

DESIGN *for* DEMENTIA

Volume 2 - Research Projects



Bill Halsall of the Halsall Lloyd Partnership and Dr. Rob MacDonald of Liverpool John Moores University

Published by
The Halsall Lloyd Partnership
98 Duke Street
Liverpool
L1 5AG
T: 0151 708 8944
F: 0151 709 1737
E: liverpool@hlpdesign.com
W: hlpdesign.com

Volume 1 - Design *for* Dementia - A Guide with helpful guidance in the design of exterior and interior environments.

[ISBN 978-0-9929231-1-2](#)

Volume 2 - Design *for* Dementia - Research Projects, outlines the research projects and describes the participatory approach.

[ISBN 978-0-9929231-2-9](#)

Bill and Rob would like to thank Mersey Care NHS Trust and Liverpool John Moores University for their financial contribution and support in producing this work

Bill Halsall and Dr. Rob MacDonald assert their intellectual property rights in this publication

© Designs illustrated in this publication remain the copyright of Halsall Lloyd LLP

DESIGN *for* DEMENTIA

Volume 2 - Research Projects

ACKNOWLEDGEMENTS

With contributions from:-

Alan Ravenhill of Halsall Lloyd Partnership

Estelle Keeley of Halsall Lloyd Partnership

Janice Macdonald of Halsall Lloyd Partnership

Grahame Smith of Liverpool John Moores University (Faculty of Education, Health and Community)

Forewords by:-

Jill Pendleton and Pauline Parker of Mersey Care NHS Trust

Regina Shaw of Service Users Reference Forum (SURF)

With thanks to:-

Beatrice Fraenkel, Chair of the Mersey Care NHS Trust

Pauline Parker, Mersey Care NHS Trust

Jill Pendleton, Mersey Care NHS Trust

Professor Anne Scott, Dean of the Faculty of Health and Social Sciences, Liverpool John Moores University

Regina Shaw, Co-Chair of the Service Users Reference Forum (SURF)

Grahame Smith of the Faculty of Education, Health and Community, Liverpool John Moores University

Professor Caroline Wilkinson, Director of the Liverpool School of Art and Design, Liverpool John Moores University

Professor Mary Marshall, Dementia Services Development Centre, Stirling University

Professor Dr. David Livesey, Director of Medicine at Mersey Care NHS Trust

Professor Dr. John R Ashton, C.B.E, Faculty of Public Health

Maggi Morris, Consultant in Public Health



DESIGN *for* DEMENTIA VOLUME 2 - RESEARCH PROJECTS

1: INTRODUCTION	...
2: THE DEMENTIA FRIENDLY NEIGHBOURHOOD	...
3: HOW DEMENTIA FRIENDLY IS OUR CITY?	...
4: CONNECTING MINDS THROUGH SANDPLAY	...
5: THE DESIGN <i>for</i> DEMENTIA BUNGALOW	...
6: SUMMARY AND CONCLUSIONS	...



1: INTRODUCTION

This volume complements '*Design for Dementia* Volume 1 - A Guide', and describes outputs from a series of research projects which have been carried out by the Halsall Lloyd Partnership and Liverpool John Moores University. The findings from these projects support the recommendations described in Volume 1 and have been carried out in accordance with the participatory philosophy which the team have adopted.

The research projects are ongoing and have developed through the activities of the team in association with the Innovate Dementia Europe project, Mersey Care NHS, the Dementia Action Alliance, and the Service Users Reference Forum (SURF).

A BRIEF OUTLINE OF THE PROJECTS

The Dementia Friendly Neighbourhood

Based on the premise that 70-80% of people living with dementia live in their own homes and use the same local environment and facilities as everyone else, how can the design of neighbourhoods be shaped to respond better to the needs of people living with dementia and how can neighbourhoods and communities help people to live well with dementia?

How Dementia Friendly is our City?

This exercise extends the lessons learnt from the Dementia Friendly Neighbourhood to a city scale, exploring responses to images of Liverpool City Centre. Its conclusions begin to point the way towards the aspiration of a Dementia Friendly City Centre.

Connecting Minds through Sandplay

Sandplay is a creative hands-on game using a Jungian sand tray and a set of assemblages to stimulate all the senses:

- **Touch** - sand, pebbles, objects
- **Smell** - sensory garden of roses, herbs, spices
- **Taste** - old fashioned sweets and ice cream
- **Sight** - coloured shiny objects
- **Sound** - background music.

A creative exploration towards a shared landscape of the mind.

The Design for Dementia Bungalow

The '*Design for Dementia Bungalow*' is a design '*paradigm*' which explores the design of an ideal model bungalow with all the features to live well with dementia. It includes an integrated '*Design for Dementia Garden*'.

All of these projects have been summarised in **Volume 1** but are described in more detail here in **Volume 2 - Research Projects**.



'Living Lab' Innovate Dementia Europe Event at Goodison Park, Liverpool

Objectives

- *Explore how neighbourhoods could be more responsive to the needs of people living with dementia*
- *Gain insight from people living with dementia about their environment.*

Method

- *'Living Lab' consisting of a mix of people including carers, professionals and people living with dementia*
- *'Photo cue' cards were used to assist in stimulating a response to an assortment of images*
- *Results were collated and analysed.*

2: THE DEMENTIA FRIENDLY NEIGHBOURHOOD

by Dr. Rob MacDonald

PRESENTATION TO INNOVATE DEMENTIA EUROPE

I am Dr. Rob MacDonald, an Architect from Liverpool John Moores University (LJMU). I am also a MerseyCare Service User with a life long bipolar disorder and have attended four of your previous Innovate Dementia meetings. I have found your way of working creative and friendly and I have become 'A Dementia Friend'.

Recently, as I am Diabetic Type 1, I had an annual check up. At the end of the check up the nurse asked me if I would like a Dementia Assessment? I was shocked! I said not yet... I am only 63 and this made me really think about how dementia can affect us at different ages.

We have been invited to this meeting by Mersey Care NHS Trust and Grahame Smith of LJMU. Today our team is both practically and academically based.

Bill Halsall is a Senior Architect and Landscape Architect. I have worked with Bill over many years. **'People Involvement'** is important in all our work and we have adopted a collaborative **'Living Lab'** and open cooperative approach for several years.

Our projects have included Huyton Housing Cooperative for the Elderly and Leta Claudia Cooperative, Everton with its bungalows and shared lounge. In Huyton and Everton we have designed houses and neighbourhoods with elderly people as our user clients.

Our most important project is The Eldonian Village in Vauxhall with its mix of different houses, bungalows and community facilities. The design of the overall neighbourhood is very important. It would be good for us all to have visits there and meet the Eldonians.

It's a great success story for Liverpool and it's a way of working to learn from. Perhaps we could have a meeting in The Eldonian Community Hall?

Not all the projects are new, because we also renovate houses of different ages including converting terraced houses in Anfield. Here, two houses have been converted in to one with street improvements and new back gardens that replace the old yards.

Janice Macdonald is a fully qualified Interior and Graphic Designer. Janice has also attended a course about Dementia at Stirling University which is a valuable knowledge and experience base within our team.

On this basis, HLP now has an extensive research library about Dementia and sources of valuable and useful information. Estelle Keeley is an Urban Designer and Landscape architect and was trained at The Centre of Urban Design, Oxford Brooks University. What is Urban Design? It's the design of safe spaces and places such as streets, pavements, gardens and roads. Spaces and places really do matter.

Alan Ravenhill is an Architect who has many years of design in the housing sector including sheltered housing for the elderly. Like most of the team, Alan's experience is based in Liverpool.



As you can see we offer you a trusted and experienced team but we are not the experts because we have come to learn from you and with you. We would like to discuss with you how our houses and surrounding neighbourhoods can help us to 'live well' during ageing and with dementia?

FACILITATING THE LIVING LAB

The design '*Living Lab*' was facilitated using packs of photo cue cards. On one side of the photo cue card is a selected image. Participants are requested to make their comments on the reverse of the cards. Comments are collated and analysed. The following pages show the image and comments from participants on the facing page. The Innovate Dementia Europe Group includes carers and professionals along with people living with dementia. The comments shown on the following pages are those of the participants.

Our suggestion is that we all have at least three things in common, and we are all the experts about these matters:-

1. We know none of us are immune to ageing
2. We all live in some form of house or home
3. We all live in a neighbourhood or district and part of the city.

We all have (good and bad) experiences and stories about living in houses and neighbourhoods. It's important to share and talk about these things because we can learn from these discussions and experiences.

Today, we would like, with your agreement, you to enable us to think and talk about dementia, our neighbourhoods and our houses. How can we '*Design well to live better with Dementia?*'

We hope today might lead to further positive events and visits? How can we create a Dementia Friendly Guide for our City? We do not know all the answers but we are here to learn along with you. We think '*Professionals should be on tap not on top*'...

Bill Halsall will introduce our design '*Living Lab*' and after the '*Living Lab*' he will prepare a written visual summary of the outcome. The objective is to develop with you a '*Design for Dementia*' guide.

I hope you find our presentation enjoyable and helpful. Hopefully, this design '*Living Lab*' might lead to further events, exhibitions and visits.

Thank You for Listening.
Dr. Robert G MacDonald

SURF Group workshop - using 'photo cue' cards to respond to and comment on their experiences of Liverpool city centre.



COMMENTS FROM PARTICIPANTS

- Very impressed, very clear. Could move in tomorrow
- Parked cars could be hazards
- Flats could lead to isolation
- Steps in front of doors could be hazardous
- Modern new home - would say more suitable for a young person
- Good safety rails on the windows
- Automobiles are obtrusive
- No wheelchair access
- Looks nice and organised
- Step to get to front door, there should be ramp
- Dangerous balcony for elderly and young
- Parking on pavement
- Nice design
- Clean, clear lines but difficult to distinguish between the buildings, if having problems with your memory. Could have different coloured doors, something in garden etc. to personalise buildings.
- Car parked on pathway is restrictive for pedestrians and specially for wheelchairs and mobility scooters
- Designated car parking spaces
- Gardens/windows/doors look the same
- Uniform - boring
- For young professionals - well kept
- Too identical
- Not at all dementia friendly
- Open plan - good and attractive

- Good as few obstacles
- Not good for observation of children or carers - 3 level house
- Can't sit out
- Balconies dangerous - children or person with disability
- No pavement
- Poor ergonomics
- Does look attractive
- No clear boundaries
- Reduces saleability as would only really be suitable for young couples or single people.

Summary

This image was liked by some people, particularly as an environment for young people or professionals.

Concerns:

- Parked cars restricting access
- Steps to front doors
- Uniformity
- Balconies (although good safety rails).

Design could be improved by:

- Designing out the steps to achieve disabled access
- Features to distinguish between each house e.g. door colours
- More organised car parking.

'Photo cue' card image.



COMMENTS FROM PARTICIPANTS

- Well known that there should not be dramatic change in colour on the ground
- Uneven pavement
- Everything is grey, no clear colour showing pavement/road boundary
- Road surfaces are difficult when driving if they change frequently, especially when wet
- Dangerous for all if pavements and road are not clearly defined
- The pavement is uneven and cobbled - hazard for falls
- Nothing signposted
- No safe crossing
- Uneven surfaces
- No warning of different gradient
- Like cobbles although difficult to walk on
- Dropped kerbs useful
- Should be one consistent repair
- Cobbles not comfortable to walk on
- Patchwork repairs
- Pavements are confusing, different tiles, cobblestones, some are poorly maintained - a safety issue
- Uneven surfaces - fall hazard
- Cobbles are difficult to walk on and terrible for wheelchair users
- Pavement and road are the same colour so you don't know where one ends and the other begins
- For a person with dementia - cobbles are the worst nightmare
- Trip hazard - tarmac and cobbles
- Confusing for pedestrians
- Not safe - uneven surface
- Too many rough edges on floor
- No clear boundaries
- Not much colour
- Posts would be better if a pale or different colour

- A flat walkway in a visible colour, cutting through cobbles would help dementia/wheelchair users
- Not wheelchair or pushchair friendly
- Different levels
- Increase risk of accidents due to uneven surfaces
- Dropped pavements are good
- Different surfaces - someone walking from cobbles to resurfaced area of road may think they are now on the pavement
- Wooden posts may be problematic
- Uneven
- Dangerous
- Dull and dark
- Different surfaces leading to possible confusion.

Summary

The tonality of the surfaces is important as well as the texture. Dark tarmac patches could be misread as holes.

Concerns:

- Unevenness of cobbled surface and hazards for pedestrians
- Tarmac patches are confusing
- Lack of distinctive colour change to show difference between road and pavement
- Lack of signage
- Wooden bollards.

Design could be improved by:

- Consistent maintenance/repair materials
- Omit cobbles on pedestrian routes - a flat walkway would be more pedestrian friendly
- Colour change between roadway and pedestrian areas
- Dementia friendly signage.

'Photo cue' card image.



#10

Yellow banner

LEWIS

CENTRAL

Ladbrokes

SUPER KING

TO BE MAINTAINED

DR OFFICE USE

Blue directional sign

WE HAVE NO...

99

COMMENTS FROM PARTICIPANTS

- Wrong place for a bike rack
- Superfluous bollard
- White pole obtrusive
- Tree base poorly designed
- Confusing changes in pavement patterns
- What is purpose of flag pole?
- Like the open space
- Signage not clear enough
- To much street furniture
- Bikes in the way
- Paving hazards
- Transitions in flooring confusing
- Taking up too much room and space for pedestrians
- Even floor but change of colour difficult
- Pavement (different colour) very confusing to pedestrians
- Bikes obstruct pedestrians
- Plinths can be used as benches and resting space
- Hazards on a main walking route - where is the recommended footpath?
- Different colour of pavement can be confusing for someone who has dementia and they may think they are at different levels
- Change in colour of pavement not good for dementia person
- Confusing signs
- Paving slabs are very confusing and blend with the raised tree areas
- Flag pole is a trip hazard and the poles and bikes will be a danger
- Signs are very small and cluttered
- Limited lighting

- Bike racks located in the middle of the pedestrian area
- The flag poles are badly located
- Seating area isn't inviting or comfortable - it's ugly
- Obstacles
- Old familiar building
- Bike racks in way - wouldn't be able to get past
- Big pillar/post in the way
- Old building that people will remember
- Floor surface slippery in the rain
- Dark, grey, gloomy looking
- City in bloom would be nice.

Summary

People liked recognisable old buildings and open space.

Concerns:

- Obstruction of cycle racks and flagpoles
- Random colour change of floor surfaces
- Uninviting seating
- Unclear signage
- Gloomy looking.

Design could be improved by:

- Being clutter free with clear routes for pedestrians
- Paving patterns that reflect movement routes
- Seats that are comfortable and look like seats
- Clear signage
- More colour - planting design.

'Photo cue' card image.



