# The Dignity Manifesto of Design for People living with Dementia: History and Context

In February 2019 in Sydney Australia, Dementia Training Australia, spurred on by international developments and changing expectations towards supporting social relationships and quality of life in care homes, hosted a symposium titled *Vision Driven Design – when good design is not enough*. The symposium – the culmination of decades of work – brought together a number of ground-breaking designers and residential care providers to discuss the role of a vision for a way of life in designing the next generation of accommodation for people living with dementia. Presenters included architects, researchers, and pioneering aged care providers.

Group conversations between presenters and practitioners quickly replaced formal presentations. At the end of these lively interactions, four of the presenters (Fleming, Bennett, Zeisel, and Golembiewski), reflecting on the two days, concluded that there was a core to the symposium that, in order to continue the conversation more broadly, needed to be made public in a set of statements or a position that encapsulated the energy and direction of the discussions.

# Alzheimer's Disease International's World Alzheimer Report 2020

The opportunity to explore that core came about at the end of 2019 with the writing of the Alzheimer's Disease International's World Alzheimer Report 2020 (Fleming et al., 2020a, Fleming et al., 2020b). This report brought together contributions from 58 authors from 17 countries and 84 case studies from 27 countries (<a href="https://www.alzint.org/resource/world-alzheimer-report-2020/">https://www.alzint.org/resource/world-alzheimer-report-2020/</a>. From the beginning it was clear that bringing this wealth of information together would require a systematic approach. The approach adopted was based on the use of the set of design principles that Fleming and Bennett had used for many years, and the use of these principles is carefully explained in chapter two of the report (Bennett et al., 2020). The result was that most of the information provided in the report was structured with reference to these principles and, happily, the authors had no difficulty using this approach.

Writing the report required many hours of conversation about the issues and approaches presented in it, particularly the relationship between design principles and design approaches and responses, as exemplified in the work of Zeisel (2013) rekindling the enthusiasm for a brief statement of the core values that were shining through the contributions. The question was, how should this brief statement be presented?

#### A Manifesto

Following a suggestion by Jan Golembiewski the decision was made to present these statements as a manifesto- a document publicly declaring the position or program of its issuer. A manifesto advances a set of ideas, opinions, or views, but it can also lay out a plan of action. ...Manifestos are generally written in the name of a group sharing a common perspective, ideology, or purpose rather than in the name of a single individual. (https://www.britannica.com/topic/manifesto)

While manifestos are often political statements, there are examples of manifestos that have been written by industry groups with the express intention of bringing about changes in practice – particularly when the issuers have observed that the industry norms have calcified to represent a level of dysfunction that has come to be accepted and even expected by the industry at large. A

good example is the Manifesto for Agile Software Development (<a href="https://agilemanifesto.org/">https://agilemanifesto.org/</a>) written in 2001 by a small group of software designers and project managers who wished to provide a better alternative to the rigid, linear, process driven approach to software development that had dominated the industry. While this manifesto had only 17 initial signatories by placing it on a web site the authors made it available for signing by other like-minded people. Since its launch it has been signed by many hundreds (<a href="https://agilemanifesto.org/display/index.html">https://agilemanifesto.org/display/index.html</a>), has become the new standard in software development, and has even influenced the course of project management in other industries as diverse as construction management (Loforte Ribeiro and Timóteo Fernandes, 2010), military planning (Cojocar, 2011), the deployment of humanitarian aid (Oloruntoba and Gray, 2006) and healthcare design (Nelson-Peterson and Leppa, 2007).

The Dignity Manifesto of Design has followed this example. It was launched on the 1<sup>st</sup> May 2021 with six signatories – Richard Fleming, John Zeisel, Kirsty Bennett, Jan Golembiewski, Kate Swaffer and Lynda Henderson. By the 21<sup>st</sup> July 2021 it had been signed by 264 people from 35 countries. All signatories were invited to suggest refinements to the manifesto as part of the signing process and a commitment made that their comments and suggestions would contribute to a review of the manifesto resulting in the publication of revised version in October 2021. Suggestions for revisions were made by 58 signatories.

