HOPE I DIE BEFORE I GET OLD:

The state of play for housing liveability in Australia

Jane Bringolf
University of Western Sydney, NSW, Australia

INTRODUCTION

The lyrics to the 1965 song *My Generation* expresses the sentiment that being 'old' is undesirable – hence the song line, "Hope I die before I get old". In a preceding line the lyrics "People try to put us down..." indicate that older people lack pertinent insights into the hopes and desires of young people. The 'misunderstood' generation of the 1960s is now today's 'baby boomer' generation – perhaps feeling misunderstood yet again, but from a different perspective.

While many cultural and social shifts have occurred since the 1960s, the stereotyping of older people has shifted little. Stereotyping of all older people as frail and incompetent and in need of special services and places denies the lived realities of the many active and healthy older people who continue to contribute to society socially and economically. As a result of negative stereotypes, policy attention appears to be focused on expected additional calls on the public purse for aged care (Productivity Commission, 2011). Although these concerns are warranted, it renders less visible those older people who will, or who could, age safely and happily in their own homes.

Discriminatory and segregationist practices based on stereotyping have lead to social and economic marginalisation for many older people (Human Rights and Equal Opportunity Commission, 2000). While the practice of gathering older people together in segregated housing developments away from mainstream society is considered an efficient way of providing appropriate housing for a 'special needs' group of people, such efficiency must be questioned if it is not at the same time effective. Segregated housing is one factor that reinforces negative stereotypes of older people as incapable, incompetent and an economic 'burden'. Perhaps as a result of this image, the baby boomer generation is seeking longer term independence in a home of their choosing rather than the cloistered atmosphere of age specific settings (Judd, Olsberg, Quinn, Groenhart, and Demirbilek, 2010). This poses challenges for the built environment, both public and private, because many designs have been formed around an archetypal fully capable, mid life adult. Such is the case, that special legislation has been enacted (Disability Discrimination Act, 1992) and building codes adapted, to permit the inclusion of people with a loss of capability in the public built domain. Whilst 'tacked on' access specifically labelled for people with disabilities is still problematic (Bringolf 2010), at least there are physical indicators of inclusion if not social indicators in the public domain. However, the notion of inclusion has not yet reached the domain of private housing. This means a person has a legal right to physically access a public building, but such legal rights do not hold in relation to accessing a neighbour's home, or indeed, their own home.

The aim of this study was to discover why the mass-market house building industry in Australia appears reticent to incorporate universal design principles into project homes. The central tenet of universal design is inclusiveness – designs that are user focused and incorporate the needs of people across their lifespan and all levels of capability. Information was gathered from industry stakeholders through survey questionnaires and in-depth interviews. Two sets of public documents were also analysed, one set relating to housing design policy in New South Wales, and the other relating to public access requirements. An exploratory investigation of the new home purchaser experience was also undertaken in an attempt to gain a consumer perspective of the industry. A small-scale survey of new homeowners and five in-depth interviews were carried out for this purpose, but not included here. The focus of this paper is on industry responses to the survey and interviews.

BACKGROUND

The assumption that older people will move to retirement villages, or specialised accommodation, or at the very least, downsize to a smaller property, is now questionable. As Olsberg and Winters (2005) found, most people want to age in their own home and not specialised accommodation. Those in the 'young old' bracket, the early retirees, may decide to downsize to an apartment with lift access and little, if any, garden as a step towards maintaining independence. But even if such housing is suitable, it may not be affordable if the family home does not realise sufficient funds to purchase a new property in a desirable location close to amenities. The over fifty-five age group is not homogenous and the perception that older people will sell up and downsize or sell up and go into age specific housing may be misplaced (Stimpson and McCrea, 2004). Consequently a move to specialised accommodation (retirement village), or prematurely entering an

institutional setting (aged care) is seen as the only viable option on offer, because there are few, if any, dwellings available to suit people in later life. However, the prospect of remaining at home in familiar surroundings and with established support networks can be increased if the home is designed to suit intergenerational needs. Universal design (Centre for Universal Design, 1997) is a proposition that products and environments should be designed with the whole population in mind. It is about maximum amenity and useability by the widest number of people possible regardless of background, age, gender, or status. It can be applied to products, environments, education and services. In explaining universal design, particularly in relation to housing, it is sometimes useful to say what universal design is not. Universal design is not about designs that resemble hospital or public toilet settings; it is not about ugliness and utility; and it is not about specialised design. Universal design is in effect, good design: aesthetically pleasing, functional and useable, and inclusive.