BAKCHICK

LINEN WAREHOUSE

LOOKS

SALE SALE

City of Liverpool

COMMENTS FROM PARTICIPANTS

- Uneven pavement
- Post in the middle of pavement
- Trip hazards
- Quite a few obstructions of street furniture
- Doesn't appear to be a clean street
- Bin looks messy
- Not appealing, no flowers - dull, drab
- Why posts on pavement
- Full of obstacles
- Dirty pavement
- Bin seems too central on pavement
- Miserable
- Slippery
- Dirty
- Design covers council obligations and cars, not people friendly, except you can walk on road
- Pavement needs cleaning
- No evidence of how the street could be more attractive, planters etc.
- Very intimidating, if one was walking towards all the barriers. The car barriers should be retractable (the bollards do retract)
- Visually it looks like spikes out of the ground in the distance and the bins should be open at the top to drop stuff in
- Traffic calmed neighbourhood but ideally should be no segregation between vehicles and people
- Experience shows a reduction of traffic speed from 30mph to 20mph in existing schemes
- Uneven curb area - different texture road, cobbled (hazard for falls)
- Semi-pedestrian road could be confusing for people
- Better colour of end of pavement (kerb) will help determine steps
- Colour of bin does not help

- Lots of obstacles
- Lack of signage, obstructions
- Bins need to be mounted on walls and in distinctive colours
- Best is local community shops, worst is obstacles and street furniture
- Too many obstructions to bump into, trip hazard
- Ugly on a slope
- Possibly smelly as area around bin is dirty
- Good having local shops
- Move bin
- Not wide enough
- Busy
- Posts causing obstructions.

Summary

People liked the busy local community shops.

Concerns:

- Obstruction of the pavement with street furniture
- Dirty, slippery pavements
- Trip hazards
- Pavement too narrow
- Not people friendly.

Design could be improved by:

- Removing obstructions from the pedestrian areas
- Clearer visual distinction between road and pavement
- Better, more pedestrian friendly design
- More colour/planting.

'Photo cue' card image.



PLEASE
MIND THE
STEP

%
OFF

'Photo cue' card image.

COMMENTS FROM PARTICIPANTS

- Sign is not straight
- Is it a step or an optical illusion
- Trip hazard
- Hidden step
- Sign writing is too small
- Can't see step
- Sign is only viewable from the front
- Should be a colour (hazard) on the actual step
- Floor/wall colour scheme should be more contrasting
- Someone with dementia may think the red carpet is a hole
- Different surfaces, people may struggle
- Which step? Not distinct enough
- Sign - half hearted effort
- What's the sign doing there? It's in the way, not clear which step it is referring to - as it is grey and not clearly visible
- Step flows into pavement - can't see it
- Signage should be outside or just inside with a verbal warning repeated inside the shop
- Helpful to have colour contrast to warn pedestrians
- The sign on a slant and doesn't look professional for the shop
- Can't see the step - would have liked paint on the side of pavement
- I like the colour red but the sign is a potential hazard
- Suggest a white strip to highlight step
- Obviously the step is dangerous, but at least it's a different colour, should have a white edge
- Sign is rubbish
- I fell down this step
- Pavement looks OK - even surface and colour
- Step up from pavement may be difficult to manage - this has been highlighted but the sign could prove to be an obstacle
- Wooden flooring in shop appears to be an uneven surface
- Display in the centre may be problematic although it appears to be low level in some areas and is aesthetically pleasing
- A blind person may not have the ability to judge varying pavement surfaces
- Uneven slope
- Sign doesn't look stable - badly designed.

Summary

Shop thresholds are a particular area of concern. Perceptual problems can create risk hazards.

Concerns:

Concerns were regarding the trip hazard of the step. Clearly even the sign is an obstruction and potential trip hazard itself:

- The red carpet could appear as a hole
- The step is indistinguishable from the pavement
- If the sign is perceived to be necessary it should be clear.

Design could be improved by:

- A distinctive colour on the tread and riser so that people going in or out can clearly see the step.

Conclusions

- The workshop following the presentation generated a good level of discussion from a mixed group of people
- The visual imaginary stimulated a good response with some significant results for the design of the built environment
- In both interior and exteriors there were significant design features which, with more understanding of the issues of dementia, could have been approached differently to create a better environment, in particular for people with dementia, but also for everyone using these spaces
- Design guidance which recognises the issues of dementia and proposes practical approaches to design would assist in transmitting the message to those involved in design, construction, management and maintenance
- A joined up approach is needed across all aspects of the built environment, not just in purpose-designed Extra Care or Residential Care Schemes
- The involvement of people diagnosed with dementia is essential in developing a true understanding of what is needed
- The shared objective should be for an environment which caters for all on an equal footing, mitigating reliance on support services and which will generate a sustainable environment for the future.



Objectives

- *To see how 'Dementia Friendly' Liverpool city centre is?*
- *To explore the problems that people living with dementia may have in navigating and using the facilities of the city centre.*

Method

- *'Living Lab' consisting of a mix of people including carers, professionals and people 'living with dementia'*
- *'Photo cue' cards were used to assist in stimulating a response to an assortment of images*
- *Results were collated and analysed*
- *An independent Equality Act mini-audit was carried out on each image.*

3: HOW DEMENTIA FRIENDLY IS OUR CITY?

by Dr. Rob MacDonald

CAN THE CITY CENTRE BE DEMENTIA FRIENDLY? - PRESENTATION

Firstly, we would like to thank the Liverpool Dementia Action Alliance for inviting us to the Town Hall today. It's a very important public engagement event.

Bill Halsall and I have been asked to run two workshops about how the city centre can become dementia friendly? We have selected '**Rope Walks**' for two reasons; in the past I lived on Slater Street and still use Bold Street as a pedestrian a great deal.

I walk up Bold Street many times each week and see the environment through the eyes of somebody with various 'hidden disorders'. From a dementia and bipolar perspective I notice the door steps, entrances, staircases and inside public buildings.

Bill's office is on Duke Street and he renovated Dukes Terrace and completed the improvements around the Chinese Arch. Bill and I worked together on a number of housing cooperatives, in particular Huyton Cooperative for the Elderly. Here we enabled people to design and build user friendly housing with resident participation. It's very important to us that those people with dementia and ageing must be involved in the effective design and management of the city and that's why we all need to listen to the views of 'The Liverpool Dementia Action Alliance' today. We are not experts but we might have a view to offer.

ENVIRONMENTAL WORKSHOP

Introduction

Understandably, most dementia environmental projects focus on the worlds inside private houses, nursing homes or medical buildings. There is also much work about the design of the immediate landscape and surrounding gardens.

However, our challenge today is how we can make our city centre buildings, streets and pavements more connected and improved.

Our focus is on making shops, cafés, coffee bars, clubs, cinemas, theatres, banks, religious buildings, pubs and public toilets, more inclusive for everyone. We should be setting our sights high to become a Dementia Friendly City that is accessible for all. Our motto should also become '**Live well with dementia in the city**'.

One thing we can do is to prioritise making safer exteriors; pavements and streets. People with dementia, and with ageing, experience changes in perception and sight. If the pavement designer gets it wrong with an ill chosen texture, pattern or use of colour, then the result can raise stress and increase the risk of falls amongst vulnerable user groups. People experiencing dementia may have problems judging distances (visuospatial skills) and have difficulties on staircases or seeing objects in three dimensions. Visuospatial difficulties might lead to distortions and misperceptions of reality - a dark patch on a road can be mistaken for a hole and a glossy surface might be perceived as being wet. Changes in surface need to be carefully considered and single front steps can be dangerous.

The city centre should not exclude anyone. All the individual buildings are linked together by streets, pavements, squares and spaces. This is the public realm and our ambition should be to make it all dementia friendly. People experiencing dementia may become confused about where they are; disoriented, lose track of the day or time; we need to clarify pedestrian movement through the public realm.

We have agreed to focus on the *'Rope Walks'* neighbourhood of Liverpool. You might think it's funny to look at an area that is more associated with **'the nighttime economy'** but why not, whatever our age, we still like to have fun! The area is defined by Bold Street, Duke Street, Hanover Street and China Town. Bold Street is my favourite street in Liverpool. For me it's a street of memories. I have lived in Slater Street and worked in Duke Street. I regularly walk up Bold Street from Central Station. For me it is a street full of memories in the city; it's not just a place for young people but for all age groups. We need to aim for a better overall place and pedestrian experience for everybody.

Checklist of Questions for the Urban Environment

Our first step in making a Dementia Friendly City has been to make a checklist of questions that we can discuss in groups of people with dementia and business people. Our aim is to come up with practical ideas that we can use to change and improve the city public buildings and environment of the city centre.

How can we improve the city centre to the benefit of people with dementia?

Focus on the Inside of Buildings

- How can we eliminate steps at shop entrances and changes in levels?
- Might we be able to introduce more handrails?
- Can we consider more non-slip staircases?
- Are sliding glass doors into shops workable?
- Do automatic doors function?
- What about revolving doors?
- Toilets in public shops
- Swing of doors
- Size and width of doors
- More mobility wheelchair accessible toilets with more space
- Toilets in shops are a big issue for me; how can they be improved?

Streets and Pavements

- The streets and pavements are the responsibility of Liverpool City Council and the Highways Engineers. These are connected to the entrances and inside of public buildings.
- How can we improve the physical condition of the streets and pavements?
- Is it possible to make dementia friendly streets with pavements for safe walking?
- What makes a better pedestrian route?
- Is there a need for improved crossings and more pelican locations?
- Could signposts and barriers be better positioned?
- Should street activity (market stalls) be located in different places?
- How can we combine heritage (memory) and dementia walks?
- How to enliven the businesses of the city centre to the benefit of people with dementia?
- Can we widen the involvement of other groups in the city centre?
- How to improve access to diverse restaurants?
- What might be a dementia friendly coffee bar or cafe?
- Are the litter bins and bollards in the best location?
- What about '*feral*' wheely bins?
- Would street and pavement cleaning help?
- Do we need more regular pavement maintenance?
- Are temporary car parks a problem?
- Perhaps there are opportunities for pocket dementia gardens?
- Do hoardings block the pavements and push us into the road and traffic?
- Can riding bikes and skateboards on the pavement be dangerous or a positive activity?
- Are there problems with temporary traffic management?

- Are the streets gloomy and dangerous at night? How to improve lighting?
- Are the lampposts in the best position in the pavements?
- Can black street furniture be painted a variety of colours?
- Does the traffic flow need to be changed?
- How friendly is the access to public toilets and toilets in restaurants/coffee bars?

Bill Halsall has taken photographs in '*Rope Walks*' and round the city centre and we would like to show you them. We also have some printed photographs and we will pass them around for your discussion and comments.

Feedback

Our objective is to encourage your feedback, comments and to summarise. Eventually, with the support of '*The Liverpool Dementia Action Alliance*' we propose to create a '*Dementia Public Streets Design Guide*'. We would like to explore how this might be published and used in the future.



- 1 Church street
- 2 FACT
- 3 Central Station
- 4 Church Street (M&S)
- 5 Clayton Square
- 6 L1 Steps (John Lewis)
- 7a L1 Steps (Odeon)
- 7b Peter's Arcade (Ted Baker/Karen Millen)
- 8 Church Street (Outside Next)
- 9 Peacock's
- 10a Apple Shop
- 10b Leaf, Bold Street
- 10c Body Shop, Bold Street
- 10d Halifax, Bold Street
- 11 Between Boots and St. Johns
- 12 Tesco, Bold Street

THE WORKSHOPS - PARTICIPATORY APPROACH USING THE PHOTO CUE METHOD

We have facilitated two workshops to promote the involvement of people living well with dementia and their carers as well as professionals working in the field of dementia and local business interests.

Building on our experience at Innovate Dementia Europe we have developed a simple technique using *'photo cue cards'* asking people to comment on a range of themed photographs of the city centre and recording their views on the back of the cards.

The photos were randomly taken on a stroll over a lunch hour. They aim to ask questions about our environment from a user viewpoint - in this case the viewpoint of those living with dementia and using the shared public realm of our city centre. Comments received have been recorded in this feedback report.

As a balance to this exercise we have independently carried out an Equality Act mini-audit using established design principles to provide a parallel commentary on the *'photo cues'*.

While this exercise can only be a *'snapshot'*, it perhaps provides some insight for designers, businesses and managers into the issues being faced and indicates where improvements could be made to assist Liverpool in becoming a *'dementia friendly city'*.





'Photo cue' card image.



1

COMMENTS FROM WORKSHOP PARTICIPANTS

- Seats are uncomfortable, don't look like seats
- Arbitrary paving patterns
- Grey bins blend in with grey floor
- Noise of buskers
- Cacophony of noise - buskers etc.
- An awful place
- Lively, busy, active, the centre of town and it is important that this space is welcoming to all
- Seating is same colour as floor - would be better if seating was a different colour
- Too dark
- Benches do not suggest what they are - confusing appearance
- Two different colours used for paving is confusing
- Curved pattern on pavement is confusing
- Bins should be pushed to the side - hard to walk around
- Trees make the area more friendly
- Walkway too busy - people need to be broken up.

EQUALITY ACT MINI-AUDIT

- Sharp edges to back support of seating
- Confusing change of colour and pattern - doesn't direct or demarcate.

SUMMARY

Church Street is traditionally regarded as the '*centre of town*'. It is busy, noisy, lively and fun. A space for everyone young and old and should be inclusive for all groups. It should be usable by people with impairments of all kinds including dementia, but also conducive to city life – the buskers, the skateboarders and everyone else. In this shared space the needs and enjoyment of everyone should be considered and respected.

CONCERNS:

- Paving pattern is confusing
- Grey tonal values of the street furniture may be hard to see or distinguish
- Bike stands and street furniture obstruct pedestrian flow.

DESIGN COULD BE IMPROVED BY:

- Directional paving design
- Less obstructions
- Tonal contrasts in street furniture
- Seats looking more like seats and being more comfortable.

2A



2B



'Photo cue' card image.

COMMENTS FROM WORKSHOP PARTICIPANTS

- Black and shiny floor
- 2 black mats
- Change of level
- Good points:
 - Treads are highlighted
 - Hand rails are provided
 - Tape on glass doors
- Gloomy atmosphere/glare
- Slippy, reflective floors
- Very dark in contrast to the light outside
- Floor appears wet
- Lighter colour for the floor
- Signage not clear
- Too many changing surfaces
- Doorway too prominent
- Area is too dark
- Hidden steps.

EQUALITY ACT MINI-AUDIT

A

- Reflective floor surfaces
- Lack of signage - pictograms
- Hard surfaces - poor acoustic environment
- Entrance matting - dark colour (visually a hole)
- Unexpected obstacle i.e. desk in middle of floor.

B

- Access to soffit of stairs allows people/children to bump into sharp edges.