# Refining the manifesto

The comments and suggestions were systematically analysed. The details of this analysis are provided in (Fleming et al., 2022). The major changes made to the values and principles are :-

- The simplification of the values to focus on positive aspects of design, e.g.
  - o Projects that are authentically co-designed with people living with dementia Rather than
  - Projects that are authentically co-designed with people living with dementia over projects that only use experts as proxies
- The inclusion of two additional values:
  - o Designs that assist people living with dementia to maintain their culture
  - Designs that are informed by evidence and research
- The broadening of an holistic approach by modifying
  - Designs that consider the needs of the whole person over those that focus solely on a person's dementia

to

- Designs that consider the holistic wellbeing of the individual, community, and environment
- The combination of
  - o Minimise unhelpful stimulation.
  - o Optimise helpful stimulation.

Into one principle

o Optimise stimulation

- The addition of a new principle
  - Afford people opportunities to enjoy contact with nature
- The strengthening of the focus on relationships by including families and friends:-
  - Provide easy access and connection to and from local communities, families, and friends.
- Greater prominence given to authentic co-design with people living with dementia by relocating this value

In addition, some changes were made to improve the grammar and punctuation.

The comments included suggestions that the values and principles be couched in terms of particular paradigms or approaches, e.g. salutogenesis and universal design, and that issues of human rights be more fully articulated. These comments were taken very seriously and are addressed in the following section.

# The Dignity Manifesto of Design for People Living with Dementia, human rights, salutogenesis and universal design – sharing a world view

The Dignity Manifesto of Design for People Living with Dementia (the Design Dignity Manifesto) promotes agreement on the core values and principles that underpin the design of physical environments intended to enable people living with dementia to lead full lives. This brief document sets both a common starting point and a set of evaluative criteria for those wishing to explore the many ways to design well for people living with dementia.

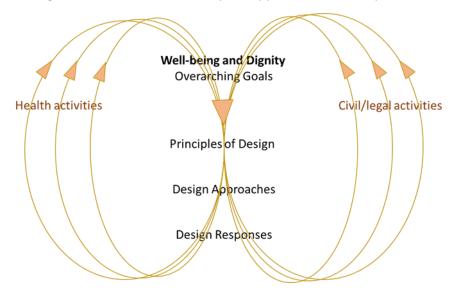
While the maintenance of dignity is central to all ethical human interactions, especially those involving healthcare and the care of people with limited autonomy, it is rarely defined. The lack of a definition of dignity in the Design Dignity Manifesto was pointed out during the review process and attention was drawn to the works of Rejno (Rejnö et al., 2020) and Nordenfelt (Nordenfelt, 2004). Nordenfelt describes four types of dignity: human dignity, dignity of merit, dignity of moral stature and dignity of identity. Two of them, human dignity and dignity of identity are particularly relevant to the situation of people living with dementia.

Human dignity describes the dignity we have as human beings specifically because we are humans. This is a value that all people have to the same degree, implying that all people should be treated with equal respect independently of sex, age, ethnicity, sexuality and function. This is the idea of dignity used in the universal Declaration of Humans Rights (UnitedNations, 1948).

Dignity of identity is associated with our understanding of ourselves as integrated and autonomous persons. Nordenfelt considered the central concepts of this type of dignity to be integrity, physical and cultural identity, and autonomy. It can vary over time and be affected by external circumstances including the conscious or unconscious actions of other people. These actions can give rise to feelings of humiliation and loss of self-respect.

These descriptions help us to see dignity as being inherent in our humanness but open to circumstances that will either enhance it or diminish it. The purpose of the Design Dignity Manifesto is to help establish a context for the enhancement of the dignity of people living with dementia by informing the process of designing the built environment.

In the second chapter (Bennett et al., 2020) of the Alzheimer's Disease International's World Alzheimer's Report 2020, the authors argue that design principles are one part of a broader schema which can be described in terms of four domains. With an increasing level of specificity the domains move from general societal goals and end with very specific actions, such as providing raised garden beds. The four design domains are: Goals, Principles, Approaches, and Responses.