There is a growing political realisation that one's own home is the most cost effective place in which to age, and if necessary, to receive in-home care services (Bridge, Phibbs, Kendig, Mathews and Cooper, 2010). However, this cannot be achieved if the market model remains focused on specific demographic segments which assume older people need special and segregated housing rather than everyday family homes. If a more thoughtful approach using universal design principles were incorporated into all new homes, the need for specialised housing would be minimised for a large proportion of the older population. The key to this design paradigm is to think of the convenience and performance of the building users rather than the performance of the building itself, or indeed, a particular market segment. While there will always be niche markets for particular goods, there are many items that almost everyone uses (a kettle, a door handle, a tap), or wants to use (a shop, a school, a bus). At first glance this seems a reasonable idea – why exclude people by design: after all, sales opportunities are increased if the product appeals to a broader cross section of people. Although it is technically feasible to include features such as level access and wider doorways, thus far, developers and builders appear reticent to change their practices. The question therefore becomes, "why is this so?"

THE NEED FOR UNIVERSAL DESIGN

Civil rights aspects aside, there is a pressing economic and social need for housing to be designed for the whole of the lifespan and to cope with all those things that happen to human beings – to themselves and family members: illness, accidents, childbirth, ageing relatives, a child born with a disability. A house built today is almost certain to contain a household with a family member with an impairment or disability at some stage of its existence. A study by Smith, Rayer, Smith, (2008) found that within the first fifty years of a dwelling's life, the likelihood of needing to accommodate a member of the household with a permanently disabling condition was 60% and if visitors were included, that figure rose to 90%. It should be noted that temporary disability, such as a broken leg, was not included in the calculations. Another key point was made by this study, the lives of people and the lives of dwellings are not static. What suits today may not suit tomorrow. A dwelling should be able to cope with a range of ability levels across all its occupants and across time, yet the reverse seems true – the occupants must fit into the pre-existing built environment (Imrie and Hall, 2001).

Disability, whether permanent or temporary, affects not only those with the condition, but those around them – a factor often omitted in analyses, particularly those based on the proportion of the population with a disability. Consequently, the national rate of disability at twenty percent (Australian Bureau of Statistics, 2003) is a useful statistic, but insufficient to account for the full impact of disability both socially and economically. Disablement is also a factor in the ageing process with more than fifty percent of people over the age of sixty years reporting a core activity limitation (Australian Bureau of Statistics, 2003). Households where disability is present represent a significant proportion of the population, and contrary to notions that such households require social housing or supported accommodation, nearly three quarters are home owners (Beer and Faulkner, 2009).

In Australia, new housing stock accounts for approximately 1.6 percent of all housing stock each year (Department of Families, Housing, Community Services and Indigenous Affairs, 2010). Whilst this is a small proportion, it represents some 145,000 dwellings each year (Australian Bureau of Statistics, 2005) and these are the homes most amenable to incorporating universal design principles. Using these figures, in less than ten years more than a million homes could better accommodate people across their lifespan. Perhaps if new homes incorporated universal design principles, renovations to older homes would eventually follow suit, because these design features would become the new norm.

The cost of supporting an older person at home is approximately fifteen to twenty three percent less than supporting an older person in an institutional setting (Bridge, et al, 2010). The additional factor here is that as

Australians age, they are more likely to want to remain in familiar surroundings if not their existing home (Judd et al, 2010).

