DEMENTIA LAB making design work: engaging with dementia in context
2019
Demo and Poster Exhibition
Reflecting on how design and research efforts unfold in the context of living, working and caring for/with people with dementia.

Eindhoven, the Netherlands
October 21 & 22, 2019
Marco Blom
Director Alzheimer Nederland

Nog toe te voegen

- Marco Blom
Dementia Lab 2019
Making Design Work: Engaging with Dementia in Context

We are proud to present you with the first proceedings of the Dementia Lab conference, 2019 edition and 4th to take place, organized around the theme ‘Making Design Work: Engaging with Dementia in Context.’ These proceedings contain demos and ideas presented at the Dementia Lab 2019 conference.

Dementia Lab is a growing community, established in 2016, which builds on a legacy of work done for and with people living with dementia and their surrounding context. The Dementia Lab approach to dementia is inclusive, participatory, and person-centered. Where in other venues it might be challenging to convey the experience of working with people with dementia, or the urgency of working in this field, Dementia Lab allows for a focused discussion around this topic with like-minded designers, researchers, carers, and other professionals operating in this area. Design is important in the wider dementia context. The number of people with dementia is still vastly increasing, presenting us with various challenges. Technology, services, environments, and engagements can alleviate some of these challenges, and contribute to the quality of life, care, and wellbeing of people living with dementia.

The theme for Dementia Lab 2019 is ‘Making design work: Engaging with dementia in context.’ This theme focused on research and design happening in direct engagement with people living with dementia, and their wider network. ‘Making design work’ zooms in on what ‘works’ or ‘does not work’ in terms of design, technologies, services, environments, or design methods in these contexts of living, caring, and working. These design challenges are addressed through a variety of contributions, both emerging from academic work as well as sharing hands-on experiences. We focus, amongst others, on the relational character, that is, the sustained relationship that a designer or researcher may develop and nurture with people living with dementia, the challenges of materiality, for example, what visual, tactile, olfactory, or other materials ‘work’
for and with people with dementia in context, or temporality, that is, what engagement in time is needed to let design or research work have a sustainable impact on people with dementia. In Dementia Lab we try to avoid regarding people with dementia as the extensions of their physical or cognitive limitations, or as a singular, undifferentiated collective defined by a common syndrome, but rather focus on their personal history, identity, and lived experiences. In doing so, we hope to be considerate and sensitive to the active and deeply personal role people with dementia can play in the design process.

This year's edition takes place in Eindhoven, at the Eindhoven University of Technology, hosted by the departments of Industrial Design and Industrial Engineering & Innovation Sciences. Eindhoven has a legacy of work in context of working for and with people living with dementia, and has established the Expertise Centre of Dementia & Technology to address these challenges. Additionally, the organization of this year’s edition is supported by Vilans, the national Centre of Expertise for Long-term Care in the Netherlands, Alzheimer Nederland - the Dutch Alzheimer Association, University of Leuven, LUCA School of Arts, and Fontys University of Applied Sciences. During this edition of Dementia Lab 2019 we aimed to have a diverse offering of work for the fields of design, art, and health. The selected work come from researchers from around the world including Australia, Canada, Mexico, South Africa, and of course from various locations in Europe. This highly diversified audience gave us the opportunity to achieve a good level of understanding of the interests, approaches, and ongoing studies in the context of dementia.

All conference participants will be able to download an electronic version of the proceedings e-book via the conference website.

- Dementia Lab organisation
Monday 21 October

0830 – 0915  Registration & Coffee

0915 – 1015  Keynote: Laila Cassim

1015 – 1045  Coffee break

1045 – 1200  Inclusion & Participation 1: Paper session
Niels Hendriks, Karin Slegers and Andrea Wilkinson - The relevance of involving people with dementia in design research
Susan van Hees - ‘Build your story’. Developing a research game to include older adults’ perspectives in research
Carolin Schreiber, Jan Üblacker, Diana Cürlis and Nora Weber - Towards Dementia Things: How Does Participatory Research and Design Improve Quality of Life in Contexts of Dementia?
Claire Bernaards, Hester van Zuthem, Noeska Meijers, Jacqueline Blok, Sandra Suijkerbuijk, Henk Herman Nap - What are the needs of people with dementia and their informal caregivers with regard to having a meaningful day? Results and experiences from the AAL Magic Table project

1200 – 1230  Dementia Lab Ideas Pitches

1230 – 1400  Lunch & Demo/Poster exposition

1400 – 1515  Technology & Experience 1: Paper session
Sara Casaccia, Gian Marco Revel, Lorenzo Scalise, Roberta Bevilacqua, Lorena Rossi, Robert A. Paauwe, Irek Karkowski, Ilaria Ercoli, J. Artur Serrano, Sandra
Suijkerbuijk, Dirk Lukkien, and Henk Herman Nap - Social Robot and Sensor Network in Support of Activity of Daily Living for People with Dementia