The overarching goals in this schema—to afford well-being and dignity to people living with dementia—reflect the interplay of current civil movements and current paradigms in science, politics, technology and the arts. Anyone familiar with services for people with dementia in the mid twentieth century, e.g. psychiatric hospitals, residential care centres, and even day care centres, knows that these goals were not apparent at that time. The change has been brought about through civil and legal action such as the recognition of basic human rights, and the rising influence of paradigms such as universal design—basic human design supporting all disabilities and human conditions—and salutogenesis—the approach to "health care" that stresses maintaining health over treating illness. The Design Dignity values and principles in the Manifesto seek to manifest this movement bringing clarity to the starting point for designing well for people living with dementia. The Manifesto's values and principles are intended to be consistent with the overarching goals and the paradigms that are leading us to them. The following sections demonstrate this consistency and show that the Design Dignity Values contribute to making the overarching goals and the major paradigms relevant and applicable to the design of physical environments for people living with dementia.

# The Design Dignity Manifesto in the Context of Human Rights

In the context of the Convention on the Rights of Persons with Disabilities and its Optional Protocol (CRPD) (Devandas-Aguilar, 2019) attention has increasingly been paid to the rights of people living with dementia. The CRPD is the first comprehensive human rights treaty of the 21st century, afforming that all persons with all types of disabilities must enjoy all human rights and fundamental freedoms. Dementia rights advocates are increasingly using the CRPD to frame their demands for equality (Steele et al., 2020). The World Health Organisation clearly states that dementia "is one of the major causes of disability and dependency among older people worldwide" (Swaffer, 2018). It follows that people living with dementia must enjoy these rights and freedoms. As Cahill (Steele et al., 2020) notes, the CRPD 'allows for a new and exciting dialogue to emerge, where the framing of dementia is no longer characterized by stigma, fear and exclusion, but rather, where the individual with dementia is viewed as a legitimate part of mainstream society'.

The principles included in the CRPD are:

- (a) Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons;
- (b) Non-discrimination;
- (c) Full and effective participation and inclusion in society;
- (d) Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity;
- (e) Equality of opportunity;
- (f) Accessibility;
- (g) Equality between men and women;
- (h) Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities. (UN)

While these are referred to as principles in the UN documents, they equate to values in the Design Dignity Manifesto. Table 1 illustrates the links, as seen by the authors of the manifesto, between the UN principles and the Dignity values and principles.

The justification for making the links between the CRPD principles and the Dignity design principles is explained more fully in Table 2.

A clear statement of the link between the Design Dignity Manifesto and the CRPD is found in the paragraph of the manifesto that introduces the values:

As designers, researchers, care deliverers, care receivers, and people living with dementia we have come to understand that good design for people living with dementia entails respecting their dignity, autonomy, independence, equality of opportunity, and non-discrimination.

	Convention on the Rights of Persons with Disabilities Principles							
Design Dignity Manifesto Values	Dignity, individual autonomy	Non- discrimination	Full participation and inclusion	Respect	Equality of opportunity	Accessibility	Equality between men and women	
Designs that consider the holistic wellbeing of the individual, community, and environment	x	x	х	х	x	x	х	
Projects that are authentically co-designed with people living with dementia	x	x	x	x	x	x	x	
Projects that prioritise enabling people living with dementia to remain in their communities and families	x	x	x	x	x	x	х	
Designs that maximise intergenerational interactions			X		x			
Designs that focus on the strengths and abilities of people living with dementia while compensating for functional changes	x	x	х	x	x		х	
Designs that accentuate the freedom of people living with dementia to make choices	x	x	x	x	x		х	
Designs that assist people living with dementia to maintain their culture		x	x	x	x			
Designs that are informed by evidence and research								
Design Dignity Manifesto Design Principles								
Begin each project by developing a vision for a dignified way of life for people living with dementia.	x	x	x	×	x	x	x	
Where safety measures are agreed to be appropriate, design them to be as unobtrusive as possible.	x	x	x	x	x	x		
Design the environment to reflect a human scale.	x		х	х	x			
Plan the environment to make it easy for people to see and move where they want to go.	x		x	х	x	x		
Optimise stimulation.	x		х	Х	x	x		
Promote movement, engagement, and enrichment.	х	х	х	х	x	х	х	
Afford people opportunities to enjoy contact with nature	x		Х					
Design all components of the environment to be as familiar as possible.	x	х	х	х	х		х	
Afford people opportunities to choose to be alone or with various size groups of people.	x	х	х	х	х		х	
Provide easy access and connection to and from local communities, families, and friends.	x	x	x	x	x	x	х	