SUMMARY

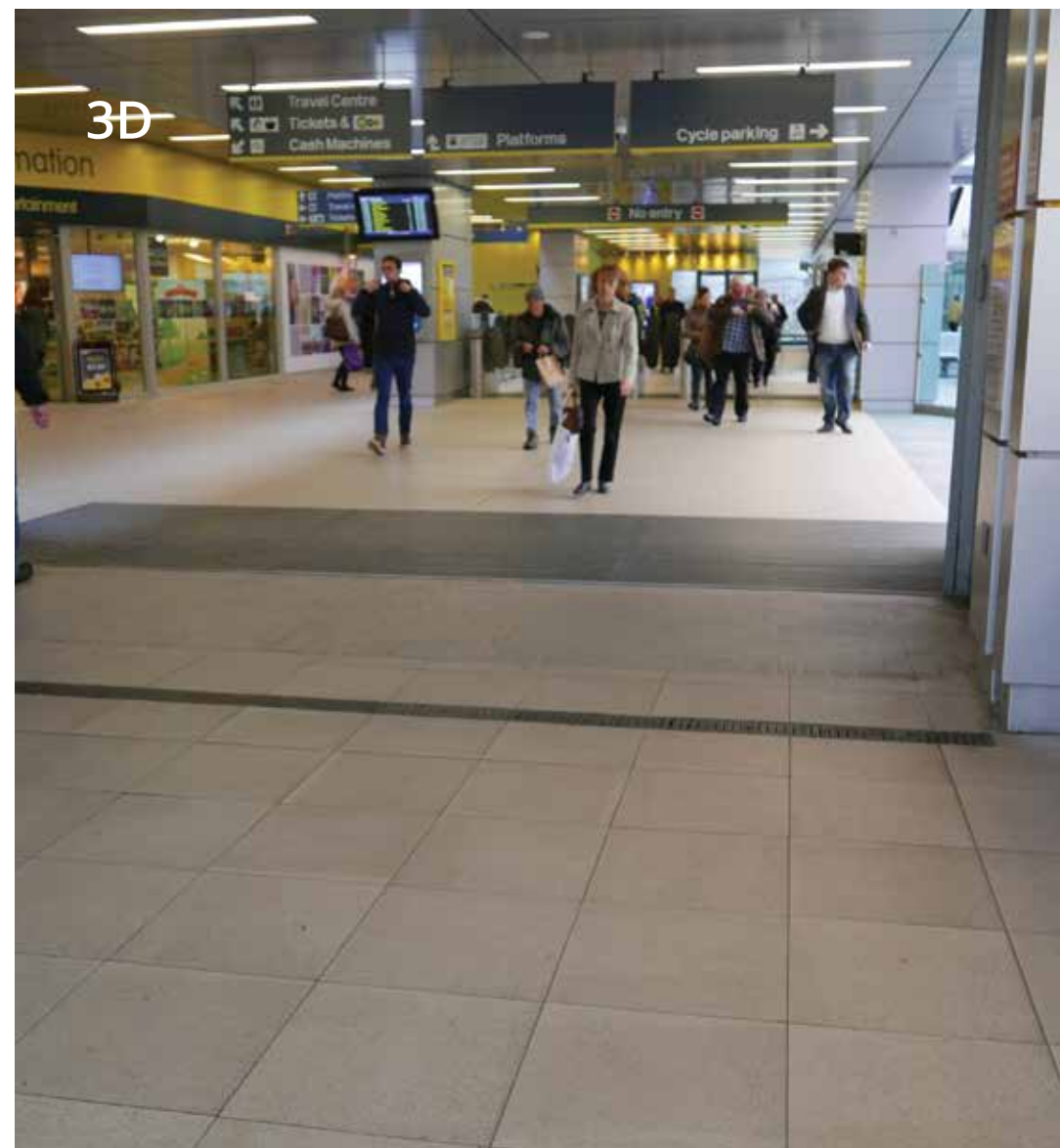
The black reflective floor finish and changes in level are confusing and create glare.

CONCERNS:

- Clear navigable routes
- Lighter non reflective floor
- Clearer signage is needed.

DESIGN COULD BE IMPROVED BY:

- More legible design
- Matt floor finish
- No black matting
- Redesigning the floorscape
- Better signage.



'Photo cue' card image.

COMMENTS FROM WORKSHOP PARTICIPANTS

A

- Good use of natural light
- Good sitting space
- Handy for bikes
- Too dark
- Shadows create steps/obstacles
- Light on floor appears as a pool of water.

B

- Shadows on paving could cause a disturbing pattern
- The shadows make it difficult to judge the surface
- Shadows create steps/obstacles
- Patterns are overwhelming.

C

- The ramp is too steep, difficult in high heels or when wet
- Handrails on the ramp?
- Bollards maybe?
- No steps?
- The gradient of the ramp is too steep
- No handrails on steep slope
- Slippery if wet.

D

- Black mat could read as a hole and cause someone with dementia to hesitate - potential accident
- Black mat appears as a hole or stairs.

EQUALITY ACT MINI-AUDIT

A

- Depth of shadow (light/dark pools of light)
- Poor signage
- Poor colour contrast (floor/walls).

B

- Confusing shadows.

C

- Steep ramp, no landings, no stepped alternative.

D

- Dark matting (can be misread as a hole).

SUMMARY

Central Station is a very well pedestrian trafficked place in the city. Consideration of the needs of all groups is essential.

CONCERNS:

- Confusing shadows in the concourse
- Black non slip matting can appear as a hole causing people with dementia to hesitate in a busy area
- Ramp is too steep.

DESIGN COULD BE IMPROVED BY:

- Shading/blinds to diffuse shadows.
- Neutral tone/colour matting.
- Redesign ramp/stepped alternative.



'Photo cue' card image.

4

COMMENTS FROM WORKSHOP PARTICIPANTS

- Too much information
- Too high - not visible to people in wheelchairs or buggies
- White on blue is OK because of contrast
- Walking times are a good indication of distance
- Positive:
- Contrasting colours are good
- Negative:
 - Too busy, too much information
 - Needs more space between the individual signs
 - Maybe have white lines between each sign to break them up
- Confusing signage
- Too much information - should be more selective
- Too close together - spacing between destinations should be increased
- Colour contrast is good
- Including a time is very helpful
- Nothing stands out - colour could be selective to more important destinations.

EQUALITY ACT MINI-AUDIT

- Confusing number of signs
- Text not large enough for reading from medium range (should be 90mm high)
- Lack of pictograms or very small pictures e.g. (man walking)
- Good colour contrast i.e. white on dark blue.

SUMMARY

'Wayfinding' is a critical issue for people with dementia. Signage is therefore more important for people with dementia, and their needs should be considered.

CONCERNS:

- Signs can also be confusing and hard to follow.

DESIGN COULD BE IMPROVED BY:

- Improve size of lettering and reduce number of destinations
- Better height for all users, including wheelchair users, to read
- More pictograms – recognisable symbols.



'Photo cue' card image.

COMMENTS FROM WORKSHOP PARTICIPANTS

A

- Signs written on glass are very hard to read and seem very unclear
- Floors look wet when they have a shiny surface.

B

- Black mat with shiny metal strips
- Should there be a tapping edge to assist visually impaired people?
- Bollards are too low and distracting
- Black mat looks like a hole, or a step up
- The glass door needs clearer signs
- From a distance the glass doors are confusing as there are no exit signs, hard to distinguish which one to go through
- Too many bollards outside the exit.

EQUALITY ACT MINI-AUDIT

A

- Columns at edge - difficult for white stick users
- Acoustically very hard - disorientating.

B

- Dark matting (could be misread as a hole)
- Poor manifestation on doors/glazed screens
- Obstacles at shop door entrance
- Doors may be *'finger traps'*.

SUMMARY

User comfort in shopping arcades should be prime design consideration and all members of the community should be catered for. This is also a commercial consideration.

CONCERNS:

- Black mat with shiny metal strips is particularly disorientating for people with dementia (strobing effect on the eyes)
- The lack of a *'tapping edge'* will also make this environment difficult for visually impaired people using a white stick.

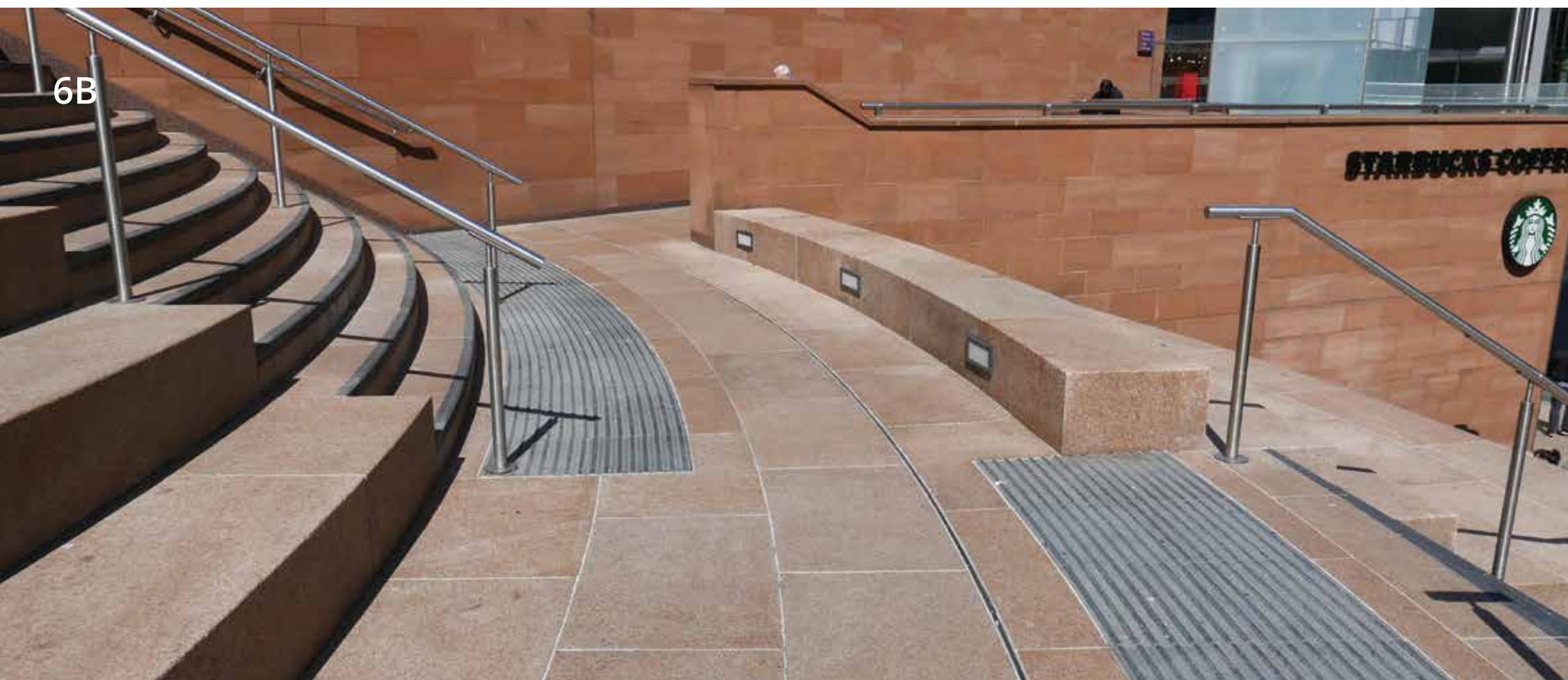
DESIGN COULD BE IMPROVED BY:

- Calmer, neutral toned matting without shiny metal strips
- Address needs of visually impaired – ridges or tapping edges.

6A



6B



'Photo cue' card image.

COMMENTS FROM WORKSHOP PARTICIPANTS

- Too steep, vertiginous, uncomfortable
- You could walk down expecting the steps to continue and fall over the stone plinth
- Dark strips could appear as holes but tactile paving is good for partially sighted
- Two different kinds of steps (some are deeper than others) is very confusing. Would be better if they were all the same depth
- Steps appear to resemble a football stadium terrace
- Easily disorientated by different heights of step
- Curved edge to step can be hazardous
- Too many steps
- No signage to where the steps leads
- Steps need to be more defined
- Confusing use - seating or steps?
- Too much of a distance to travel
- Hand rail isn't continuous
- Takes too long to get up or down
- Black mat appears as a hole (tactile paving).

EQUALITY ACT MINI-AUDIT

- Handrails liable to snag clothing - ends should be turned down
- Open handrail to allow access to seating steps can cause falls if visually impaired people are using them
- No contrast nosing to seating steps
- Handrail starts mid flight (6a) hazard for visually impaired
- Metal handrail can be cold/hot to touch
- Trip hazard on landing (6b) no warning of dwarf wall.

SUMMARY

Design feature to encourage people to sit out on the steps is a great idea, but the detail execution of the design may be difficult for people with dementia to negotiate.

CONCERNS:

- The steps are high and steep and the flights stagger which could be a deterrent for people with dementia and present a potential accident waiting to happen
- Where is the nearest ramp or lift?

DESIGN COULD BE IMPROVED BY:

- Safety review
- Better designed compliant handrails
- Contrast nosings on seating/steps
- Guard trip hazards.



7A



7B

'Photo cue' card image.

COMMENTS FROM WORKSHOP PARTICIPANTS

A

- Hidden dark escalators
- Glass balustrades are disturbing
- Could bang your head on the stairs
- No clear signs - need a sign at eye level to say *'Odeon'*
- Two colours on step makes it hard to judge where the step is level to place foot
- Handrails need to be more visible
- Signage is hardly visible due to size and colour blends in with the sky behind it
- Not confident to walk up alone as it appears too narrow and steep
- Staircase appears as if it would move independently when walking up it
- Not clear where the stairs lead to

B

- Jazzy paving pattern could be disturbing for people with dementia
- Checks on the floor design are very confusing and look very disorientating
- Black squares appear as holes or steps.

EQUALITY ACT MINI-AUDIT

A

- Under stair area requires guarding
- Handrails to stairs do not project past bottom riser.

B

- Visually confusing flooring.

SUMMARY

Front access to a public building should be inviting to all and clear to find. It should enhance and contribute to the visitor experience (all visitors). People with dementia can have difficulty with judging distances and negotiating stairs or escalators.

CONCERNS:

- Glazed balustrades and non-compliant handrails could be difficult to negotiate
- Unprotected under-stair could be dangerous
- Escalator is hidden
- Generally it is uninviting - a dark canyon
- The arcade paving is a quality finish and enhances the shopping experience, but the jazzy pattern can *'strobe'* - disturbing for people with dementia.

DESIGN COULD BE IMPROVED BY:

- Better signage at lower level
- Compliant design of handrail and balustrade
- More clearly visible escalator - better lighting
- Protecting underside of stair.



'Photo cue' card image.

COMMENTS FROM WORKSHOP PARTICIPANTS

- What are they?
- Why here?
- Not wheelchair friendly or usable by anyone in a scooter or from a low position
- Obstruction of telecom box
- Poorly maintained - broken and dirty
- Not at all clear how to get into the phone box - very confusing as walls are covered and no clear signage
- Hard for wheelchair users to use
- Obstructing the walkway - should be up against the wall
- Cannot fit both patient and carer in booth at the same time.