Yvette Vermeer, Paul Higgs, and Georgina Charlesworth - Surveillance Technology in Dementia Care: implicit assumptions and unresolved tensions

Kathrina Dankl, Stefan Moritsch, Fritz Pernkopf, Elisabeth Stögmann, Theresa König and Sten Hanke - Memento for Living, Working and Caring: An ‘Archetypical Object’ for Being with Dementia

Nel Wagner - Thuiskomertje: Een Hulpmiddel voor Mensen met Dementie

1515 – 1545 Coffee break & Demo/Poster exposition

1545 – 1700 Inclusion & Participation 2: Paper session

Caylee Raber, Jon Hannan, Mariko Sakamoto, Srushti Kulkarni, Nadia Beyzaei, Donna Levi and Alison Phinney - Emily Carr University Zeitgeist Program: Bringing together student designers and care home residents to co-design publications - A social innovation project

Izoné McCracken, Retha de la Harpe and Monica Di Ruvo - Developing Dementia Personas for User Centred Architectural Design Considerations in Non-Specialised Contexts tensions

Leonie van Buuren, Masi Mohammadi and Olivia Guerra Santin - Evaluating three validation-methods for an architectural intervention for seniors with dementia in the empathic design framework, a case study

Francien van de Ven - Hoe ga je om met apathie en initiatiefloosheid?

Fernanda Marx - Forever with me, Daisy

1700 – 1900 Drinks at Demo area
Tuesday 21 October

0830 – 0915  Registration & Coffee

0915 – 1015  Keynote: prof. Arlene Astell

1015 – 1045  Coffee break & Demo/Poster exposition

1045 – 1200  Technology & Experience 2: Paper session
   Ward de Groot and Maarten Houben - Exploring how an Interactive Placemat can Influence Eating Activities for People with Dementia
   Sarah Campbell, David Frohlich, Adam Vaughn, and Norman Alm - Sentimental Audio Memories: Exploring the emotion and meaning of everyday sounds
   Gail Kenning, Alon Ilsar, Rens Brankaert, and Mark Evans - Improvisation and Reciprocal Design: Soundplay for dementia
   Chloe Meineck - Music Memory Box: The importance of personalised reminiscence

1200 – 1230  Guest interview - Living with Dementia

1230 – 1400  Lunch & Demo/Poster exposition

1400 – 1530  Workshops session
   Marieke Zielhuis and ZonMw - ZonMw
   James Hodge, Kellie Morrissey, and Sarah Foley - OpenLabs
   Niels Hendriks & Andrea Wilkinson - D-Lab
1530 – 1600  Coffee break

1600 – 1700  Closing session: Town Hall Meeting, Announcement & Discussion

Optional Wednesday 22 October

1000 – 1230  Visit Ouderenlandgoed Grootenhout

1230 – 1400  Health & Wellbeing tour Dutch Design Week 2019
Participating Countries

- Canada
- The Netherlands
- Mexico
- United Kingdom
- Belgium
Inclusion in Everyday Life
This project seeks to contribute to the health and well-being of adults, through a comprehensive system that supports better control over medication consumption. To achieve this, a multifunctional product is proposed; one that stores, orders, and doses the drugs, and alerts users at the time they should be taken, while helping to keep track of their consumption. This helps reduce failures with medicine consumption and unnecessary suffering.

To get in touch with the designers, email: dh.diana@hotmail.com
RESilience Monitor for INfomral caregivers in Dementia

Radboud University Medical Center, UMC Alzheimer, Geriatric Medicine
Designed by D. Oostra, M. Nieuwboer, M. Olde Rikkert, and M. Perry

REMINd is a user-friendly application for informal caregivers and a dashboard for case managers to monitor wellbeing and resilience of caregivers to provide timely support and prevent crises. Close monitoring wellbeing of caregivers and early intervening may prevent crisis admissions of people with dementia. A human-centered design method was used to identify wishes and needs.

To get in touch with the designers, email: dorien.oostra@radboudumc.nl
Malnutrition in Dementia

Tilburg University, GGzE, and Catharina Ziekenhuis
Designed by Miranda de Weijer-Dupuis, Simone Verhaar, and Liselore Snaphaan

Malnutrition is a common problem in people with dementia, whereby weight loss precedes dementia and increases during its development. Malnutrition leads to more health problems and a faster disease course. Earlier admission to a nursing home and an increase in hospital treatment are a consequence of this. During this exhibition the scientific insights into nutrition and dementia will be discussed. Participants are challenged to think along with what recommended dietary patterns are for dementia and show which nutrients are important here.

To get in touch with the designers, email: liselore.snaphaan@ggze.nl
Traveling with Dementia

Go Upstream
Designed by Andy Hyde

Go Upstream creates spaces and opportunities for people with dementia to work with transport service providers, to build a greater understanding of dementia and use this new knowledge to design more inclusive products and services, together. The involvement of people with dementia lies at the heart of our work. This can lead to better design through relational working. Our poster will describe some of our projects that are attempting to demonstrate the value of this approach.