TABLE 2 The Design Dignity Principles and the CPRD (developed from Table 2 in (Bennett et al., 2020))

Dignity principles	The environment	Links to CRPD principle
Begin each project by developing a vision for a dignified way of life for people living with dementia.	-supports the chosen lifestyle -has a way of life that is clearly evident to everyone -in aged care, reminds staff of values and practices that are required and gives them the tools to do their job	a) Dignity, individual autonomy b) Non-discrimination c) Full participation and inclusion d) Respect e) Equality of opportunity f) Accessibility g) Equality between men and women
Where safety measures are agreed to be appropriate, design them to be as unobtrusive as possible.	-enables a person to continue to pursue way of life -enables a person to make the most of her/his abilities -is easy to move around internal and external built environment -has any potential risks made unobtrusive	a) Dignity, individual autonomy b) Non-discrimination c) Full participation and inclusion d) Respect e) Equality of opportunity f) Accessibility
Design the environment to reflect a human scale.	-has positive effect on a person's responses and feelings -does not intimidate people -encourages a sense of well being -enhances a person's competence	a) Dignity, individual autonomy c) Full participation and inclusion d) Respect e) Equality of opportunity
Plan the environment to make it easy for people to see and move where they want to go.	-enables a person to make choices -minimises confusion -offers opportunities for engagement -enables a person to be confident to explore the built environment	a) Dignity, individual autonomy c) Full participation and inclusion d) Respect e) Equality of opportunity f) Accessibility
Optimise stimulation.	-minimises a person's confusion and uncertainty -provides cues about where a person is and what she/he can do -enables a person to focus on positive visual, audible, olfactory, and tactile cues -avoids prolonged exposure to large amounts of stimulation	a) Dignity, individual autonomy c) Full participation and inclusion d) Respect e) Equality of opportunity f) Accessibility
Promote movement, engagement, and enrichment.	-increases a person's engagement -maintains a person's health and wellbeing -has paths free of obstacles -includes points of interest -provides opportunities for activities and/or social interaction	a) Dignity, individual autonomy b) Non-discrimination c) Full participation and inclusion d) Respect e) Equality of opportunity f) Accessibility g) Equality between men and women
Afford people opportunities to enjoy contact with nature	-improves a person's physical, mental and emotional health -has outside places located in close proximity to inside places -facilitates the transition from inside to outside -features outside places that offer passive and active points of meaningful engagement	a) Dignity, individual autonomy c) Full participation and inclusion d) Respect f) Accessibility

Design all components of the environment to be as familiar as possible.	-has places a person can use and enjoy -reflects a person's personal background -involves a person in personalising the built environment	a) Dignity, individual autonomy b) Non-discrimination c) Full participation and inclusion d) Respect e) Equality of opportunity g) Equality between men and women
Afford people opportunities to choose to be alone or with various size groups of people.	-enables a person to choose to be with others or on their own -enables a person to engage in relevant activity -has a variety of places which have different characters (eg place for reading, place for chatting) -includes internal and external settings -stimulates different emotional responses	a) Dignity, individual autonomy b) Non-discrimination c) Full participation and inclusion d) Respect e) Equality of opportunity g) Equality between men and women
Provide easy access and connection to and from local communities, families, and friends.	-reminds a person who she/he is and maintains her/his sense of identity -includes places that are shared by the wider community and people living with dementia -has easy access to these places and around a site	a) Dignity, individual autonomy b) Non-discrimination c) Full participation and inclusion d) Respect e) Equality of opportunity f) Accessibility g) Equality between men and women

# The Design Dignity Manifesto in the Context of Salutogenesis

The concept of salutogenesis has been a major contributor to recent changes taking place in the way health and health services are generally perceived. Its roots lie in the ongoing struggle to answer a deceptively simple question 'What is health?', a 15 year quest undertaken by Aaron Antonovksy that culminated in his books, *Health, stress and coping* (Antonovsky, 1979), and *Unravelling the Mystery of Health: How People Manage Stress and Stay Well* (Antonovsky, 1987).