METHOD

Using an interpretivist framework and mixed methods the study explored industry stakeholder attitudes and opinions of universal design in housing as a means of identifying barriers to implementation and why they exist. It was anticipated that an effective processes for overcoming barriers might be identified rather than the current method of continually explaining the benefits of designing inclusively, which has met with little success thus far. Narrative accounts were drawn from in-depth interviews and a postal/online survey of industry participants: property developers, planners, regulators, architects, project home builders, building designers, engineers and surveyors practicing in New South Wales. All sixteen interview participants were based in Sydney and selected using non-probability sampling. Participants for the industry survey were recruited through industry associations and direct email and mail contact using website searches and resulted in sixty-two fully completed responses.

In the early stages of data collection, two important events occurred: one, a mass roll-out of social housing as a response to the Global Financial Crisis; and two, the resurrection of the proposed *Draft Disability (Access to Premises – Buildings) Standards* (Australian Government, 2010), which had been languishing in a political backwater for nearly ten years. The social housing documents analysed were the Australian Government Social Housing Initiative Guidelines (2009), and the call for tenders for the construction of social housing (RES466, Housing NSW, March 2009). The analysis focused on the consistent, or otherwise, use of terminology across the three documents and is reported in detail in Bringolf (2010). The Inquiry into the *Draft Disability (Access to Premises – Buildings) Standards* provided further documentation in the form of public submissions and transcripts from public hearings. Although this is a public access standard the documents were analysed for attitudes towards older people and people with disabilities. Table 1 shows the themes identified from the data and their presence across the industry interviews, survey and document analysis.

Table 1: Triangulation of Three Techniques: Presence of Themes

Themes	Interviews	Survey	Documents
Explanations of universal design	x		x
Design problems	x	x	x
Design influencers	x	x	x
Market perceptions	x	x	
Disability/Aged housing	x	x	x
Legislation	x	x	x
Cost issues	x	x	x
Training		x	
Opinion of universal design	x	x	
Attitudes towards disability/ageing	x	x	x
Language issues	x	x	x
Barriers to universal design	x	x	x
Facilitators of universal design	x	x	x

Documents, interviews and narrative sections of survey questionnaires were examined for meaning and themes. Demographic information formed the majority of quantitative data, but qualitative data was also translated into basic quantifiable units, such as the number of times a particular word or phrase was used. This helped to identify themes and indicated the level or magnitude or importance of themes. An extensive literature review of universal design, housing policy and housing design was undertaken, and because the data collection process revealed that universal design is taken as a euphemism for ‘disabled’ design, a review of the disability studies literature was also undertaken.

Whilst this study was underway, the then Parliamentary Secretary for Disability, the Hon Bill Shorten, brought disability and ageing advocacy groups to the negotiating table with the property and house building industry. At the conclusion of the negotiations, a set of voluntary industry guidelines for creating homes that cater for the needs of the broader community was agreed. These guidelines branded as *Livable Housing Design Guidelines* (Commonwealth of Australia, 2010) were largely based on the design concepts outlined in the Landcom *Universal Housing Design Guidelines* (2008).

FINDINGS

The industry survey and interviews both found that 80% of industry participants expressed goodwill towards the concept of universal design. However, according to participants this was insufficient in itself to bring about change: this could only be achieved through legislation or at least, some standards or guidelines to follow. There was general agreement that mandatory rather than voluntary codes were the only sure way to bring about change. Other major issues arising from the analysis were language and terminology, cost arguments, education issues, societal attitudes and regulations.

Language and Terminology

A lack of shared understanding and tendency to use terms interchangeably was apparent in the way industry applied terms and utilised language in the survey questionnaires, the interviews and the government documents. Most industry participants gave a fair description of universal design, but throughout the interviews in particular, participants transformed universal design into terms found in codes and regulations related to ageing and disability. The survey responses were similarly aligned. It is not surprising that terms are used incorrectly and interchangeably. Codes, regulations and public signage apply terms such as “disabled toilet”, “disabled ramp”, and “disabled parking”. Such items are “accessible” not “disabled”. Accessible parking places are quarantined for people with limited mobility, but toilets and ramps, for example, can be used by anyone, and are well utilised by parents with small children and prams as well as people with wheeled items and large items of baggage. Although toilets, parking places and ramps are operational and not disabled, the propensity to label them as such perpetuates notions of segregation and otherness. Consequently, most participants could only understand the concept of universal design from the paradigm of separateness and thought universal design a catch-all term for designs for older people and people with disabilities.

