The Future of Ageing Large Print Guide









Contents

1	Introduction	p.5
2	Design Age Institute	p.7
ß	Gita	p.11
<u>A</u>	Home Office	
	to Age in Place	p.15
5	Designing for	
	your future self	p.19
6	Growing Together	p.21
7	Hearing Birdsong	p.25
8	The Centaur	p.31
9	This Age Thing	p.35
10	Display	
	acknowledgements	p.39



1 Introduction

One thing we all have in common is that we are ageing. Many of us will live into old age. By 2040, more than a quarter of the UK population will be aged over 60. We are moving towards a future in which the population of older adults will only continue to grow.

Curated by Design Age Institute, in collaboration with the Design Museum, this display explores how design is helping to reimagine products, services and environments to enhance our experience of living in later life. How can we meet the needs, interests and aspirations of our future selves?

Six current initiatives supported by Design Age Institute are presented here, offering an insight into the live process of design. These projects combine functionality and cutting-edge technology to create items and opportunities that we will not only need as we age but may even desire.

We Are All Ageing, 2022 2 minutes 17 seconds Produced by Chocolate Films Courtesy of Design Age Institute



2 Design Age Institute

Design Age Institute was established in 2020, with funding from Research England, as the UK's national strategic unit for design and the healthy ageing economy. Working collaboratively across industry, academia and the public sector, the Institute uses design-led innovation to explore and respond to people's needs as they age.

The Institute builds on 30 years of research led by the Helen Hamlyn Centre for Design at the Royal College of Art. It comprises five world-leading organisations in research, design, innovation and learning: the Design Museum, the Helen Hamlyn Centre for Design, the International Longevity Centre UK, the UK National Innovation Centre for Ageing and the Oxford Institute of Population Ageing.

Bringing together these collaborators, Design Age Institute works on the development of engaging and commercially viable products and services that enable happier and healthier ageing – at work, at home and in the community.







Getting older is about more than the number of birthdays you've had. It is also about the ways in which our physical, mental, social and financial resources change as we age. The Hamlyn Cloverleaf infographic was developed by Design Age Institute as a framework for exploring the impact of life's transitions on our ability to live and work independently for longer.

Hamlyn Cloverleaf, 2022

Designed by Design Age Institute and Geoff Williamson Courtesy of Design Age Institute





For many people, it can be challenging to carry everyday items, such as parcels, groceries and library books. Gita is a completely hands-free cargo-carrying robot that acts as a companion and a pair of 'spare hands'. Able to carry up to 18 kilograms at six miles per hour, Gita's technology enables it to mirror a typical walking speed and differentiate between people and objects, both in daylight and at night. Gita can also process visual and spatial information in real time to adapt its behaviour.

Communicating intuitively with users through sound, light and touch, Gita has the potential to mitigate loneliness and isolation in older adults. Gita helps to boost healthy behaviour by encouraging walking, and to foster more independent and sustainable styles of living in later life.

Project Team

Gita is made by Piaggio Fast Forward, which is part of the Piaggio Group, the creators of the Vespa scooter. The UK National Innovation Centre for Ageing has been joined by Roseanne Wakely, Designer in Residence at Design Age Institute, to explore Gita's potential impact on the lives of older adults.



Design by Piaggio Fast Forward Design research by the UK National Innovation Centre for Ageing and Design Age Institute User consultation and engagement by VOICE

As Designer in Residence, Roseanne Wakely is working with intergenerational user groups to map how Gita can help people to navigate the city of the future. Users' experiences of walking with Gita have fed into concept designs exploring how this innovative robot can fit into everyday life alongside other familiar mobility devices.

'Walking with Robots', 2022

Illustrations by Roseanne Wakely Courtesy of Roseanne Wakely

Meet Gita, 2021

1 minute 3 seconds Produced by Kaleidoscope Creative Films Agency Courtesy of the UK National Innovation Centre for Ageing

Gita, 2021

Designed by Piaggio Fast Forward Plastic and metal Courtesy of the UK National Innovation Centre for Ageing



Home Office to Age in Place Working in later life

Shifts in working patterns and advances in technology have led to many people working primarily from home in later life. However the design of most typical homes does not meet the needs of older adults if they are to work effectively and remain productive beyond retirement age.

Northumbria University is working with Design Age Institute to design a purpose-built Home Office to Age in Place for older residents in South Seaham Garden Village, County Durham. This redesigned working set-up will consider layout, ergonomics, furniture, lighting and smart technology to support people to live and work well in their own homes.

Project Team

Home Office to Age in Place brings together experts in architecture, design for ageing and computing from Northumbria University, along with furniture designers from Pentagram, the world's largest independent design consultancy. The project is being co-designed with older people from the UK National Innovation Centre for Ageing and the Elders Council, as well as health professionals from the Chartered Society of Physiotherapy and the Association of Occupational Health and Wellbeing Professionals.