In simple terms the activities that take place in the pursuit of 'health' can be divided into two categories, the pathogenic and the salutogenic. Pathogenic activities are focussed on discovering and eliminating the sources of ill health, salutogenic activities are focussed on discovering and supporting the sources of health, but not only being free of illness or injury but, rather, complete physical, mental, and social well-being. The goal of achieving health requires success in both activities and both pathogenic and salutogenic approaches can be seen in the activities of designers. In the case of designing for people living with dementia there has been a gradual expansion of the field from concerns about the pathogenic elements of design, e.g. those that cause confusion and agitation, like complexity and over-stimulation, to putting greater emphasis on those that engage with the concerns of salutogenesis, e.g. how to create environments that support well-being. This is often presented as a move away from the medical model towards a more holistic eco-psycho-social model (Zeisel et al., 2016).

Antonovsky promoted a paradigm shift from "the axiom . . . which is at the basis of the pathogenic orientation which suffuses all western medical thinking: the human organism is a splendid system, a marvel of mechanical organization, which is now and then attacked by a pathogen and damaged, acutely or chronically or fatally" (Antonovsky, 1996) to an orientation that takes as its starting point that humans are constantly having to adapt to life's circumstances or to put it another way, negotiating stress:-

- In contrast to the dichotomous classification of pathogenesis into healthy or not, salutogenesis conceptualizes a healthy/dis-ease continuum
- In contrast to pathogenesis' risk factors, salutogenesis illuminates salutary factors that actively promote health
- In contrast to focusing on a "particular pathology, disability or characteristic" of a person, salutogenesis might work with a community of persons and "must relate to all aspects of the person" (Page 11 (Mittelmark et al., 2016))

In his research on holocaust survivors, Antonovsky recognised a great variability in people's capacity to deal with stress. He saw stark differences in a group of women who survived this horror. Twenty nine percent of the women in his sample appeared to have come through the stress and pain of the holocaust relatively unscathed. He attributed this to what he termed their sense of coherence—reflecting their view of life and capacity to respond to stressful situations. Antonovsky describes this view of life as a global orientation to see life as structured, manageable, and meaningful. A person's sense of coherence reflects a personal way of thinking, being and acting, with an inner trust, which leads people to identify, benefit, use, and re-use the resources at their disposal (Eriksson and Lindström, 2006). He posits that the sense of coherence has three components: comprehensibility, manageability and meaningfulness.

Golembiewski (Golembiewski, 2016) describes these three components in relation to the design of the physical environment:-

'Comprehensibility' refers to providing an environment that enables a person to make sense of their life narrative, context and current circumstances. Without this fundamental understanding, people have little capacity to make the most of circumstances or to negotiate life's challenges.

'Manageability' refers to providing an environment that assists people to manage day-today physical realities, like working efficiently and comfortably, paying bills, staying warm, dry, clean, rested and nourished and other maintenance of their physical lives.

'Meaningfulness'... is the foundation of the desire to live. It is meaningfulness that gives life forward thrust—the will to resist the entropy of illness and death's inevitability, and as such it is possibly the most important of the salutogenic resources. Meaningfulness is also the most elusive because meaning is difficult to define and is highly personal. Meaningfulness is found in the intensity of personal connections, engagement with responsibilities and the pursuit of desires.

According to Antonovsky, the third component is the most important because without a sense of meaning there is no reason to persist and survive and confront challenges; without a sense of meaning the person will not be motivated to comprehend and manage events.

Salutogenesis has impacted architecture, particularly hospital design, through the work of Alan Dilani (Dilani, 2008, Dilani, 2005) and the International Academy of Design and Health. While it would be an exaggeration to say that the salutogenic paradigm alone has substantively impacted hospital design, the combination of salutogenic and universal design (to be addressed later) has definitely had a profound effect on the design of modern hospitals and other health care

environments (Golembiewski, 2016, Grey et al., 2018). This impact makes it essential to examine the Design Dignity Manifesto values and principles to demonstrate their consistency with the salutogenic approach.

Neither Antonovsky nor Dilani have provided, as far as the authors can determine, a succinct description of the values that underpin the salutogenic approach to design. While this makes a direct comparison between Design Dignity values and salutogenic values difficult, some help may be gained by looking at a set of 19 values and principles assembled by a public health researcher (Gregg and O'Hara, 2007). These values and principles are taken from the work of experts in holistic, ecological, and salutogenic approaches. Ten of the 19 are relevant to the design process, the others deal with public health processes and issues. Table 2 illustrates the many points of agreement between the value sets and the lack of any areas of disagreement.