In terms of social housing the Australian Government decided that fifty percent of housing under the Nation Building Program must be universally designed and this appeared to be a golden opportunity to progress the concept within the property and house building industry. Unfortunately, the program was under considerable time constraints and this resulted in a patchwork of existing codes rather than a simplification of ideas. The documents related to the social housing package showed a plethora of terms: adaptable, accessible, seniors, aged and disabled, universal, and visitable (Bringolf, 2010) and created further confusion. The Parliamentary Inquiry into the Access to Premises Standard revealed that some industry groups believed this segregation is warranted, if not on the basis of market demographics then on the basis that certain people are the responsibility of the government and are therefore not the responsibility of industry.

Language usage also impacted on the perception of universal design creating extra costs. Those with knowledge of standards for public disability access and adaptable housing, and did not differentiate these from universal design principles, were convinced universal design attracts additional cost.

Perceived Additional Costs

In general, the interviews revealed a belief that universal design costs “a lot more”, although no evidence or figures were provided. In terms of access to public buildings, additional costs might be incurred if changes or additions to design are needed after the design concept has been agreed, or after the commencement of construction. Although the Property Council of Australia was unable to explain how any extra costs might be calculated when questioned during the Parliamentary Inquiry into the Access to Premises Standard, they continued to claim extra costs would be incurred and that such costs outweighed the benefits (House of Representatives Standing Committee, 2009). Although extra costs were not quantified by the Property Council, they continued with such assertions during the public hearing and their submission to the Inquiry. If such views are entrenched throughout the industry, albeit without quantifiable evidence, it is likely these views would also be applied to housing. It should be noted, however, that housing designed to the adaptable code often includes more expensive features, particularly those related to the kitchen. So, if universal design is considered as another term for adaptable housing, it too would be considered more expensive. With additional cost promulgated as a major barrier to inclusive design, Landcom, the New South Wales State Government land development corporation, set up a project to investigate the issues (Landcom, 2008).

Landcom took different types of home designs currently on the market and reconfigured them to universal design principles. They found that construction costs increased by one to two percent. They also found that if the principles were considered at the design concept stage, inclusive features could be incorporated into all housing types with almost no additional cost (Landcom, 2008:7). However, such evidence has done little to change industry views or practices. Armed with evidence to dispute the long-held beliefs about costs, Landcom set out to encourage project home builders to build universally designed display homes in new development sites. However, they were confronted with a response that revealed another set of assumptions. According to a Landcom representative, builders said they, "wanted to have some normal homes as well" (A. Petersen, personal communication, 8 April, 2010). This indicates that cost might not have been the major barrier as claimed. Rather it was used as a more socially acceptable way to resist change than to reveal an underlying set of beliefs about older people moving into special or separate housing – one of their product lines.

Overall, two assumptions were made about costs: one, the cost will increase, and two, extra cost will not be entertained by the consumer. Those participants who understood the underlying concepts of universal design felt that any increased cost would be borne by consumers regardless because the improved design features would be considered virtuous. Citing costs as a barrier avoids the need to reveal any attitudinal resistance to change for what many respondents perceived as a "small percentage of the population". However, the belief that older people and people with disabilities should be the subject of separate and special products revealed an underlying tendency to stereotype and marginalises both groups. On the whole, those who did not confuse universal design with adaptable and accessible design were more likely to favour its introduction, and if possible with education rather than new regulations.

Education and Enforcement

Participants who understood the underpinning concepts of universal design believed the solution lay in convincing others of its value through education. However, for the majority, difficulties posed by the structure of the industry, resistance to change, and the desire to maintain a level playing field, were considered too difficult to overcome with education. Consequently, legislation was viewed as the only way to facilitate universal design in housing. There was a general theme in both the interviews and survey responses that the industry is set up in such a way that it is impossible to bring about change without new regulations. It is likely that a related factor, competitive advantage, is operating here, and the industry interviews in particular, revealed that regulations might be needed more for the maintenance of an industry-wide level playing field than for difficulties in design change. If legislation takes centre stage as a facilitator, the issue then becomes how such legislative documents and building regulations should be framed.