Architectural design, smart technology and gerontology by Northumbria University, with Chris Brown as architecture research associate Furniture design by Pentagram

'Products to Environment', 2022Illustration by Chris BrownCourtesy of Northumbria University

'Fold' light-block, 2022 Illustration by Pentagram

Courtesy of Pentagram



5 Which everyday item would you redesign for your future self?

These ten everyday items were identified as the most frustrating in a recent survey of over 2,000 adults aged between 55 and 104. The survey was carried out in collaboration with This Age Thing, a community focused on ageing and design, and u3a, a UK-wide interest group. Here we invite you to participate in this interactive version of the survey.



6 Growing Together Intergenerational garden

Growing Together is an ongoing joint enterprise between the Design Museum, Design Age Institute, the Lightbulb Trust and members of local communities. Together they are working to establish an accessible, age-inclusive and restorative learning space within the underused Dame Sylvia Crowe Garden to the north of the Design Museum.

Growing Together was inspired by the need to provide new community spaces, especially in the aftermath of the Covid-19 pandemic, which increased many people's sense of isolation from their communities and often from the wider world. Virtual and off-site workshops held during the pandemic have shaped the design of the garden to make it welcoming for all ages.

Project Team

The project brings together communities based around the Design Museum, including Hammersmith Academy, Open Age, and the Kensington and Chelsea Over 50s Forum. They are working alongside public works, a not-for-profit critical design practice. By opening up opportunities for co-design, public works are engaging participants in critical thinking about sustainable design practices.



Consultation design and facilitation by Georgia Cottington and Elliot Lunn Garden design and facilitation by public works

Model of Dame Sylvia Crowe Garden, 2021

Model by Georgia Cottington and Elliot Lunn Courtesy of Georgia Cottington, Elliot Lunn and the Design Museum

Images depicting the Dame Sylvia Crowe Garden, 2021 Photographs by Georgia Cottington and Elliot Lunn Courtesy of Georgia Cottington, Elliot Lunn and the Design Museum

Designers Georgia Cottington and Elliot Lunn began the project by mapping the benefits that an intergenerational garden could bring to local groups. Online and in-person listening sessions encouraged creative thinking, and collected ideas and priorities for designing a garden with local communities at its heart.

'Growing Together Garden Vision', 2021

Illustration by Georgia Cottington and Elliot Lunn Courtesy of Georgia Cottington, Elliot Lunn and the Design Museum



7 Hearing Birdsong An app to support early hearing loss diagnosis

Hearing Birdsong is an immersive digital audioscape that uses the tranquil sound of British birdsong to help people to engage with their hearing health.

The traditional method used to diagnose hearing loss has not changed for more than 50 years. Currently, more than twelve million adults in the UK experience symptoms of hearing loss, but the majority will never be fitted for hearing aids. Yet hearing loss creates many age-related challenges, including social exclusion, cognitive deterioration and increased risk of dementia.

The Hearing Birdsong app aims to reduce the stigma associated with hearing loss and to support early diagnosis by creating an enjoyable experience that allows people to check their hearing in the privacy of their own homes.

Project Team

Hearing Birdsong was conceived by design studio Kennedy Woods, and developed using insights from a steering group of patients and experts in hearing loss. With support from Design Age Institute, Kennedy Woods has collaborated with digital product developers Studiomade to develop the prototype into an app for the healthy ageing marketplace.

Concept and lead design by Kennedy Woods Sound design by Oscar Jones Digital product development by Studiomade

Explore the app prototype to discover what you can hear.

Film of Hearing Birdsong app prototype, 2022

2 minutes 22 seconds Designed by Kennedy Woods Sound design by Oscar Jones Digital product development by Studiomade Courtesy of Kennedy Woods

Angela's Story

Angela walks in the woods. She knows the old routes like she knows the length of her stride or the back of her hand. She knows how the light plays through the leaves in autumn and the exact density of the frozen earth in winter. She knows the smells of the seasons. But most of all, she knows the songs of the birds that greet her: the little melodies of her daily pilgrimage.

One day, the songs start fading. They fade so softly and so slowly that Angela doesn't hear them slipping away. But they keep fading. And one day Angela is walking in the woods, and there are no more melodies.



Hearing Birdsong was inspired by Angela, a hearing loss patient who participated in the project's first workshop. Angela shared the story of what first prompted her to seek help for hearing loss.

Angela's story, which inspired Hearing Birdsong, 2022 Illustrations by BlackBird Foundry Courtesy of Kennedy Woods

Hearing Birdsong audio box prototype, 2019

Designed by Thomas Woods Plywood and metal Courtesy of Kennedy Woods



The following text is located within the structure for the Hearing Birdsong immersive soundscape

Listen to the soothing sounds of a forest full of birdsong. What can you hear?

Five birds commonly found in the UK's woodlands make up the cast of the Hearing Birdsong audio experience. Each bird call has been digitally altered to occupy a narrow band of frequencies that match those examined during a traditional hearing test.

Wren 4 – 8 kHz Very High

The wren's song is cheerful, clear and ebullient. For its small size, the wren has one of the loudest songs of any bird. It also has one of the highest-pitched songs, ranging from about one full octave below to one full octave above the highest note on the piano.

Song Thrush 3-4 kHz High

The song thrush in full voice is arresting and brilliant. As a composer, the thrush displays a marked tendency to repeat the same phrase two or three times. However it has a large repertoire (around 200 phrases), and these phrases are sung with clarity and vigour.