The relationship is easier to illustrate between the Design Dignity Principles and the salutogenic approach because the key salutogenic resources are clear: Comprehensibility, Manageability and Meaningfulness. These components are mapped against the Design Dignity Principles in Table 3. Each principle maps clearly onto one or more salutogenic components with no apparent disagreement between the Design Dignity Principles and the components of salutogenesis.

This analysis, albeit subjective, of the relationship between the Design Dignity values and principles and those inherent in the salutogenic approach places the Design Dignity values and principles, i.e. the Design Dignity Manifesto, safely in the context of the same world view as salutogenesis. There is no conflict between the two and, therefore, no need for modification. The values and principles of salutogenesis provide a context that embraces and informs the Design Dignity values and principles.

Table 2: Links between Design Dignity Values and salutogenic values

		Design Dignity Manifesto Values							
Holistic, ecological, salutogenic value label	Holistic, ecological, salutogenic value description	Designs that consider the holistic wellbeing of the individual, community, and environment	Projects that are authentically co-designed with people living with dementia	Projects that prioritise enabling people living with dementia to remain in their communities and families	Designs that maximise intergenerational interactions	Designs that focus on the strengths and abilities of people living with dementia while compensating for functional changes	Designs that accentuate the freedom of people living with dementia to make choices	Designs that assist people living with dementia to maintain their culture	Designs that are informed by evidence and research
Organic	Seeing the world as a living, breathing, dynamic, whole	х						х	
Constructionist, subjectivist	Acknowledging that all people are connected and that collectively they construct knowledge and understanding about their worlds		х		х		х		х
Ecological	Recognising that people exist in multiple ecosystems, from the individual level, to the family, group, community and population level. All parts within the whole system affect each other, and the whole is greater than the sum of the parts.			х	х			х	x
Holistic	Understanding that health is a complex concept that includes aspects of well-being that relate to the whole person	х				x		х	x
Health and well- being	Emphasising factors that create and support health, well-being, happiness and meaning in life,	х			х	х	х	х	х
Health as a resource for living, sense of purpose and enjoyment of life	Recognising that health provides a sense of purpose and enables greater enjoyment of life and is not an end in itself.					х	х		
Participatory processes that empower people	Using participatory processes that enable and empower people to connect with their inner wisdom and gain control over their lives and the determinants of their health		х				х	х	х
Participatory, egalitatrian	Facilitating participatory and egalitarian processes that assist with the redistribution of power, rather than processes that have their foundations in patriarchy and domination.		х			х	x	х	
Active participation of people affected by the issue	Ensuring that the people most affected by an issue are an integral part of all components of a health promotion change process that addresses the issue		х						
Ally	Working with a person as an ally and a resource, who is on tap for the community, as distinct from working on top of people as an outside expert who assumes they know what's best for the community.						х	х	

Table 3:Links between Design Dignity Principles and Salutogenic Principles

	SALUTOGENIC PRINCIPLES				
DESIGN DIGNITY MANIFESTO PRINCIPLES	MANAGEABLE	COMPREHENSIBLE	MEANINGFUL		
Begin each project by developing a vision for a dignified way of life for people living with dementia.			X		
Where safety measures are agreed to be appropriate, design them to be as unobtrusive as possible.	X				
Design the environment to reflect a human scale.	Χ	X			
Plan the environment to make it easy for people to see and move where they want to go.	X	X			
Optimise stimulation.	X	X			
Promote movement, engagement, and enrichment.	X	X	X		
Afford people opportunities to enjoy contact with nature			X		
Design all components of the environment to be as familiar as possible.		X			
Afford people opportunities to choose to be alone or with various size groups of people.	X				
Provide easy access and connection to and from local communities, families, and friends.			X		

# The Design Dignity Manifesto in the context of universal design

Experiences of the second world war also contributed to the development of universal design. The Centre for Excellence in universal design, established by the Irish National Disability Authority (History of UD | Centre for Excellence in universal design) places the origins of universal design in medical advances made during the twentieth century that increased the likelihood of surviving injury and illness. The rights and needs of older people and people with disabilities was brought into focus by the fact that people were living longer, thus the average life expectancy of people with severe impairments was increasing, and a large number of Second World War soldiers were returning home with disabling injuries. . Governments responded by introducing equal rights and anti-discrimination legislation, bringing pressure to bear on the design industry to create accessible and usable products, services, and environments.