EQUALITY ACT MINI-AUDIT

- Badly positioned telecoms box, no visual warning (8b).

SUMMARY

Telephone boxes may still be necessary in the age of the mobile phone - for emergencies perhaps. However, if they are, they should be inviting, and usable by all.

CONCERNS:

- Lack of design consistency, and provision for wheelchair/scooter users
- Poor maintenance, sharp edges.

DESIGN COULD BE IMPROVED BY:

- Remove them, or provide modern phone boxes useable by all.



'Photo cue' card image.

COMMENTS FROM WORKSHOP PARTICIPANTS

- Narrowing steps with tapered riser
- Obstructions - dark shadows
- But a pleasant active space in the summer
- Liked by skateboarders
- Handrails on steps?
- Is there an alternative ramped route?
- Not obvious or clear
- Step not clearly marked
- Bollards too low, so may not be seen and may be easy to walk into/trip over
- Steps and bollards appeared to be a bench
- Underneath appears very dark
- No handrail for steps.

EQUALITY ACT MINI-AUDIT

- No tactile surface at top or bottom of stairs
- No contrasting nosing to steps
- Low seat blocks, bollards
- No handrails to steps
- No ramped alternative.

SUMMARY

The city needs places like this which are sociable, active and vibrant, particularly in the summer. However, there are perceived barriers for use by people with dementia.

CONCERNS:

- The steps are a potential trip hazard, there are no handrails or an alternative ramp.

DESIGN COULD BE IMPROVED BY:

- Providing alternative easy ramped access with handrail
- Modifying bollards and other obstructions.



'Photo cue' card image.

COMMENTS FROM WORKSHOP PARTICIPANTS

A

- Glass front causes confusing reflections
- Where is the door - is it clearly marked
- Both shops have logos as their signage - not everyone knows these logos or can remember what they are
- Logo appears to be floating

B

- Tapering step with no hand rail - no disabled access although there is a lift inside
- Damaged bollard - splinters
- Glass entrance makes it hard to distinguish which is the door
- Step appears as a slope, unsafe and hidden
- Bollard is an obstruction

C

- Black band/mat could appear as a hole-patterned flooring ditto
- Too many difference floor surfaces

D

- Black mat - glass doors comments as before
- Hidden slope leading up towards the shops floor level
- All entrances are too dark.

EQUALITY ACT MINI-AUDIT

GENERAL

- Lack of/inappropriate manifestation markings on glazed doors/screens
- No contrast to leading edge of fully glazed doors.

B

- Dangerous step - not identified, changing riser height.

SUMMARY

Shop entrances can present particular difficulties - steps, black mats, changes in tone and confusing patterns, also reflections in glass doors and screens. It may be hard to determine what is a glazed window and what is the door.

CONCERNS:

- Black mats
- Lack of grab rails
- Hard to see steps
- Obstructions by entrances
- Confusing changes of colour/material.

DESIGN COULD BE IMPROVED BY:

- Consideration of the special needs of all shoppers
- Making it easier to get in and out of the shops
- Avoid obstruction near entrances
- Disabled access - ramps etc.
- Clear entrances - clear safety marking on glass panels.

11A



11B



'Photo cue' card image.

COMMENTS FROM WORKSHOP PARTICIPANTS

- O.M.G!
- A complete mess of paving materials and obstructions
- A well used space in a prominent position - it should be better than this
- Confusion of tonalities is confusing for people with dementia
- The stairs at the top of the street are dangerous
- Different pavement surfaces (and uneven levels). Looks very confusing and may cause people to trip
- Bollards could be highlighted with a lighter colour on top or around the object
- Patterns should be useful to guide you somewhere, not random and confusing
- Difficult to navigate round
- Planter hole can be hazardous
- Too many colours, textures and shapes
- Grids and black paving appear as holes.

EQUALITY ACT MINI-AUDIT

A

- Poorly maintained paving - trip hazard.

B

- Use of inappropriate materials for repairs causing changes in surface texture and visual confusion.

SUMMARY

Maintenance issues in the public realm can be disturbing because of obstructions and changes of material and tonal values.

CONCERNS:

- Visual perception of multi-coloured surfaces
- Lack of clarity in direction and pedestrian flow
- Obstructions and trip hazards.

DESIGN COULD BE IMPROVED BY:

- Redesign public realm and relay paving in simple sensitive materials without unnecessary obstructions and trip hazards. Directional design would provide clarity for people with dementia or the visually impaired as well as everyone else using the space.



'Photo cue' card image.



COMMENTS FROM WORKSHOP PARTICIPANTS

- A good effort to provide a ramped access on a sloping street in a historic building - it can be done
- Black mats could appear as *'holes'* causing people to stop at the top of the steps and cause an accident
- Good handrails
- Contrasting treads (but one missing)
- No sign to say *'enter'*
- Slope leads down (and steps lead up) to two black mats, which look like holes
- Glass door is confusing
- Entrance not clearly marked
- Black mat appears as a black hole
- Floor appears as a slippery slope
- Too many changing surfaces
- Steps as soon as you enter shop
- Two colours on step makes it hard to judge where the step is level to place foot on
- Steps appear too steep.

EQUALITY ACT MINI-AUDIT

B

- Excessive length of ramp
- No tactile flooring
- Dark coloured matting
- Missing tread insert.

SUMMARY

Achieving disabled access in a traditional street where steps are more normal, and the slope of the pavement also creates level differences which can be difficult. This example shows one approach.

CONCERNS:

- Black mats.

DESIGN COULD BE IMPROVED BY:

- Attention to flooring materials specification - tonal values
- No black floor mats.



SUMMARY

The exercise was based on a very simple participatory exercise based on the use of *'photo cue'* cards. Comments were gleaned from a mixed group of participants including people living with dementia, health professionals and city businesses. Two workshop sessions based on 'How Dementia Friendly is our City?' were facilitated. One in the morning and one in the afternoon with different participants. Subsequently the exercise has been repeated at a meeting of the SURF Group (2nd October 2015). Comments from this session have been included in the analysis.

Although this study was carried out in Liverpool, it could have been carried out in any town or city in the country, with similar results. While the exercise was local, the implications are global for the design and management of publicly accessible environments.

The *'photo cue'* locations were randomly chosen on a lunchtime walk through the city. They are not in any way 'pointed' at particular places or organisations. There are examples which demonstrate that responsible care has been taken in terms of disability awareness. There are examples which illustrate where more consideration could be given to the challenges presented to people with dementia, in moving freely around the city.

In considering the implications of the requirements of people living well with dementia to the design of the public realm, the needs of others must also be considered and successfully integrated into design solutions. Groups include the visually or hearing impaired as well as children and young people. Public safety and security are the prime concern but environments should also be attractive and stimulating for all.

70-80% of people living with dementia live in their own homes, as part of the community and have a role in society like everyone else. They use the city centre as we all do. The challenges they face in doing so, need to be better understood and responded to by all of us.

This short exercise is by no means comprehensive or scientific in any way but it illustrates an approach which could be carried out on a bigger scale with the involvement and participation of the City Council, city centre businesses and service users.

In this way a **'Design for Dementia Audit'** could be more comprehensively developed on a city wide scale.

Next Steps

This output from the conference and the SURF meeting, will be shared with the participants and feedback invited.

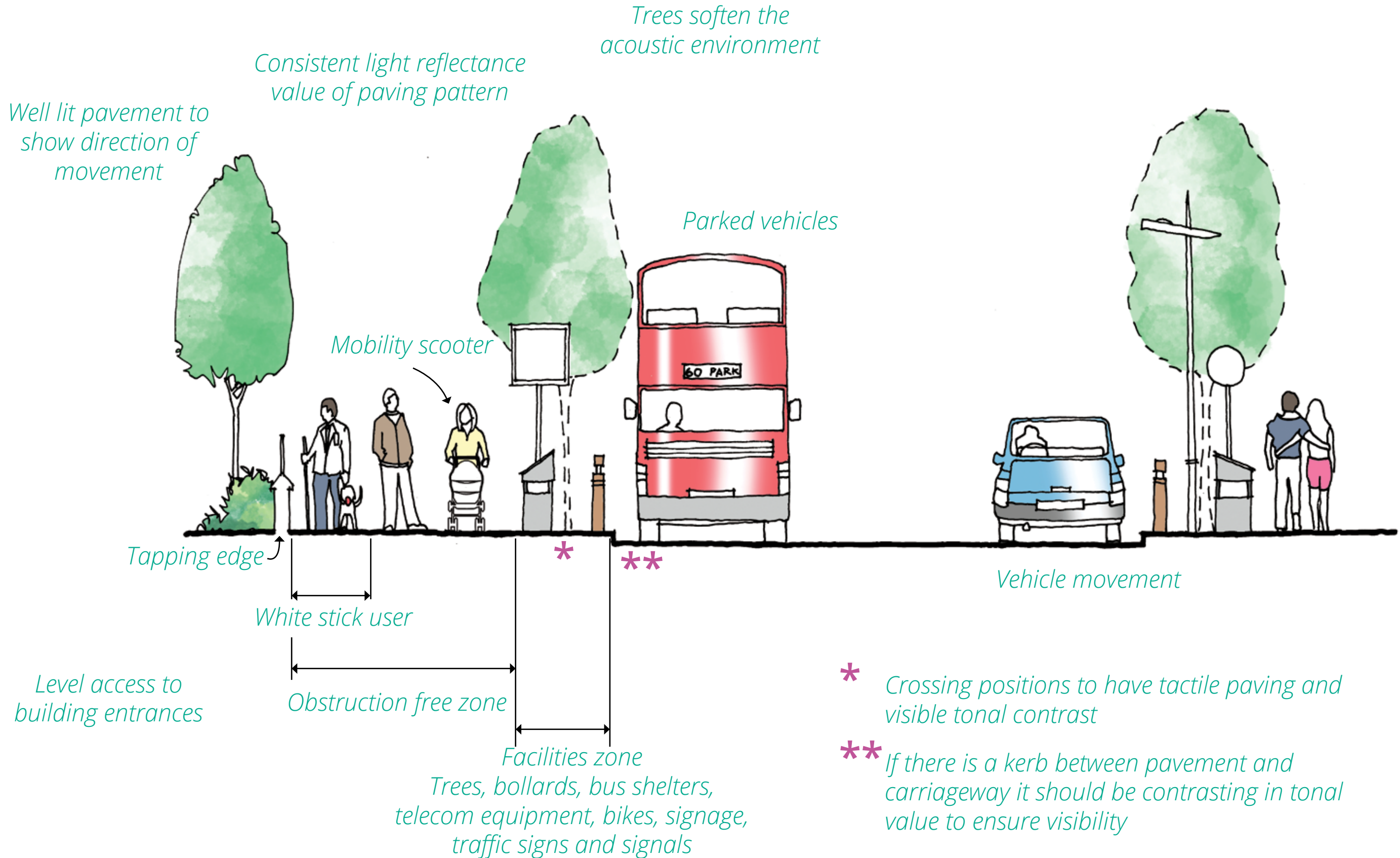
Feedback will be used to adapt, amend and complete the document as a record of the workshop event.

It is anticipated that the Liverpool Dementia Action Alliance and the Service Users Reference Forum will use the document to pursue their aim of a 'Dementia Friendly City'.

SURF Group workshop - using 'photo cue' cards to respond to and comment on their experiences of Liverpool city centre.

THE DEMENTIA FRIENDLY PAVEMENT CONCEPT

A clear unobstructed pavement with directional paving orientation - wide enough for all categories of users to move confidently and freely, including white stick users and mobility scooters.



SOME OF THE LESSONS LEARNT

Although this exercise has been simple, non-selective or comprehensive in any way, there are some lessons which can be learnt.

1. The Pedestrian Environment

Design consideration is needed in response to the experience of people living with dementia. The pavement experience may be inhospitable:

- If it is obstructed by the bollards, bins, seats or equipment boxes. Clear unobstructed routes are essential.
- Shiny, slippery, or black tarmac patches may be misinterpreted as holes. Consistent surfaces in texture and tone are recommended.
- Kerbs which are virtually invisible form trip hazards. Kerbs should contrast in tonal value.
- Strong paving patterns such as chequerboard may cause disturbance - consistent reflectance values are required.
- Paving patterns or changes or colour which are arbitrary can cause confusion. Paving should be directional, assisting movement in a logical direction.
- Lighting designed for traffic safety may not be right for pedestrians. Street lighting should indicate the direction of travel.
- Pavement users include sight impaired people, people living with dementia as well as wheelchairs, mobility scooters and prams
- Pavements should have unobstructed zones wide enough to cater for all users
- Seats which are an integral part of street furniture may be confusing. Seats should look like seats
- Steps at changes in level should be avoided as far as possible. Where there are changes in level, there should be a clear choice between staircases, ramps or lifts
- Vertical objects such as litter bins or seating areas should contrast with paving so that they are clearly visible
- The city centre environment can be noisy and disturbing to people with dementia
- Noise can be absorbed or masked by trees or water features
- Signage should be clearly visible from a wheelchair position. Symbols and pictograms may be included. Too many signs on finger posts can confuse
- The pattern of shadows can be disturbing and make it difficult to judge the surface. They may be read as steps or obstacles
- Partially sighted people may use a white stick and can be assisted by the provision of a tapping edge
- Small groups of steps can be difficult to judge. Handrails are needed. If there are handrails they should be continuous. If there are steps there should be a clearly visible ramp nearby
- Manhole covers can appear as a hole and should have recessed corners with matching paving infill



2. Thresholds and Entrances

- Black rubber mats seem to be ubiquitous at entrances and thresholds. These may appear as holes to people with dementia and may cause them to hesitate in a busy thoroughfare and cause an accident. Some black mats have shiny metal strips which add to the confusion and disturbance. Thresholds which have a consistent tonal value and light reflectance value (LRV) are safer. However, if there is a step there should be a clear contrast so that it is clearly visible.
- Glass screens can be problematic. How can the fixed screen be distinguished from the door? Reflections in glass screens or balustrades also cause disturbance. Manifestations as required by regulation, must always be incorporated and clearly visible.
- Contrasting door surrounds can assist in identifying the door position.
- In the context of existing shop frontages the design of thresholds suitable for use by those with dementia is a particular challenge. There is invariably a change in level. Pavements may slope across the entrance.
- Entrances present a design challenge which must be tackled on a case by case basis in response to the principles outlined.

SURF Group workshop - using 'photo cue' cards to respond to and comment on their experiences of Liverpool city centre.