Blackbird 1 – 2 kHz Medium

The blackbird has been called the Beethoven amongst birds. The blackbird sings long, beautifully shaped phrases, well-defined in time and tone. The effect is mellow, flute-like and musical.

Cuckoo 350 - 750 Hz Medium Low

Male cuckoos use their distinctive song to defend their territories and attract mates. Females advertise with a softer version of the song. Both sexes sing a lower-pitched, slower version when searching for nest sites and building their nests.

Collared Dove 250 - 350 Hz Low

This dove's song, or 'perch-coo', is sung mainly by unmated males, sitting on a highly visible perch. It's a soft 'coo-oo' followed by two or three louder 'coo's. Paired male doves will often give a three-parted 'nest call' while nest-building: a 'coo-OO-oo', highest in the middle.

Hearing Birdsong audio soundscape, 2022

Designed by Kennedy Woods and Oscar Jones Courtesy of Kennedy Woods

'Meet the Cast', 2022

Illustrations by BlackBird Foundry Courtesy of Kennedy Woods



8 **The Centaur** Increased mobility for the world we live in

The Centaur is a self-balancing, two-wheeled personal electric vehicle for people who have difficulties getting around. It aims to increase independence, self-esteem and social connection by making supported mobility more flexible. Designed for the world we live in, the Centaur fits through standard-sized doorways and under tables and desks, powerfully increasing the freedom of those with mobility difficulties.

Design Age Institute is working with Centaur Robotics Ltd to enhance the way the Centaur communicates with those who use it. The Centaur aims to appeal to both existing wheelchair-users and those who have not considered using a mobility device before.

Project Team

The Centaur was created by Centaur Robotics Ltd. Designers Tom Stables, Juliette Poggi and Ross Atkin from Design Age Institute worked with Centaur Robotics Ltd and the ExtraCare Charitable Trust to improve the vehicle's already sophisticated technology and the support services that make it easier to drive.

Design by Centaur Robotics Ltd Service design and design research by Design Age Institute



Inspired by his father's struggle with mobility issues, Centaur Robotics Ltd Design Director Paul Campbell created the Centaur to enable free and flexible movement in the real world. Aerodynamic, precisely engineered, stylish and hardwearing, the design allows the seat to rise, enabling users to freely adjust their height for tasks such as reaching high shelves, or to put them eye-to-eye with other people.

The Centaur display model, 2022

Designed by Centaur Robotics Ltd Nylon and aluminium Courtesy of Centaur Robotics Ltd

More Than a Chair, 2022

2 minutes 22 seconds Produced by Chocolate Films Courtesy of Design Age Institute

Images depicting the Centaur, 2022

Photographs by Chris Reeve Courtesy of Centaur Robotics Ltd





This Age Thing A community of healthy ageing advocates

This Age Thing is a community bringing together age activists, storytellers, creatives, business-leaders, researchers, designers and ageing people to celebrate the diverse stories of later life. Founded in 2021 by Design Age Institute and led by age champion George Lee, This Age Thing invites everyone to challenge negative perceptions and stereotypes of ageing, and to share what it really means to get older.

Join the community and share your story at thisagething.co.

Annual newspaper for This Age Thing, 2022 Designed by Curious Ways Edited by George Lee and Gigi Eligoloff Courtesy of Design Age Institute

Facilitated by the Learning team at the Design Museum, This Age Thing and Design Age Institute launched The Wisdom Hour to bring designers and communities together to explore what it means to grow older – and possibly even wiser. Illustrator Jess Nash created these posters to capture in visual form the stories and ideas discussed by participants.

Posters for The Wisdom Hour and Objects of Wisdom, 2021 Illustrated by Jess Nash Courtesy of Jess Nash



The Good News is We Are Living Longer

But it sometimes seems that all we hear about are the challenges, the stories of decline, loneliness and hardships. No wonder we sometimes worry about getting older.

Now is the time to change this negative ageing narrative.

It is time to declare loudly that age is not a problem.

That there is so much to celebrate.

A greater sense of who we are and what is important to us.

A richer life perspective gained through lived experience.

A mature brain which explains why we are able to solve problems from a greater number of perspectives.

Yes, we may encounter challenges as we age but ageing is a vital asset, not only for ourselves, but also for society's collective financial and emotional wealth.

So we need action right now to change the negative narrative of ageing to a more truthful one.



And that is why we have created This Age Thing. A place for all of us to share stories, to be listened to, to take action and make tangible, positive changes.

Our goal is simple. To unite us as we age – building a strong and united community, This Age Thing will become a powerful voice, sounding board and world changer.

Together we can redesign a world to help us all live longer, healthier and happier.



10 Display acknowledgements

Design Age Institute Curated by Victoria Patrick, Impact Manager

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Design Museum Project Management Ruth Bradley

Displays Curator Maria McLintock

Assistant Curator Tiya Dahyabhai **Creative Team** Exhibition Design The design kollektiv

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Designing for Joy, 2022

2 minutes 19 seconds Produced by Chocolate Films Courtesy of Design Age Institute