Societal Attitudes and Marketing Practice

Comments from respondents regarding older people and people with disabilities revealed an expectation that older people should move out of their current homes, move into age-specific housing and free up the home for a younger family. Therefore the industry should not be expected to change anything, and that means continuing to create 'seniors' specific housing developments, whether for private consumption, social housing associations, or state governments. As one respondent claimed, "If you design a product around an age group which is at the back end of its life, you deliberately design an assistive living product."

Consumer demand was cited by industry stakeholders as a major force for change, but if universal design is promoted as 'ageing design' or 'disability design', appealing to consumers for design changes based on notions of a less capable self are not likely to succeed. Consequently any demand is unlikely to come from consumers, and this lack of demand for universal design features is used as supporting evidence for maintaining the status quo. Consumers' decision making processes, however, are often less than rational. Beliefs about the attributes of a product, the feelings it evokes, as well as processes of social comparison and desire to improve self-worth are all involved in the decision making process (Bagozzi, 1986). With advertising slogans of dream homes evoking promises of a 'best possible future', it is unlikely that project home builders will promote anything other, and also unlikely that consumers will demand anything that detracts from the anticipation of an idealized vision of their future selves. Regardless, the influence of consumers is questionable when the nature of the mass market housing industry is to produce 'off the shelf' products in a 'build and sell' framework. The influence is limited to choosing from the designs on offer rather than providing input into the design.

Property developers and project home builders in particular, often referred to their "housing products" and consequently marketing theory and practice becomes another factor to consider. Life cycle theory segments consumers into: Fledgling Teens and Early Twenties; Courting, Nest Building, Full Nest, Empty Nest, and

Sole Survivor (Dickson, 1997). This classification rests on assumptions that products can be produced to satisfy each of these archetypal groups at certain stages of life, and marketing professionals develop a program of product development and advertising accordingly. This fits with the notion that young couples, established family groups, and older people will require different types of accommodation. The industry believes it is meeting market demands with its current product lines because no consumer dissent is detected: “most people who buy them, like them” said a large property developer. Older people and people with disabilities are considered a discreet market segment: “we do different products for different segments” said an industry participant.

So far the more obvious barriers to universal design have been discussed: cost, education, marketing and societal attitudes, and the less obvious but important issue of language and terminology usage. Each is interrelated in a way that locks the web of barriers together. The clue to finding the key to this lock is in the factors relating to legislation and regulation. It is here that the relevance of the way the industry is structured becomes apparent.

The Structure of the Industry

Within the industry interviews and survey there was a significant level of in-principle support for universal design features (80% in both the interviews and survey responses), but as discussed earlier, most participants (85%) believed they could only be implemented through introducing new regulations. It seems paradoxical that something gaining such support can only be achieved by force. Mass market housing in large development sites mainly consists of privately purchased detached dwellings. Consumers choose a block of land, and after perusing the various houses (products) on display, make their selection. Although facades and floor plans differ, structurally these homes are similar and this means building components can then be produced in a factory-like way. However, unlike a standard factory set-up, different sections of the house-building ‘factory’ are owned by different industry groups, (developers, designers, builders). These groups are brought together in a single network supported by strong links based on professional codes and norms, and shared cost-efficiency goals. Actors interact around formal planned institutions, such as regulations, as well as informal evolved institutions characterized by ground rules (van Bueren and Priemus 2002).

Katz and Kahn’s classic work (1978) on systems theory predicts that as size and age increase, the organization or system is more likely: a) to become closed to external influences, and b) to apply internal rigid controls to maintain its equilibrium. Katz and Kahn identify ten organizational characteristics, but the two most relevant here are the role of authority and responsibility, and the way in which feedback is received.