Objectives

- *Explore the use of the 'Jungian Sandplay' as a method for stimulating engagement, communication and participation, involving people living with dementia*

Method

- *Stimulate all the senses*
- *Promote 'play' and relaxation*
- *Evoke memory*

4: CONNECTING MINDS THROUGH SANDPLAY

by Bill Halsall

CONNECTING MINDS THROUGH SANDPLAY EVENT - EXPLORATION 2ND JULY 2015 AT HLP'S OFFICES

This event took place at HLP's Liverpool office and was based on an exploration of the use of a Jungian sandtray as a vehicle for involvement and participation. Participants included a mixture of academic staff, design professionals and people living with dementia. The format was intended to be play based and fun, breaking down formal inhibitions and relationships so that all could participate on a '*level playing field*'. The intent was to provide sensory stimulus through all the senses and to promote memories and associate stories through sandplay.

A range of objects including a sensory garden, historic objects, herbs and spices and old fashioned sweets were assembled with an operatic soundtrack.

ATTENDANCE

Gina Shaw	SURF Co-Chair
Graham Gavin	SURF
Bill Halsall	Senior Partner, HLP
Estelle Keeley	Landscape Architect, HLP
Alan Ravenhill	Architect, HLP
Janice Macdonald	Interior Designer, HLP
Dr. Robert G MacDonald	RIBA, Reader in Architecture, LJMU
Dr. Susan Ashton	LJMU
Lizzie Smears	LJMU

Denise Parker LJMU

BACKGROUND TO THE EVENT

Dr. Robert MacDonald of the LJMU and Bill Halsall, Senior Partner at Halsall Lloyd Partnership have been invited to facilitate a workshop at the Connecting Minds Conference to be held in September at the Tate Gallery in Liverpool.

THE THEME OF THE CONFERENCE IS: Connecting Minds: Arts and Dementia.

Bill and Rob have been exploring the potential use of the '*Jungian Sandtray*' as a vehicle for engagement, enabling group participation including people with dementia (HLP have long experience using hands-on modelling as a design participation technique).

We felt that before '*going live*' in the Tate Gallery we should carry out an exploration on a smaller scale with a fairly open minded view about what might happen or what might come out of it.

Thank you to all who joined us and entered into a spirit of '*play*' and made the event a success.

FORMAT

Drawing on HLP's background and experience, we felt that the format should be play-based and fun, breaking down formal inhibitions and relationships so that all could participate on a level playing field. There was no laid down brief or rules. Our intent was to provide stimulus through all the senses and to promote memories and associate 'story' with the sand play.

The sand tray, (a box painted blue inside) stood in the centre of the table and was surrounded by a range of objects brought along by Bill and Rob.

Objects included:-

- Box of interesting stones, pebbles, shells and other small objects – model houses, trees and feathers, glass marbles, Christmas tree baubles, plastic duck, etc.
- Postcards, newspaper photos, etc. from the 60s
- Sensory garden – sweet smelling roses, garden herbs
- Kitchen smells; spices, nutmeg, cinnamon, pepper, etc.
- Background music
- Pear-drops, Uncle Joe's Mint Balls
- These objects were aimed to stimulate all the senses; sight, sound, touch, smell and taste (ice cream served at half time!)

TOOLS

- Buckets, spades, funnels, cups, jugs, spoons, sieves, cake tin, etc. were available as tools to assist in stimulating ideas
- Recording – the session was videoed and photographed.





THE WORKSHOP SESSION

Initially, the participants shared experiences and shared the objects which promoted an impromptu open ended discussion. Reminiscences and ideas about sensory environments and the therapeutic effect of gardens followed. The HLP team initiated the action with the sandtray. A *'Hill Village'* was followed by a *'Zen Garden'*. Water was introduced enabling structures in the sand to be formed.

Soon everyone was involved. More *'sparkly'* items were introduced and a series of cones and towers took shape topped by glass marbles. Results were photographed.

FEEDBACK

A very enjoyable afternoon was had by all. The exercise broke down barriers and facilitated talk.

The spirit was positive, not dwelling on problems or bad experiences. There were very positive suggestions such as involving nurse students in sandplay as part of their training.

It did not dwell on the past but built on memories and mutual experiences.

'I found the session this afternoon very enjoyable, thought provoking, and inspirational'

Regards Denise Parker

'We had a wonderful time, best fun in ages'

Gina and Graham

'We thought it went really well and it made us think about what a Dementia Garden might be'

Dr. Robert MacDonald





Introducing the idea



Sharing memories



'Zen' garden, raked sand, stones and shells



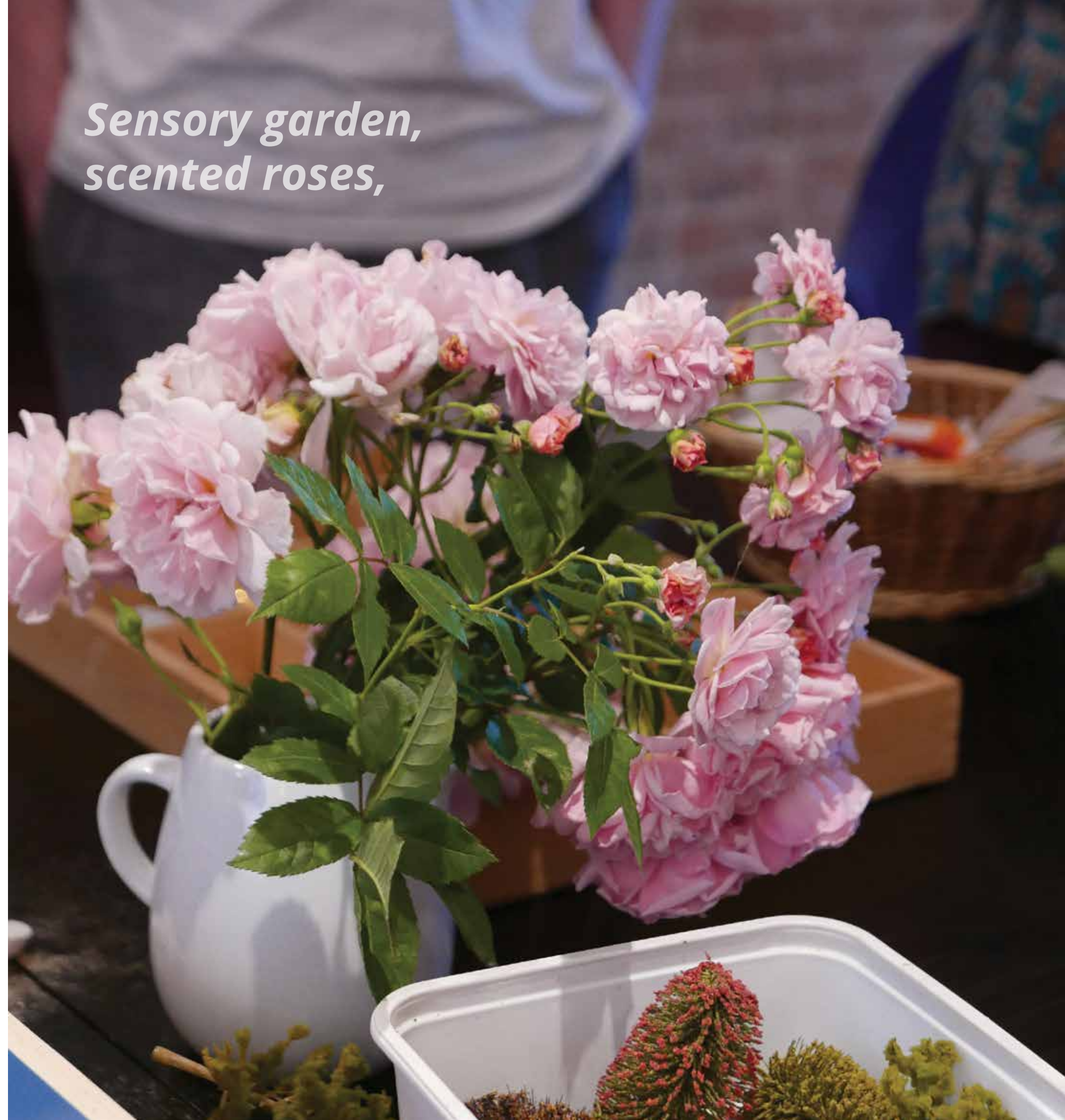
A calm, unhurried, unpressured atmosphere



Where shall we put the feather?



Exploring the potential



*Sensory garden,
scented roses,*

garden herbs, spices

Tray of small objects



Expressive, fun - relaxing



Tactile stimulus





Just add water!



Freedom to make a mess



'Keep Calm and Carry on'

*An exploration of
the commonality of
experiences*



Add some bling



Creative stimulus





Textures, forms



Familiar objects



A garden of shared memories and experiences

"We had a wonderful time, best time in ages".



A mutual expression of ideas



Play with purpose...



...or no particular purpose

CONNECTING MINDS WITH SANDPLAY

The Jungian sand tray project sets out to explore memory through objects and the five senses; sight, touch, smell, hearing and taste. Sandplay is an experimental game that lasts about an hour and is aimed to encourage creative lateral thinking, sensory awareness and memory recall.

The game could apply to all people with or without dementia. We can rediscover memories in play. Jungian Sandplay can become art therapy for tactile visual image making.

Conclusion

- The open-ended, exploratory nature of the event was important as was the willingness of the group to **'relax and play'**. Avoidance of prescribed objectives and performance outputs or expectations was necessary to achieve the **'spirit of play'** and to push the boundaries of exploration
- We feel that the event was a successful exploration of an idea and intend to use the sand tray method at the Connecting Minds Conference in September 2015
- Model figures, human and/or animal would help the animation of the sandtray
- Maybe some simple musical instruments or sound sources e.g. tambourine, triangle, or wind chimes
- A larger event will need either more sand trays, a bigger sand tray or alternative activities depending on the size of the group
- More information is needed about the venue and numbers of participants at the Albert Dock
- Sandplay can be democratic and inclusive.

Sand play uses a shallow tray painted blue inside to represent water, or sky, filled with sand, measuring approximately 50x70x7cm. Nearby is a collection of different small objects with which to play in the sand. The play can be photographed during the game and after the sand play is finished.

Doing a Sandplay requires no special skill. The players are encouraged to play with the objects in the sand and out of the sand, to touch, smell, taste, listen and look and recall. What memories do the objects bring about? Jung used Sandplay as a technique of 'active imagination' to provide a creative base for the expressive use of the arts as therapy.

'I remember that day (wedding day) as clear as it can be... but it's a struggle to recall what I did this morning'. It's happened to all of us at some time or another. You can't put a name to a face. You forget where you put your keys. You can't remember where you parked the car. Most of the time such slips are a nuisance, rather than a sign of something more serious. Dementia affects everyone in different ways. As well as problems with memory, other signs can include feeling confused even when in a familiar environment, problems thinking things through, and finding it hard to follow conversations (Alzheimer's Society, Leaflet, 2015).

Sandplay is part verbal, non-rational and unsophisticated. Sandplay encourages creative memory regression and stimulates the mind. Sandplay can be compared with free painting, free drawing and free form sculpture. These therapies started their history with artists working with people employed in psychiatric and medical institutions. Perhaps there is a role for them in the 21st Century?

Sandplay is a shared activity that integrates play and choice with small hand sized objects. It involves an unplanned dialogue with individual's inner thoughts and memories. It's fun and control is to be relaxed.

EVALUATION

- The occasion was enjoyable, relaxing and reduced stress
- The output in the sandtray was abstract but possibly resembled a **'garden'**. The texture of the sand complemented the shiny stones and marbles quite nicely while the vertical forms of the cake tin, feather and sand towers formed a pleasing three dimensional composition (possibly reminiscent of a garden)
- Discussion focused on using the method as a way of initiating conversation with people with dementia possibly stimulating memories, experience and stories
- The potential of the use of the sand tray as an education tool for various groups was suggested.
- As a design tool the method was expressive, free form and three dimensional. By freeing from the constraints of a brief or a site it enabled experimentation and exploration of space, form and materials
- As a therapy, the techniques are well established in Jungian circles. Although no-one in the group had any experience or qualification as a Sandtray therapist, this aspect may reward further investigation
- As Architects and Landscape Architects, we can see clear benefits of the approach as a participatory design tool enabling a mixed group to express shared ideas through hands-on modelling. Ideas could inspire concepts, which could then be developed through a more applied design process to full scale applications.

As a catalyst to promoting a more positive engagement with people living with dementia based on fun and enjoyment, the idea has tremendous potential.



5: THE DESIGN *for* DEMENTIA BUNGALOW

by Bill Halsall

Objectives

This is a demonstration project from the 'Design for Dementia' guide. The concept is to take the simplest of dwelling types and to design an 'ideal' model bungalow. The design process is participatory.

Methods

- Use the design principles established by the 'Design for Dementia' guide and other guidance. Design a 'paradigm' for a dementia friendly dwelling
- Incorporate statutory standards and voluntary codes for design
- Participatory design process involving hands on modelling to explore the design with the SURF group
- Evolutionary design process to demonstrate adaptability
- Similar design rigour applied to an integrated 'Design for Dementia' Garden.

INTRODUCTION

The 'Design for Dementia Bungalow' is a design paradigm which responds to the growing issues of dementia in society.

It is a research project which arises from a wider research partnership sponsored by HLP Architects and Designers, and Liverpool John Moores University into 'Design for Dementia'.

Together with other parallel research projects it forms the basis of a new publication 'Design for Dementia - A Guide'. Other sponsors and partners include Mersey Care NHS, Innovate Dementia Europe, Intereg IVB, Dementia Action Alliance and the SURF (Service Users Reference Forum).

A distinguishing feature of this work has been the participatory nature of the approach, involving health professionals, academics and carers along with people living with dementia. Innovative participatory techniques are being evolved to generate a user responsive design process and research outputs. The premise of 'Design for Dementia' is that 70-80% of people living with dementia continue to live in their own homes rather than in any specialised form of housing. They continue living in the same neighbourhoods and use the same local facilities and centres. Dementia is a growing issue associated with the demography of an ageing population.

Responding to this issue as designers, we should envision a future where housing, neighbourhoods, local facilities and centres must all respond to the needs and aspirations of those living with dementia and to enable them as far as possible to *'live well with dementia'*.

The 'Design for Dementia Bungalow' is a first step. Taking the simplest archetype and applying 'Design for Dementia' principles, the project explores the issues and proposes design solutions which may then be applied to a wider range of archetypes including existing dwellings and refurbishment projects. The lessons learnt can be more widely applied in a range of different contexts.

The 'Design for Dementia Bungalow' is not just designed for dementia. It envisages scenarios which cater for a range of abilities and disabilities and builds on well established design standards including Lifetime Homes and Secured by Design.

In this respect the design philosophy is *'Long Life, Loose Fit'* - a comfortable aspirational home and a good place to live for anyone, but with dementia needs considered in every detail.

Importantly, the 'Design for Dementia Bungalow' comes with a 'Design for Dementia Garden' reflecting the health benefits of a 'green' view and the enjoyment and stimulus of a linked outside space.