The design industry responded with concepts such as barrier-free design, which aspired to remove barriers for people living with a disability from the built environment. The more generalised concept of accessible design emerged in the 1970s and promoted the incorporation of accessible solutions into the general design of products, services, and environments. While the mainstream design industry was evolving, the parallel field of assistive technology began to provide more specialised solutions for people with specific requirements. Fields such as Human Factors, Ergonomics, and other functional design approaches began to use information about the physical anatomy and the behaviour of the person to create designs that meet individual needs. universal design emerged from the combination of developments in all of these fields.

The values that underpin universal design can be gleaned from the following description:

universal design (UD) is an approach to design that increases the **potential for developing a better quality of life for a wide range of individuals**. It is a design process that **enables and empowers a diverse population by improving human performance, health and wellness,** and **social participation (Steinfeld and Maisel, 2012). It creates products, systems, and** 

environments to be as usable as possible by as many people as possible regardless of age, ability or situation. Other terms for universal design used around the world include Design for All, Inclusive Design, and Barrier-Free Design. UD terminology and meanings differ from one country to another and often reflect each nation's societal values. Cultural differences influence how the movement has been adopted in different countries. However, the common goal of social inclusion transcends national laws, policies, and practices.

universal design is not a fad or a trend but an enduring design approach grounded in the belief that the broad range of human ability is ordinary, not special. universal design addresses barriers faced by people with disabilities, older people, children, and other populations that are typically overlooked in the design process. **UD reduces stigma** and provides benefits for all users. For example, building entrances without stairs assist equally someone who moves furniture, pushes a baby stroller, or uses a wheelchair. UD can increase usability of an environment or product without considerably increasing its cost by reducing the need for design modifications later when abilities or circumstances change. (Steinfeld and Maisel, 2012) (Sourced from <a href="http://universaldesign.com/what-is-ud/">http://universaldesign.com/what-is-ud/</a> bold font added.)

In sum, universal design values environments that:

- Develop a better quality of life
- Enables and empowers users
- Are useable by people regardless of age, ability or situation
- Improve social inclusion
- Reduces stigma

The consistency of the Design Dignity Manifesto values with these values is illustrated in Table 4.

Table 4: Links between Design Dignity Values and universal design values

Design Dignity Manifesto Values	Develop a better quality of life	Enables and empowers users	Are useable by people regardless of age, ability or situation	Improve social inclusion	Reduces stigma
Designs that consider the holistic wellbeing of the individual, community, and environment	х	х	х	х	х
Projects that are authentically co-designed with people living with dementia		х			
Projects that prioritise enabling people living with dementia to remain in their communities and families	х	х	х	х	х
Designs that maximise intergenerational interactions	х		х	х	х
Designs that focus on the strengths and abilities of people living with dementia while compensating for functional changes	х	х	х		
Designs that accentuate the freedom of people living with dementia to make choices		х			х
Designs that assist people living with dementia to maintain their culture		х		х	х
Designs that are informed by evidence and research	х	х	х	х	х

In 1997 a working group of architects, product designers, engineers and environmental design researchers, led by the late Ronald Mace ( <a href="https://www.udinstitute.org/principles">https://www.udinstitute.org/principles</a> )put forward seven principles of universal design (UD):-

## Principle 1: Equitable Use

The design is useful and marketable to people with diverse abilities.

#### **Guidelines:**

- 1a. Provide the same means of use for all users: identical whenever possible; equivalent when not.
- 1b. Avoid segregating or stigmatizing any users.
- 1c. Provisions for privacy, security, and safety should be equally available to all users.
- 1d. Make the design appealing to all users.

# Principle 2: Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

#### **Guidelines:**

- 2a. Provide choice in methods of use.
- 2b. Accommodate right- or left-handed access and use.
- 2c. Facilitate the user's accuracy and precision.
- 2d. Provide adaptability to the user's pace.