Large organizations have a hierarchical system of authority and responsibility. Whilst the house-building industry behaves as one whole entity, it is at the same time fragmented. Although mechanistic, it lacks the hierarchical governance that single organizations possess. No point of overarching authority can be found, because power is dispersed throughout the system. Consequently there is no point at which to make an appeal for innovation. Appeals to individuals within the system are unlikely to succeed because tight controls render them powerless to effect change. Because change is not easily effected inside the machine, a force from outside is needed – in this case, in the shape of regulations. New regulations allow the whole industry machine to begin producing houses to new standards in a coordinated way and the competitive ‘level playing field’ and cost efficiencies are maintained. The system retains its cherished machine-like stability, and profit margins are presumed to be protected.

According to Katz and Kahn, mechanistic organizations code external feedback into language that fits existing norms. All other information is regarded as “error variance” or one-off abnormal events. The issue of communicating thoughts and the way in which language is used presents itself again. Industry codes universal design as ‘disabled design’ because the term is embedded in regulations. Consequently, a change in terminology and language use is unlikely and universal design will continue to be interpreted as ‘disability’ design. Consequently, challenging the now common usage understanding makes a change of thinking all the more difficult.

If systems theory has a predictive value for the house building industry, focusing on housing design details will require a new set of regulations even if they are contested. Such regulations will likely be based on a mix of existing codes using familiar language. However, regulation of universal design is contradictory to the concept because one of its key elements is iteratively improving on designs over time. So the question is: will regulations, voluntary or mandatory, bring about the outcomes proponents seek?

In summary, there are three main overt barriers to universal design in housing. First, universal design is interpreted as ‘disabled’ design, which is deemed ugly, and this is contrary to the aim of selling an attractive

product. Second, people with disabilities and older people are considered a separate market segment needing separate products. Although universal design principles can be applied to all market segments, segmentation of itself is not the barrier; rather it is the notion of social separateness. Third, the industry believes that any changes to design templates will increase costs and therefore pose a serious business risk, particularly if consumers are not perceived to be demanding such design features. Whilst construction cost increases are largely negligible, this is only part of the picture. The covert barrier is the cost of change within a tightly controlled system.

A SOLUTION?

The principles of universal design were recently introduced into Australia as a voluntary code in the form of *Livable Housing Design Guidelines* (Commonwealth of Australia, 2010). The new brand name was devised in an attempt to overcome the industry's misunderstanding of universal design and to make the idea more appealing to consumers. Nevertheless, it is unlikely that a new name will overcome societal and industry-wide ideas of segregation particularly when the document references disability access standards and other instruments relating to disability. Indeed, these new guidelines were launched in a retirement village and can be found in the disability section of the Australian Government website (National Dialogue on Universal Housing Design, 2010). In addition, systems theory also predicts that change is unlikely without legal pressure. So how can the barriers of societal attitudes and industry resistance to innovation be overcome?

In contrast to the Australian approach of appealing to market mechanisms with the hope that industry will eventually be persuaded to universal design concepts, the Norwegian Government faced the issue systematically by integrating universal design concepts into various aspects of national planning policy. By so doing, it tackled the inherent normative and structural issues head on. The story of its establishment and progress is provided by Olav Bringa in two documents (2001, 2007) and a potted version follows.

Norwegian terminology surrounding universal design is the first clue to their approach. They have captured notions of accessibility whilst stressing other aspects that relate to universality such as safety, sustainability, aesthetics, and financial viability (Bringa, 2007). The use of phrases such as 'universal design perspectives' and 'universal design strategies' clearly aligns the Norwegian approach with processes rather than products, and it is indeed processes that universal design seeks to emphasise. The process involved applying universal design principles to statutory instruments, codes and policies as a measure of quality assurance.

To find out why accessibility objectives were previously absent in most municipalities, they first sought the opinions of planners and advocacy groups. A lack of understanding of the issues and an "inability to understand that accessibility for people with disabilities is relevant to their work and discipline" was identified by Bringa (2001:29.11). Educational institutions were given additional funding to devise innovative methods of teaching universal design across a range of disciplines. More than fifty percent of eligible institutions joined the project and programs were developed that proved popular with students and raised their level of interest (Bringa, 2001).

As a result of various pilot projects over a period of more than four years, the Norwegian Planning Act now includes the principle of universal design in the objects clause, and this will bring it to the same level of importance as sustainability and heritage protection (Bringa, 2007). The most significant change to processes, according to Bringa, is that community participation will be required at the early stage of all developments.