THE BRIEF

The design process tackles the main issues of *'living well with dementia'* through the development and refinement of the design of a single archetype. It is envisaged that the **'Design for Dementia Bungalow'** could be designed into mixed housing schemes or could form the key component of specialist elderly care schemes. However, the design philosophy is *'long life, loose fit'* - a dwelling which could be aspired to, and lived in, through life by anyone.

- Satisfy a range of standards including Lifetime Homes, Secure by Design etc.
- Simple layout, easily navigable
- Visual cues to assist orientation
- Visual connection and easy access between living room, bedroom and wc
- Low level window sills - view out from a low position
- Hoist route from bedroom to bathroom
- Option between shower or bath
- Separate wc/utility area
- Natural light into the middle of the plan
- Car port with direct access to the bungalow
- Garden with patio area and raised planting beds for easy gardening
- Bedroom for carer - potential moveable wall
- Interior finishes appropriate for dementia
- Open plan kitchen/dining/living area with easy access to the garden
- Easy access between garden and wc
- Workable within mixed housing layouts

- Energy efficient low carbon design and specification (Passivhaus principles?) - cheap to run
- SMART technology
- Level access throughout including thresholds
- Spaces large enough to provide good ease of movement
- Natural ventilation
- Clearly visible front entrance
- Easy natural *'flow'* between rooms
- Higher level of artificial light (twice normal)
- Task focused lighting
- Reduce the number of doors (or removable doors)
- Good views from seated position to front and rear
- Views to *'green'* and communal activity
- Tonal contrast between floors, walls and doors
- For the carer - balance privacy and access
- Views of approach to front entrance
- *'Viewable'* kitchen/bedroom/bathroom storage - easy to find things
- Easy to maintain.



DESIGN *for* DEMENTIA BUNGALOW

Hands on Modelling Event 2nd October 2015

Design participation with SURF (Services Users Reference Forum) members using the '*Design for Dementia*' model.

Description

As part of the SURF meeting the HLP team introduced the bungalow concept and assisted members in small groups to explore '*hands on*' the bungalow model. This process enabled a productive discussion about the potential of the purpose designed accommodation for people living with dementia.

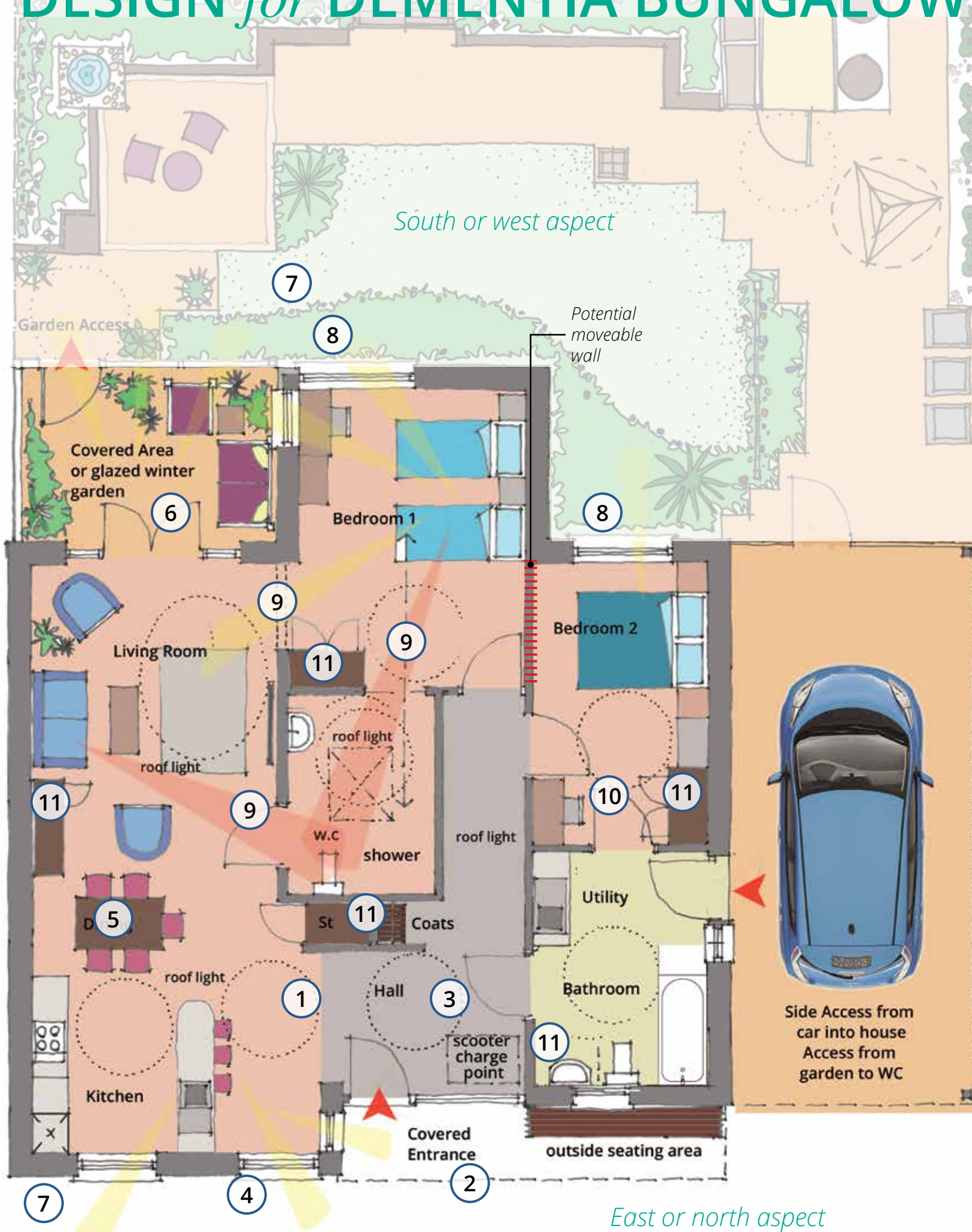
Points of Discussion

- The bungalow was liked - as an ideal model but also as a way of explaining to housing providers - the council, housing associations or builders what was needed by people living with dementia
- A degree of 'customisation' is needed. Therefore, the design should be flexible with alternative layouts. In particular, a choice between bath and shower. Some people felt that they couldn't use a bath, others found the sound of a shower annoying. Plans have been amended to show a wet room en-suite with the main bedroom, and a bath in place of a shower in the combined utility area
- However, plan variants should show a range of options. In the same way the kitchen layout should have design variants to cope with different needs and aspirations. Choice of appliances is an important consideration. There is concern about gas in particular - that someone could forget to turn it off and cause a fire. Induction hobs with safety cut-outs are a potential solution to this problem.

- The '*Design for Dementia Bungalow*' needs to be able to easily respond to the different stages or types of condition involved. Potential solutions are: removable doors, ceiling mounted hoist positions or removable wall panels. This 'evolutionary' plan concept enables a responsive design which can be customised to suit individual needs
- Maintaining the garden was another concern, although the greenery and convivial surroundings were appreciated. Suggestions include artificial turf - to save grass cutting while maintaining a 'green view'. Many people living with dementia gain great enjoyment and relaxation from their gardens, but are concerned about future maintenance
- The carer's needs and lifestyle must also be considered. A degree of privacy and respite is necessary.



DESIGN *for* DEMENTIA BUNGALOW



- 1 Open plan living from hall - kitchen dining - living room allows visual connection of spaces and reduces stress of multiple doors
- 2 Covered entrance and glazed screen promotes improved security and observation of outside - 'who is coming to the door?'
- 3 Large entrance hall with easily accessible storage and scooter charge point. Easy to orientate from entrance
- 4 Kitchen and dining areas have natural daylight and views to the outside
- 5 Open plan living and dining promotes easy observation and inclusiveness
- 6 Sheltered rear space/winter garden allows outdoor enjoyment and activity for a longer period of the year, maximising sunlight and vitamin D manufacture in the skin
- 7 All rooms offer views to the front garden or rear garden areas. Gardens planted with interesting shrubs and flowers. 'Sensory' garden providing stimulus to smell and taste as well as sight, sound and touch
- 8 Both bedrooms offer clear, interesting views to the rear garden even if a member of the family is bed bound. A direct connection is also created between living room and bedroom to facilitate inclusion of all family members and promote easy supervision
- 9 Visual links between living and bedroom areas are created including views of the toilet/wc
- 10 Additional visitor wc has direct access to bedroom 2. This wc also has a direct external link from the garden and parking area. This bathroom has been linked with a separate utility space to remove the washing machine, possible smells and noise from the open plan kitchen - living space
- 11 Functional storage - related to room functions



Conservatory outdoor space connected to the garden

Main bedroom with views to the garden, living room and wc

Main bathroom with top light

Carer's bedroom with potential knock through panel within the wall to the main bedroom and ensuite connection to the shower room

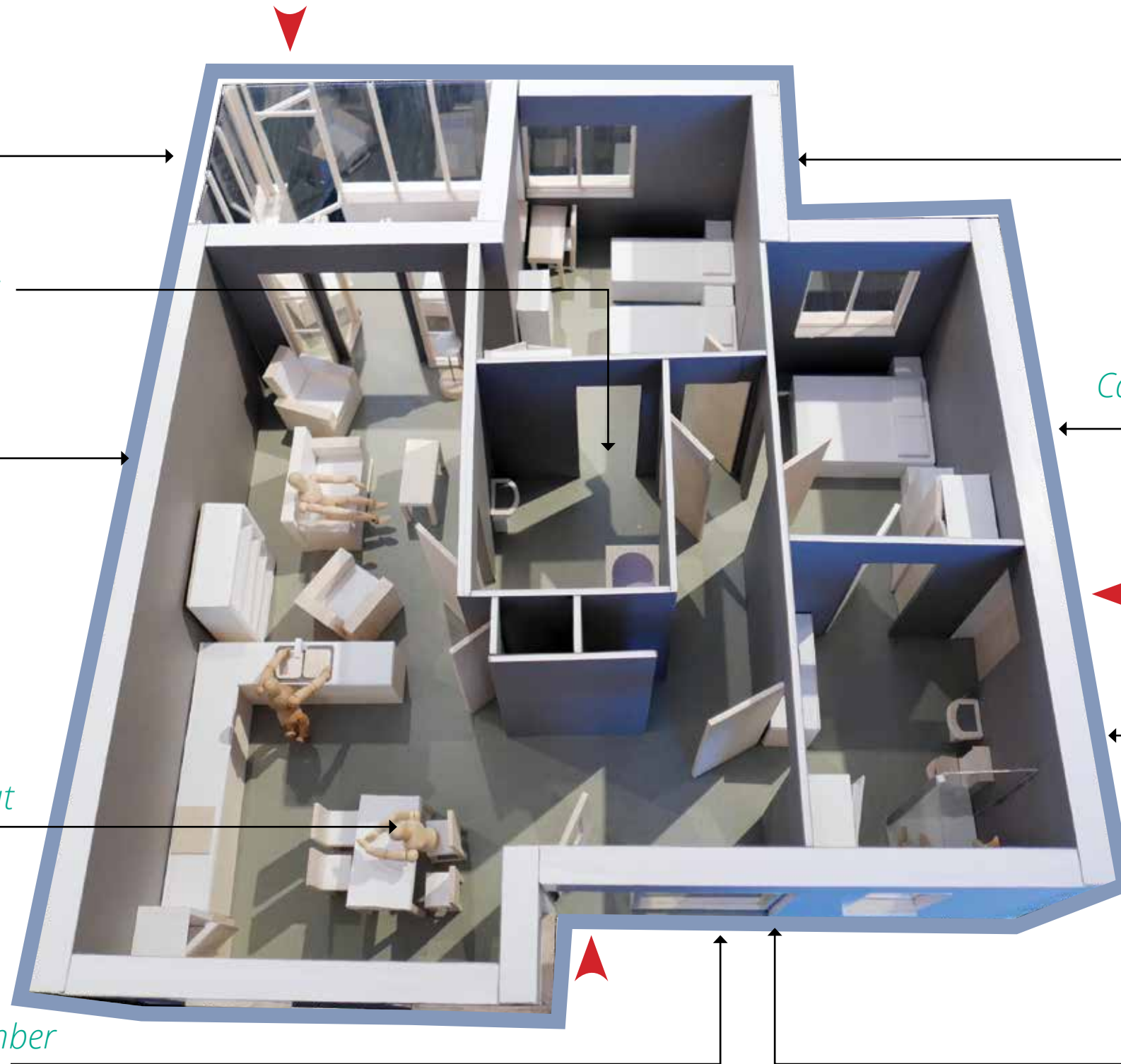
Open plan living space connected to bathroom

Shower/utility room accessible from the garden and car port

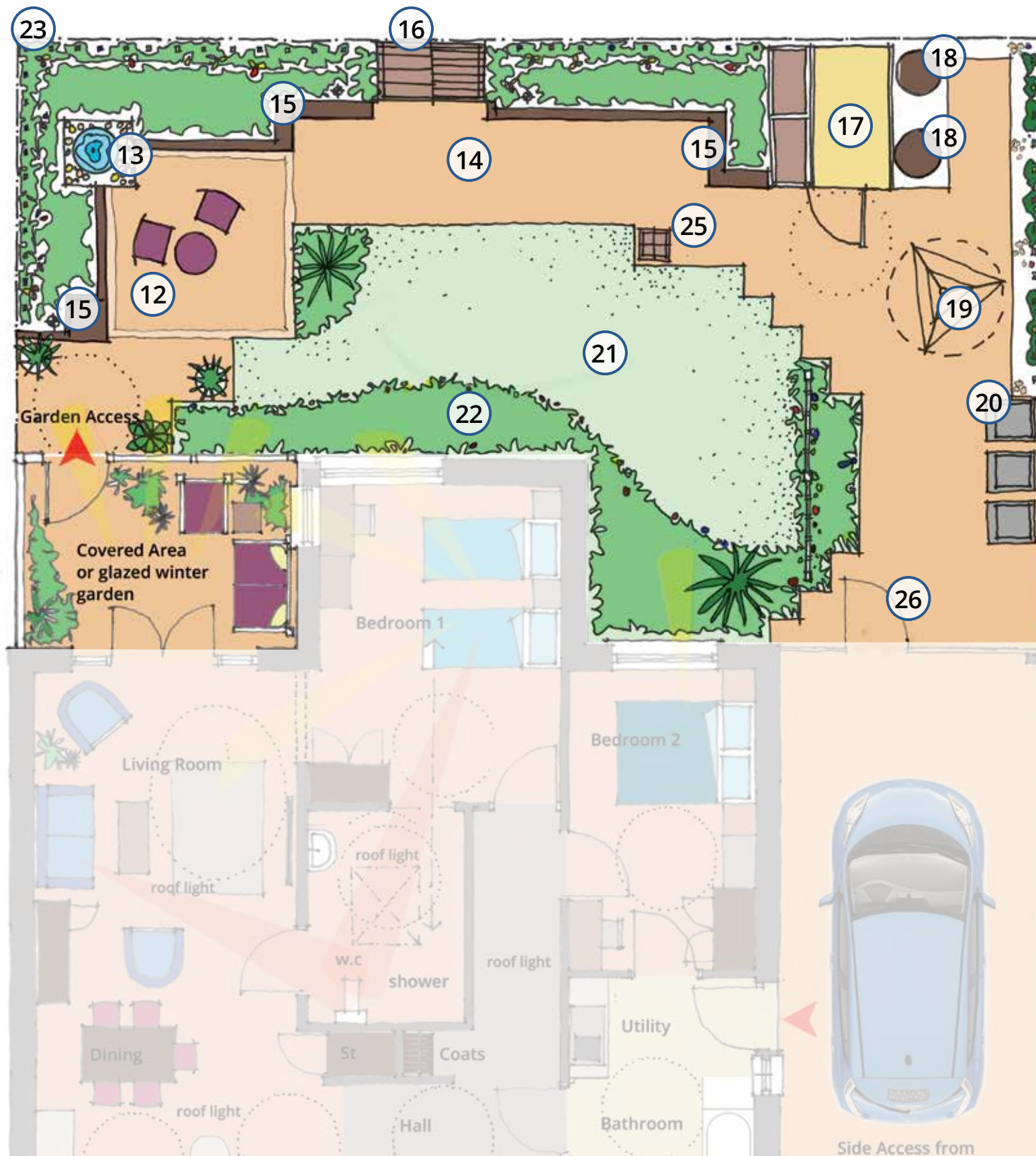
Kitchen/dining area - views out to the entrance

