with disability has compromised its implementation (Bringolf, 2008). The two examples demonstrate how academics, industry personnel, policy and technical advisors are vulnerable to the prevailing societal norms, utilising the same underpinning assumptions when framing their research, policy and technical documents. The notion of including 'the others' into designs still fails to shake off old concepts of 'specialised designs' where 'disabled' bits are tacked-on around the edges. This may be due to the lack of explanatory power of universal design as well as societal attitudes.

With greater clarity of terms academics have a platform from which to make research and debate more meaningful, practitioners have a stable reference point for consistent application, and policy-makers have established principles from which to frame documents. Bringing about real change, however, also requires a paradigm shift from a standpoint of otherness to a standpoint of inclusiveness. The shift to designing inclusively is therefore more than an education issue – it requires a shift in societal attitudes.

The answer to the question posed in the title of this paper is that universal, accessible, adaptable, and disabled are not basically the same just because they have evolved with people with a disability and/or older people in mind. Now is the time for stakeholders to sit down together to review the situation and thrash out the issues so that energies can be applied more fruitfully to supplying socially sustainable housing for all.

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