Regardless whether Norway has a different planning and regulatory system to Australia, both countries face similar issues of normative approaches towards people with disabilities and older people, and entrenched industry practices. Norway appears to have found a successful means by which to legislate for universal design (see *Norway universally designed by 2025*, 2009). Part of the success is attributed to shifting the focus from detailed design regulations to the concepts applied at the planning and development stage. The success is also due to the whole of government approach bringing it into the mainstream agenda and not leaving it to the social services department to raise accessibility as a policy issue. In addition, universal design meshes with environmental and economic sustainability, and as such, "creates a framework for human rights, equity and democratization" (Bringa, 2007:113).

CONCLUSION

The question posed at the beginning of the study asked, "Why doesn't the house-building industry embrace universal design?" The answer is complex and multi faceted. Additional and assumed unviable costs, lack of consumer demand, and lack of regulations are all factors over which industry claims to have little, if any, control. Besides, there is a belief that either (or both) government and ageing-specific businesses are

responsible for supplying ‘special’ housing. This raises the question of who, then, is responsible if there is a pressing social and economic need to accommodate an ageing population.

The survey, interviews and documents revealed that industry uses the terms adaptable, disabled, accessible and universal interchangeably on the basis that they are applied to particular population groups, and as such, are only considered in terms of separate and specialised accommodation. Cost was upheld as the primary reason for opposition on the basis that it is: a) not being demanded by consumers, and b) would only benefit only a few people.

Whilst the Nation Building program included investment in social housing and decreed that fifty percent of new housing stock under this funding package must be universally designed, the policy documents accompanying this aim fell into similar traps of misunderstanding the concept and using terminology interchangeably. Rather than educate industry of the universality of these design features, it further entrenched the notion that this applies to ‘special’ housing. Consequently universal design remains an abstract concept and its common usage name, universal housing design, has become an umbrella name for any housing related to ageing and disability.

Although the *Livable Housing Design Guidelines* were introduced to industry as a voluntary code, old ideas will not change easily particularly with references to disability access standards. The success of these new guidelines is yet to be tested, but evidence elsewhere suggests that voluntary codes are rarely implemented (Maisel, 2005). In contrast to the Australian approach of attempting to manipulate the market mechanisms and hope that industry will eventually be persuaded to universal design, the Norwegian model for implementing universal design turned to the paradigm of universal design itself for the solution.

The Norwegian experience demonstrates that broadly applying universal design principles to planning concepts rather than design details is more likely to reach the goal of architectural and therefore social and economic inclusion. The Norwegian model does more than address regulations: it addresses the underpinning attitudes and stereotyping, and emphasises notions of inclusivity and avoids unnecessary housing segregation. Examining policies and applying principles of equity and inclusion is an educational process in itself. This approach also side-steps the issue of market demand – consumers are presented with the finished product in the same ways as before. The process created a new culture incorporating inclusive norms and values, and consideration of all people in design. It therefore presented a new way to use (or not use) the existing language, and by including consumers in the planning processes, it overcame the closed feedback mechanism inherent in large systems which cause the perception of “error variance”. Industry began to listen.

REFERENCES

Australian Bureau of Statistics, (2003), *Disability, Ageing and Carers Australia, 4430: Summary of Findings*.

Australian Government, (1992) Australian Government. "Disability Discrimination Act 1992, as Amended 2006." Com Law,1992.

Australian Government, (2009), "Social Housing Initiative Guidelines: Element 1 - New Construction." Department of Families, Housing, Community Services and Indigenous Affairs, April 2009.

Australian Government, (2010), "Disability (Access to Premises - Building) Standards 2010." edited by Attorney-General's Department: ComLaw.

Bagozzi, R.P. (1986), *Principles of Marketing Management* New York: Macmillan, pp 37-70.

Beer, A., Faulkner, D. (2009), "The Housing Careers of People with a Disability and Carers of People with a Disability." Australian Housing and Urban Research Institute, Southern Research Centre, 2009.