Entrance hall - minimum number of doors and good views out

Front entrance - covered and highly visible



DESIGN *for* DEMENTIA GARDEN



- 12 Patio terrace with table set for eating or activities
- 13 Visual focus - water feature; sound, movement, reflection
- 14 Clear wide paths
- 15 Raised beds, with areas of wider coping for sitting
- 16 Visual focus - seating arbour
- 17 Greenhouse or shed
- 18 Compost bin/water butt
- 19 Washing line
- 20 Bins/recycling, screened from garden by timber trellis
- 21 Lawn
- 22 Low, fragrant planting next to windows
- 23 Boundary fence softened by climbers
- 24 Lighting to enable the garden to be enjoyed in the evening
- 25 Bird table or bird bath to encourage visiting birds.
- 26 Security gate and fence





DESIGN DESCRIPTION

Plan Form

The '*Design for Dementia Bungalow*' is a double fronted plan form with a prominent central front entrance to assist wayfinding and orientation. Bedrooms and main living space are to the rear for quietness, peace and tranquillity.

The entrance is overlooked by an angled window from the dining area to encourage visual connection and interaction. Visitors can be observed on approach. The entrance will be covered, with a space for a seat and a light.

At the centre of the plan is the main bathroom. Its central position is dictated by the need for easy access from both living room and main bedroom. A key driver of the plan is visibility of the wc both from the living room, seating position and the bed position.

Natural light is another factor in design, reinforcing the patterns of night and day and providing the best possible lighting level. It is envisaged that the bathroom would be top lit. The living/dining/kitchen is an open plan arrangement maximising visual contact between activity areas and sociability between occupants.

A covered area/glazed winter garden or conservatory sits between the main living space and the garden to create opportunities for sitting out even when the weather may be poor.

The main bedroom will accommodate two single beds or a double bed. There is generous space provision for full wheelchair mobility and access to storage. Low sill levels provide a '*view to green*' from the bed position and good visual connection to the covered area and to the living room.

Bedroom 2 is designed to accommodate a carer and therefore needs to be very close to bedroom 1.

Between bedroom 1 and bedroom 2 there is a potential '*knock-through*' panel/moveable wall so that if necessary the carer in bedroom 2 could have more immediate access to the person living with dementia.

A key feature of the plan is the utility room/wc shower room. This means that the potentially noisy washing machine can be taken out of the open plan living room/dining room/kitchen area and that laundry and clothes storage functions are accommodated out of the kitchen.

The utility room/shower room also doubles as an en-suite for the carer providing some additional privacy.

The utility room has an outside door to allow direct access from the car park to the bungalow and from the garden to the wc.

The overall plan form shows a high degree of visual connectivity between spaces and a good movement flow between rooms as well as separation of functions providing the potential of internal privacy.

Storage is positioned to be related to the function of rooms and spaces. Where possible the use of doors is avoided. For example coats are stored in a recess, kitchen cupboards would be open or glazed. This is to enable people with dementia to find things which might otherwise be misplaced and to avoid confusion of doors, particularly in the entrance area.



'DESIGN *for* DEMENTIA GARDEN'

The 'Design *for* Dementia Garden' is an important feature. People with dementia benefit from being outdoors walking about and enjoying nature. Many enjoy their gardens for the relaxation it brings and for the exercise involved.

Natural light reinforces the circadian rhythms and aids the manufacture of Vitamin D in the skin.

The 'Design *for* Dementia Garden' is very green providing interesting views from inside. It may have a water feature to provide a visual focus as well as the soothing sound of running water. Raised planting beds enable gardening from a seated or wheelchair position.

A range of seating opportunities are built into the garden providing different vantage points and orientations.

The garden includes a potting shed or greenhouse and compost bins to encourage active engagement in gardening activity. Planting is designed to be '*sensory*' maximising the stimulus of smell, taste and touch as well as sight and sound. The garden is designed to encourage biodiversity, attracting wildlife, birds and insects for additional interest and stimulus all year round.

FINISHING AND FURNISHINGS

The interior domain is given form and spatial definition by providing contrast between walls and floors, doors and architraves and skirting boards. Sanitary fittings, if white, will stand out against a contrasting wall. Floor finishes may change between rooms but the tonal value, (light reflectance value) should be consistent to avoid changes in floor finish being interpreted as steps.

Thresholds between inside and out will be level and again of a consistent tonal value. In general objects in the bungalow will be easily recognisable; taps should look like taps, toilet seats should be coloured to stand out against a white suite, wardrobes should look like wardrobes.

Chairs and tables should be stable. Large geometric patterns which might '*strobe*' or be confusing or disturbing should be avoided.

As well as good natural lighting, very good artificial lighting will be provided at twice normal levels. Ambient and task lighting should be balanced to avoid glare.

HEALTH AND SAFETY IN THE HOME

Material and component specifications include a high level of consideration for health and safety, for example low level V.O.C.s - Volatile Organic Compounds to ensure a healthy environment.

Entrance overlooked from dining space



Open plan living/kitchen/dining space



EVALUATION

Design Principles

The 'Design for Dementia' principles:

- Familiar
- Distinctive
- Legible
- Accessible
- Comfortable and stimulating
- Safe.

These are all incorporated into the design of the 'Design for Dementia Bungalow'. Detailed development of the design should now follow, interpreting the detailed application of the principles into every aspect of the plan.

Areas for further development include:

- Heating and ventilation systems
- Lighting design
- Detailed kitchen design
- Sanitary specification
- Fixtures and fittings specification
- Planting palette
- Paving specification.

Design Audits

A series of design audits will be carried out including:

- HAPPI audit
- Lifetime Homes
- Secured by Design
- Design for Dementia audit.

These audits will no doubt generate subtle changes and an evolution of the plan.

Carbon and Energy Agenda

The 'Design for Dementia Bungalow' must be affordable to run and comfortable in use, ensuring consistent ambient temperatures throughout the year, through the careful use of thermally efficient construction, combined with thermal store principles and appropriate use and control of natural daylight (maximising natural lighting, beneficial solar gain and limiting overheating and glare). The control of non-beneficial air leakage and draughts with the introduction of clean warm air is also important in providing an environment conducive to healthy living and well being.

Benchmark standards are being considered to evaluate and rate performance in key areas of energy efficiency and sustainability. These include:

BRE Home Quality Mark: A sustainability assessment scheme placing consumers at the heart of environmental sustainability, energy efficiency and wellbeing principles. The scheme provides a simple and robust rating system for use within the social and private sectors for promoting the sustainability agenda.

Energy efficiency benchmarking, using one of the three quality standards:

AECB Silver Performance Standard: A self certified, low cost, low risk, energy efficiency benchmarking scheme based on PassivHaus principles, reducing CO2 by approximately 70% to that of an average new build home.

PassivHaus: An independently certified energy efficiency standard based on a clearly defined set of energy efficiency and air leakage reduction targets, achieving CO2 reductions of approximately 80% to that of an average new build home.

Gold standard: The AECB exemplar standard achieving CO2 reductions of approximately 95% to that of an average new build home by the use of more stringent CO2 and air leakage targets together with implementation of renewable technologies.



Inside outside connection

Construction:

Several construction principles are being considered:

Structural insulation panels (SIPS): Providing high levels of thermal performance with low thermal bridging

Thermal mass panels: To assist in controlling overheating and maintaining consistent temperatures within the home

Whole house heat recovery system: To provide clean, temperature controlled ventilation

Underfloor heating: Providing safe, consistent temperature throughout the home, free from draughts and dust movement.

Natural illumination and solar gains: Thermally efficient windows carefully sized and orientated to maximise naturally available light and pleasant views from living spaces and key bedrooms while limiting heat loss and solar glare.

Orientation

The **'Design for Dementia Bungalow'** is designed to have an east or north aspect at the front and a south or west aspect to the rear. This is to provide the correct orientation of bedrooms and living spaces connecting to the garden and to provide a quiet environment reducing disturbance at the rear of the bungalow.

However, in a site specific application there will inevitably be more constraints and design variants may be required. Heat gain will be a key factor in orientation.

Size

The **'Design for Dementia Bungalow'** is approximately 110.2m² including the covered area.

This is quite large exceeding new housing space standards and therefore there is a significant cost to providing these units.

Land Take

There is also a significant land take, as with any bungalow. However, the rear garden is relatively shallow - 6 metres, enabling tight interface distances, front and rear.

Siting

On specific schemes the **'Design for Dementia Bungalow'** may form part of a **'Design for Dementia'** dedicated scheme, or may form part of a general community housing scheme within a new or existing neighbourhood.

Combinations

Further exploration is needed to demonstrate how the **'Design for Dementia Bungalow'** will combine with itself or with other unit types within a scheme context. It will easily form a terrace with a street frontage, and can be adapted, with consideration of roof junctions, to work on a corner.

Our preference is for it to sit in a cluster with other dwelling types to provide a mixed community within a convivial community living environment which can provide natural support to those living well with dementia.

Next Steps

- Develop the concept into more detail
- Explore options for building a full size prototype
- Pilot projects - Pursue the potential of a series of schemes as exemplars in various parts of the country to form pilot studies with external monitoring and evaluation.