# Principle 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.

#### **Guidelines:**

- 3a. Eliminate unnecessary complexity.
- *3b.* Be consistent with user expectations and intuition.
- 3c. Accommodate a wide range of literacy and language skills.
- 3d. Arrange information consistent with its importance.
- 3e. Provide effective prompting and feedback during and after task completion.

#### Principle 4: Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

## **Guidelines:**

- 4a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- 4b. Provide adequate contrast between essential information and its surroundings.
- 4c. Maximize "legibility" of essential information.
- 4d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- 4e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

# Principle 5: Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

#### **Guidelines:**

- 5a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- 5b. Provide warnings of hazards and errors.
- *5c. Provide fail safe features.*
- 5d. Discourage unconscious action in tasks that require vigilance.

# Principle 6: Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

#### **Guidelines:**

- 6a. Allow user to maintain a neutral body position.
- 6b. Use reasonable operating forces.
- 6c. Minimize repetitive actions.
- 6d. Minimize sustained physical effort.

# Principle 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.

#### **Guidelines:**

- 7a. Provide a clear line of sight to important elements for any seated or standing user.
- 7b. Make reach to all components comfortable for any seated or standing user.
- 7c. Accommodate variations in hand and grip size.
- 7d. Provide adequate space for the use of assistive devices or personal assistance.

There are clear similarities and no contradictions between these principles and the Design Dignity Principles, e.g. safety, scale, visual access, stimulus management to aid wayfinding. Nevertheless, the UD principles have a broader scope than the Design Dignity principles. When Thomas Grey and his colleagues in Ireland specifically applied UD principles to designing for people living with dementia(Grey et al., 2015), they identified eight critical principles (Pages 8-9, (Grey et al., 2015)). These are listed in Table 5 and the links with the Dignity principles are indicated.

Clearly there are significant similarities and no contradictions, showing that, as is the case with Salutogenic principles, there is a prima facie case for consistency between the Design Dignity principles and universal design. universal design provides a widely accepted context which embraces and informs the specialised Design Dignity values and principles.

Table 5: Links between the Design Dignity Principles and universal design issues.

	Dementia specific design issues that reinforce and supplemented UD principles							
Dignity Design Principles	Encourage a participatory design approach where people living with dementia, carers and other family members can take part in the design process	Use familiar design with the use of recognisable features that are consistent with user's expectations	Provide an environment that is easy to interpret and calm, paying particular attention to the reduction of acoustic and visual disturbances	Provide distinct spaces for different activities to enable rooms and areas to be associated with their respective functions	Provide good visual access to key areas of the dwelling, or to important objects to remind and prompt the occupant when required	Support personalisation of the environment to enhance continuity of self	Provide unobtrusive safety measures and ambulant assistive living devices to provide a safe and secure environment	Provide safe and accessible outdoor spaces that are perceptible from the interior to encourage occupant use of these spaces.
Begin each project by developing a vision for a dignified way of life for people living with dementia.	х							
Where safety measures are agreed to be appropriate, design them to be as unobtrusive as possible.							X	
Design the environment to reflect a human scale.			Х					
Plan the environment to make it easy for people to see and move where they want to go.					X			
Optimise stimulation.			х					
Promote movement, engagement, and enrichment.				х				Х
Afford people opportunities to enjoy contact with nature					X			х
Design all components of the environment to be as familiar as possible.		Х				x		
Afford people opportunities to choose to be alone or with various size groups of people.				Х				
Provide easy access and connection to and from local communities, families, and friends.				X				

#### Conclusion

The values and principles that appear in the Dignity Manifesto of Design for People Living with Dementia have been subjected to scrutiny by a large number of keenly interested stakeholders and the comments and suggestions have been carefully considered by the team who launched the manifesto. The result has been significant changes to the wording of the original values and principles and the addition of new values and principles.

The Design Dignity values and principles have also been systematically compared with those of three of the most powerful influences on current design practice – the human rights movement, the salutogenic approach, and universal design. The comparison shows that the Design Dignity values and principles are entirely consistent with these.

This process of international scrutiny and careful analysis of context leads to the conclusion that the Dignity Manifesto of Design for People Living with Dementia can take its place as a common starting point and a set of evaluative criteria for those wishing to explore the many ways to design well for people living with dementia.

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