Bridge, C., Phibbs, P., Kendig, H., Mathews, M., Cooper, B. (2010), "Home Ownership Reduces the Host of Home-Based Care among Old Adults." *AHURI Research & Policy Bulletin*, no. No 132.

Bringa, O.R., (2001), "Norway's Planning Approach to Implement Universal Design." In *Universal Design Handbook*, edited by W.F.E. Preiser and E. Ostroff. New York: McGraw Hill.

Bringa, O.R., (2007), "Making Universal Design Work in Zoning and Regional Planning: A Scandinavian Approach." In *Universal Design and Visitability: From Accessibility to Zoning*, edited by J.L. Nasar, Evans-Cowley, J. Columbus, Ohio: John Glenn School of Public Affairs.

Bringolf, J., (2010), “Calling a Spade a Shovel: Universal, accessible, adaptable, disabled – aren’t they all the same?" Refereed paper presented at the 4th Australasian Housing Researchers' Conference Sydney 5-7 2009. Edited by B. Randolph, Burke, T., Hulse, K., and Milligan, V. University of New South Wales, Sydney 2010.

Center for Universal Design, (1997)."The Principles of Universal Design." North Carolina State University, Raleigh: Center for Universal Design, 1997.

Commonwealth of Australia, (2010), "Livable Housing Design Guidelines." Canberra: Department of Families, Housing, Community Services and Indigenous Affairs.

Department of Families, Housing, Community Services and Indigenous Affairs, (2010), *National Housing Supply Council, 2nd State of Supply Report.* Commonwealth of Australia.

Dickson, P.R. (1997), *Marketing Management*. Fort Worth: Dryden Press.

House of Representatives Standing Committee on Legal and Constitutional Affairs. "Disability (Access to Premises - Buildings) Standards [Draft]". Official Committee Hansard, (25 March 2009, Sydney).
Housing NSW, (2009), "Request for Tender: Land and Multi-Unit Development, RES466, Returnable Schedules".
Human Rights and Equal Opportunity Commission, (2000), *Age Matters: A report on age discrimination,* Commonwealth of Australia.
Imrie, R., Hall, P., (2001), *Inclusive Design: Designing and Developing Accessible Environments*. London & New York: Spon Press.
Judd, B., Olsberg, D., Quinn, J., Groenhart, L., Demirbilek, O., (2010), "Dwelling, Land and Neighbourhood Use by Older Home Owners." Melbourne: AHURI Report No. 144, Australian Housing and Urban Research Institute, UNSW-UWS Research Centre.
Katz, D., Kahn, R.L., (1978), *The Social Psychology of Organizations.* New York: Wiley.
Landcom, (2008), "Universal Housing Design Guidelines" *The Landcom Guidelines.* Sydney, Landcom.
Norwegian Ministry of Children and Equality (2009), *Norway universally designed by 2025: The Norwegian Government's action plan for universal design and increased accessibility 2009-2013*.
Maisel, J.L. (2005), "Visitability as an Approach to Inclusive Housing Design and Community Development: A Look at Its Emergence, Growth and Challenges." Center for Inclusive Design and Environmental Access, Buffalo, NY.
Olsberg, D., Winters, M. (2005), "Ageing in Place: Intergenerational and Intrafamilial Housing Transfers and Shifts in Later Life." Melbourne: Australian Housing and Urban Research Institute.
Productivity Commission, *Caring for Older Australians: Overview*, Report No. 53, Final Inquiry Report, Canberra, 2011.
Smith, S.K., Rayer, S., Smith, E.A., (2008) "Ageing and Disability – Impocations for the Housing Industry and Housing Policy in the United States" *Journal of the American Planning Association,* 74, No. 3.: 289-306.
Stimpson, R.J., McCrea, R.(2004), "A Push-Pull Framework for Modelling the Relocation of Retirees to a Retirement Village: The Australian Experience." *Environment and Planning A* 36: 1451-70.
van Bueren, E.M., and Priemus, H. "Institutional Barriers to Sustainable Construction." *Environment and Planning B: Planning and Design* 29 (2002): 75-86.