Living room showing views to bathroom



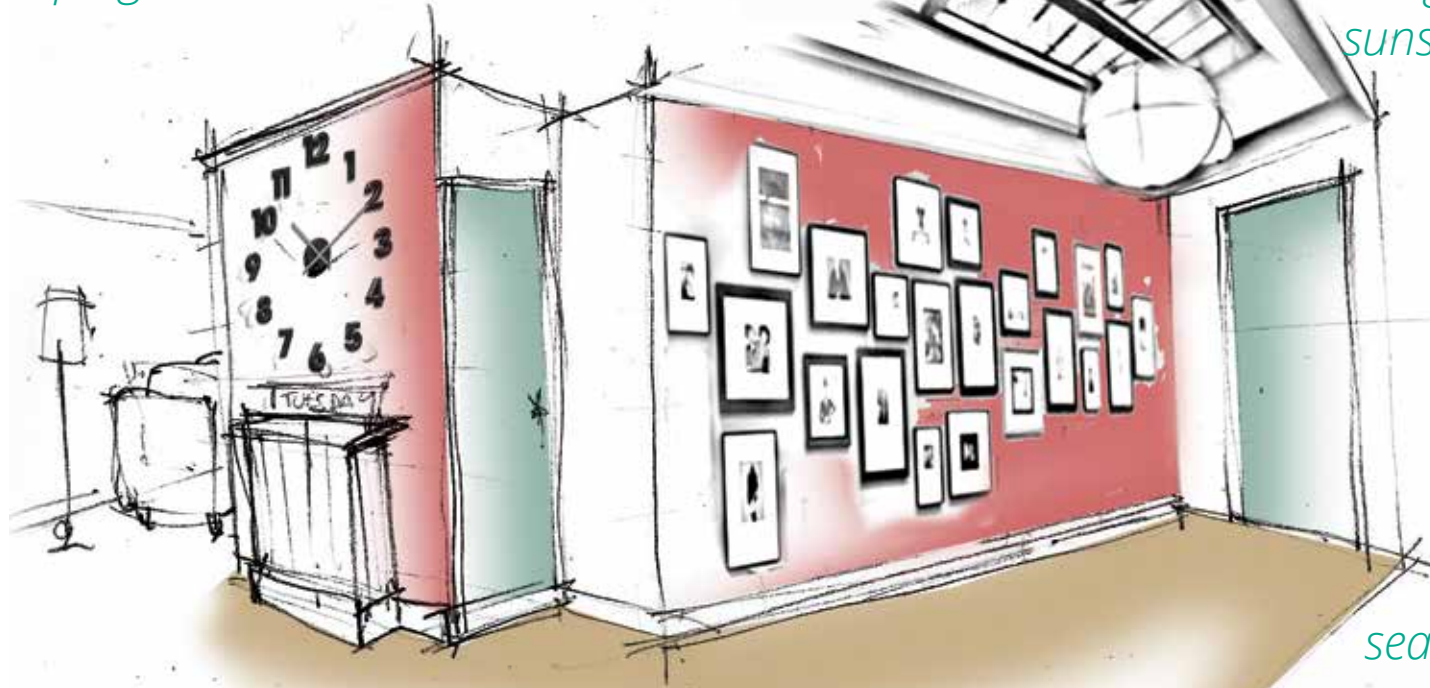
Covered space/conservatory



Kitchen/living space and conservatory

Large clock on entrance wall helping with orientation

Rooflight over small corridor bringing in natural light and sunshine



Memory wall with cosy seat opposite for moments of solace and reverie

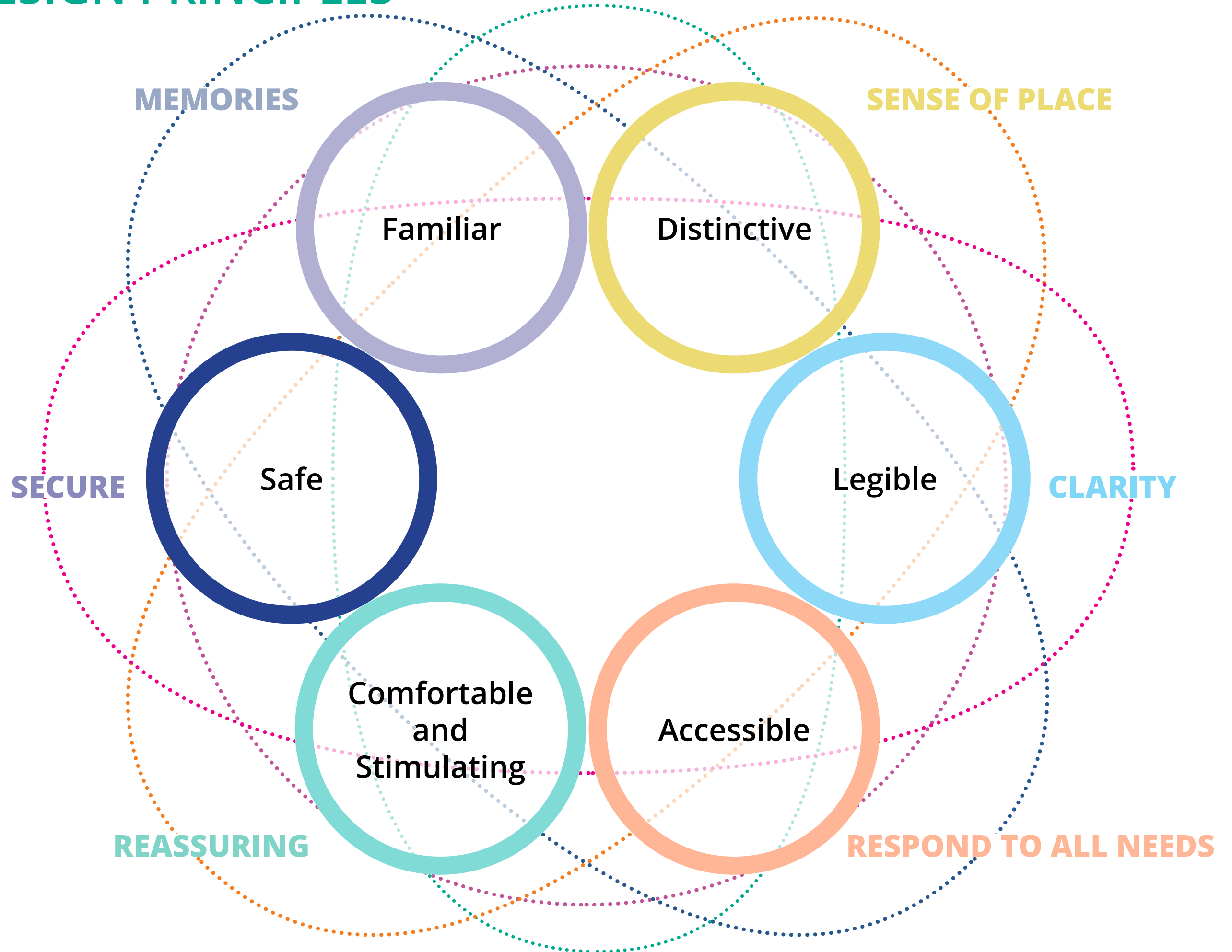
Modern interiors with traditional reassuring feel, soft welcoming finishes that help sooth and comfort



Summary

- The 'Design for Dementia Bungalow' responds to the needs of people living with dementia but is also 'aspirational' demonstrating a potential lifestyle which could be enjoyed by many people
- It should not be 'stigmatised' or 'institutional' in any way
- Design exercises explore interior decor, colour schemes and furnishings which fulfil the requirements of people living with dementia, but will also create an attractive non-institutional environment
- Similarly, the 'Design for Dementia Garden' is being developed in more detail with the emphasis on sensory planting, light and shade, and attractiveness to wildlife
- The potential market is also to be explored. While registered social landlords, healthcare trusts or housing co-operatives may be interested partners in development, the 'Design for Dementia Bungalow' should not be bracketed into 'social housing' or 'special needs' alone. People may 'downsize' to the bungalow from a family home, seeing the bungalow as a more 'liveable' environment. Developers may also be interested in this market
- Other archetypes are now being considered, based on the lessons learnt from the bungalow, enabling new housing neighbourhoods to be developed which are designed for dementia in every aspect and detail, including the public realm and local centres and facilities.

KEY DESIGN PRINCIPLES



6: SUMMARY AND CONCLUSIONS

by Bill Halsall

THE FOUR AREAS OF ACTIVITY DESCRIBED IN THIS VOLUME HAVE COMMON THEMES:-

A Participatory Approach

Engaging and involving mixed groups of people in activities which enable them to express their experiences, difficulties and frustrations as well as their needs and aspirations. Activities have been shared, mutual, hands-on and fun.

A Creative and Positive Response

A desire for people with dementia to live well with dementia has been expressed through these action research projects. These aspirations find fulfilment in the **'Design for Dementia'** Bungalow – a design paradigm expressing and enabling a way of life and a social response through the design in detail of an ideal model.

A practical application of the six key principles of design for dementia.

1. Familiarity

People living with dementia relate to their environment through familiar places, objects, or landmarks. Familiar faces of family friends and neighbours become very important. Memory of past times and events may be more easily recalled than recent events.

2. Distinctive Environments

To assist people with dementia to move freely and independently, their homes and their neighbourhood, environments must generate sense of place through distinctiveness of design.

3. Legibility

To navigate their surroundings people with dementia need help in finding their way to where they want to go.

4. Accessibility

The design of all environments must respond to the needs of a full range of users including those living with dementia.

5. Comfortable and Stimulating Environments

Environments should reduce stress and disorientation and encourage participation, conversation and activity.

6. Safety

The safety of people with dementia in both the home environment and the external spaces they use, is obviously a critical design requirement.

Outcomes

The outcomes of this work will prove useful for designers and managers of the built environment and for health service professionals and academics in furthering this research. But are also relevant and accessible for carers and those living with dementia. The research projects lead the way to the practical guidance in **'Design for Dementia' Volume 1 – A Guide.**

Bill is a Senior Partner of the Halsall Lloyd Partnership. He has promoted the practice from a small local architectural practice to a nationally based interdisciplinary design practice with offices in Liverpool, Preston, Nottingham and Newcastle.

Born in 1950 and spending his early life in Bootle, Bill studied Architecture at Liverpool University. After a short period, working in London he returned to Liverpool to complete his training and qualified as an Architect in 1974. In 1979 he undertook a part time course in Birmingham and qualified as a Landscape Architect in 1983.

He has played a pioneering role in new housing initiatives including early work with the Housing Cooperative Movement. As Architect of the Eldonian Village in Liverpool and many other award winning community based housing projects, he has promoted sustainable communities and environmentally innovative solutions throughout his 40 year career.

His work is based on an inclusive philosophy, generating good design through participation and involvement of clients, communities and user groups. Tackling urban issues through promoting shared vision and consensus building between stakeholders, he has produced sustainable designs and masterplans with a high degree of ownership, commitment and deliverability. Solutions include both new build and refurbishment as well as integrated environmental projects and open space designs. He has been involved in many publications and research projects and is currently involved in research focussing on the links between design and health.

Bill's involvement and commitment continues to find expression through design of convivial, safe and stimulating living and working environments which are conducive to communal life and create distinctive neighbourhoods with a strong local identity. Through his work he continues to develop the principles of socially and environmentally sustainable design and the spirit of innovation in the design process.

Bill Halsall

Architect and Landscape Architect

Senior Partner

Halsall Lloyd Partnership

98 Duke Street, Liverpool. L1 5AG

liverpool@hlpdesign.com



The Authors



Dr. Rob MacDonald RIBA is a Registered ARB Architect who was born in Toxteth in 1951. After two Trans Sahara expeditions he returned to study at Liverpool University where he obtained two First Class Honours Degrees and completed his PhD through research into Terraced Housing. Subsequently, he worked in Zambia, Wales and Glasgow before returning to Liverpool to work with Bill Halsall on Housing Cooperatives and resident engagement.

Since 1989 Rob has been The Reader in Architecture at Liverpool John Moores University and his research focuses on Therapeutic Environments, Architecture for Good Mental Health and Well Being, **'Design for Dementia'** and a book chapter on **'Dementia and The Environment'**. He has published in **'The Design for Mental Health Journal'** about a new Prescription for Psychiatry and The Book **'DIY Integrated City'**.

Recently he was funded by the university to visit The Royal College of Surgeons, Physik Garden, Welcome Foundation Library, Finsbury Health Centre, Peckham Pioneering Health Centre and The Maggie's Cancer Care Building at Charing Cross.

Rob is a Design Champion and Service User for Mersey Care NHS Trust and a member of The Performance and Investment Committee (PIC) after being warmly welcomed by the service users, carers and The Non Executive Chairman.

Rob is the elected Chairman of The Patients Reference Panel at his General Practice in Crosby and Blundellsands. In 2015 Rob has been invited to give the Keynote address, about a service user's perspective, to The International Conference of Dementia and Facilities Management at Silverstone, Milton Keynes.

It's Rob's belief, based on his personal experiences of mental health, that creative collaboration, cooperation, conversation and user participation ought to be at the centre of making good health care architecture.

Dr. Robert MacDonald
*Reader in Architecture LJMU
Liverpool School of Art and Design
John Lennon Art and Design Building
Duckinfield Street, Liverpool. L3 5RD
R.G.MacDonald@ljmu.ac.uk*



The Halsall Lloyd Partnership is an interdisciplinary design practice with a wide range of skills in all aspects of the built environment. HLP create design solutions with care and understanding within a culture of innovation in both product and process.

HLP's approach is proactive, working with clients and communities to develop ideas and realise visions; and we are environmentally driven to achieve successful sustainable projects.

HLP works as a studio based team offering a responsive, high quality integrated design service from a single point of delivery.

HLP's services include:

- Architecture
- Masterplanning
- Urban Design
- Landscape Architecture
- Conservation Architect
- Community Participation
- Interior Design
- Graphic Design
- Project Management
- Clerk of Works Service
- Energy Advice and Assessment
- Principal Designer

The partnership was established in 1975, has a network of four offices, and works throughout England and Wales.

Our offices are based in:

- Liverpool
- Preston
- Nottingham
- Newcastle

In 2008 HLP became a Limited Liability Partnership (registration number OC333403). For more details about the practice and our work please visit our website at www.hlpdesign.com

Liverpool

98 Duke Street,
Liverpool L1 5AG
Tel: 0151 708 8944
Fax: 0151 709 1737
email: liverpool@hlpdesign.com

Preston

3 West Road, Fulwood,
Preston PR2 8NR
Tel: 01772 719 996
Fax: 01772 712 587
email: preston@hlpdesign.com

Nottingham

53 Forest Road East,
Nottingham NG1 4HW
Tel: 0115 989 7969
Fax: 0115 959 8281
email: nottingham@hlpdesign.com

Newcastle

Design Works, William Street,
Felling, Gateshead NE10 0JP
Tel: 0191 495 0055
Fax: 0191 469 3539
email: newcastle@hlpdesign.com



The Liverpool School of Art and Design at LJMU was first opened in 1865, becoming the first school of Art and Design in England outside of London.

The school occupies the RIBA Award Winning purpose designed John Lennon Building.

Today a community of artists, designers, illustrators and architects deliver cutting edge programmes, high impact research and work alongside some of the world's most iconic cultural leaders.

There is active research in Architecture, Fashion Design, Fine Art, Graphic Design, History of Art and Spatial Design. The School has partnerships with Tate Liverpool, Liverpool Biennial, Bluecoat, RIBA NW and FACT.

Recently, The School of Art and Design has developed good research and practice relationships with The Halsall Lloyd Partnership which have resulted in publications, conference presentations and real building proposals.

'*Design for Dementia*' is a Design Guide which aims to assist designers and others working in the built environment to tackle the challenge of dementia in society. Dementia is a growing issue associated with the demography of an ageing population.

The premise of '*Design for Dementia*' is that 70-80% of people living with dementia continue to live in their own homes rather than in any specialised form of housing. They continue living in the same neighbourhoods and use the same local facilities and centres.

Familiarity with surroundings is recognised as a key to reducing the symptoms and loss of function of dementia. By implication, if people can remain living in their own homes, in their own neighbourhoods, then the disorientation, confusion and anxiety of a move to a new environment is reduced.

While older properties can be improved and adapted to suit the requirements of those living with dementia, and businesses can address some of the needs of their customers, the aim must be to improve responsiveness in design of the built environment in the medium and long term. While this may sound like a daunting task, the benefits in financial terms to health and social support services, and in human terms to the families, friends and neighbours who are tackling the challenge of dementia, are huge. Of course, most importantly of all, is assisting people to '*live well with dementia*' as far as possible.

The opportunity for this Design Guide arises out of the inspirational work of Innovate Dementia Europe and is produced by a collaboration between Bill Halsall of Halsall Lloyd Partnership, Architects and Designers, and Dr. Rob MacDonald of Liverpool John Moores University.

The research process for the guide included a series of '*Living Lab*' formats and participatory techniques, and the authors are grateful for the involvement of SURF (*Service Users Reference Forum*), Liverpool Dementia Action Alliance, Mersey Care NHS and LJMU.

PARTICIPATORY RESEARCH PROJECTS INCLUDE:

- **The Dementia Friendly Neighbourhood** - responds to the design of interiors and exteriors in pursuit of '*design for all*'
- **How Dementia Friendly is our City?** - an ongoing project. An exercise using photo cue cards to help to understand the response of people with dementia to Liverpool City Centre
- **Connecting Minds through Sandplay** is a creative '*hands-on*' game using a Jungian sand tray and a set of assemblages to stimulate all the senses:
 - **Touch** - sand, pebbles, objects
 - **Smell** - '*sensory garden*' of roses, herbs, spices
 - **Taste** - old fashioned sweets, ice cream
 - **Sight** - coloured shiny objects
 - **Sound** - background music.

A creative exploration towards a '*shared landscape of the mind*'.

- **The '*Design for Dementia*' Bungalow** explores an ideal model design for a bungalow with all the features required to '*live well with dementia*'. This is being developed as a design '*paradigm*' and it is hoped that we can build a '*show bungalow*' with all the appropriate '*smart*' technologies and most importantly a '*Design for Dementia*' garden.

'*Design for Dementia*' comprises:-

Volume 1 - *Design for Dementia* - A Guide with helpful guidance in the design of exterior and interior environments.

[ISBN 978-0-9929231-1-2](#)

Volume 2 - *Design for Dementia* - Research Projects, outlines the research projects and describes the participatory approach.

[ISBN 978-0-9929231-2-9](#)

DESIGN for DEMENTIA is a Design Guide which aims to assist all of those responsible for the design and management of the built environment to tackle the growing challenges of dementia in society.

Volume 1 DESIGN for DEMENTIA - A Guide provides helpful guidance in the design of exterior and interior environments.

Volume 2 DESIGN for DEMENTIA - Research Projects gives details of the research projects which underpin the guide.



designed and published by the Halsall Lloyd Partnership, November 2015

ISBN 978-0-9929231-2-9