To get in touch with the designers, email: hello@upstream.scot
Family Window

University of Technology Eindhoven, Industrial Design
Designed by Kyara Fasen

Research shows the importance of social contact for people with dementia, sadly the further the dementia develops the less opportunities for social contact with family and friends remain. Family Window tackles this problem by making it possible for people with dementia to watch and reply to video messages of loved ones at any time. The system will, by means of clear questions and a simple interface, guide and stimulate users to reach out and stay in touch.

To get in touch with the designers, email: k.r.fasen@gmail.com
Wijstijd

University of Technology Eindhoven, Industrial Design & Vitalis
Designed by Thilly Coppelmans and Sylvia van Aggel

People in the initial stage of dementia struggle with time orientation, leading to loss of confidence and missing appointments. A high burden on caregivers is one of the biggest reasons for people with dementia to move into a care home. Wijstijd is a clock that connects the now and the next appointment through visual and sound signals. This helps the user in their daily routine, creates independency and relieves caregiver burden, allowing a person with dementia to stay at home.

To get in touch with the designers, email: s.van.aggel@vitalisgroep.nl
Sound and Experience
Kozie: A Sense of Home

Kozie & Filip Studios
Designed by Tom Kortbeek and Roos Meerman

KozieMe is a soft pillow that responds to touching via the built-in speakers. When touched the pillow will produce different sounds so the user can listen to his or her favorite sounds without any help. With the added SD-card you can easily personalize KozieMe with personal voice messages or songs.

To get in touch with the designers, email: jens@fillipstudios.com
Your Moments: Staying in Touch with Who You Are

University of Technology Eindhoven, Industrial Design
Designed by Nicole van Essen

Your Moments is an interface that facilitates staying in touch with who you are. Through co-design with people living with early stage dementia, an audio interface is created containing personalized audio that is connected to memories of moments in your life. The audio varies from recorded memories, poems, music, books to messages of people close to you.

To get in touch with the designers, email: nicolevanessen@live.nl
‘Hi grandma! Listen to this! It’s a part of a new song I was taught during guitar lesson today!’ Stay Tuned! facilitates a connection between family members and independently living older adults, through new technology with a retro look. The messages radio receives spoken messages of family members or friends, which are sent through WhatsApp. The spoken message is played on the radio when the pointer is turned to a picture, similar to switching between radio channels.
The link between music and dementia is a well-documented yet magical phenomena. Music can stay in our memory far longer into the later stages of dementia, than speech or physical abilities. The box and its guide help people through the process of linking music with objects to create a personalised tool that can be used to reminisce, reawaken and reconnect.
Soundscape Pillow

University of Technology Eindhoven, Industrial Design & Nature for Health
Designed by Daniel van Pel, Maarten Houben, and Berry Eggen

This project explores how we can design personalised auditory experiences for people with dementia. We introduce a new design, called SoundscapePillow, a long tubular shape changing pillow that enables personalised auditory experiences by listening to (nature) soundscapes. The built-in sound system produces these soundscapes to empower people with dementia to relax, to reduce agitation, and to remember past experiences. The experience can be personalised via an app.

To get in touch with the designers, email: danielvanpel@gmail.com
Illi-TV

Amsterdam University of Applied Sciences & Illi Engineering
Designed by Ruurd Bell, Ivor Kwaab, Yunus Tuzkapan, and Mike Oudshoorn

People with dementia benefit from recalling positive memories. Even in a very advanced phase of memory loss, songs from the past and familiar imagery can release a lot. Illi-tv is a small box that is connected to the television or projector. Via the app (illi Play) this box can be operated with the telephone or tablet. illi-tv contains life stories of people living with dementia, music therapy, recognizable images, memory training, movement exercises and much more.

To get in touch with the designers, email: ruurd@illi-tv.nl
Play and Participation
There is growing evidence that playing games could have health benefits for people living with dementia. However, deterioration of the brain influences how people experience the world around them and thus affects their experience when playing games. When designing games for people living with dementia, special attention needs to be payed to which play experiences and level of cognitive challenge users are exposed to.

To get in touch with the designers, email: hestervanzuthem@activecues.com
Build Your Story: A Research Game to Include People’s Perspectives

Studio Malou van Dijck, Tranzo Tilburg University
Designed by Malou van Dijck

Babbelbord is a playful game to collect untold stories about people’s daily life, experiences, ideas and dreams. This game is an alternative for interviews or focus groups, and is not solely depending on verbal capabilities. It empowers participants to express their thoughts visually and verbally through creativity, imagination and associations. A story can literally be ‘build’ and support memory.

To get in touch with the designers, email: info@malouvandijck.nl
Stress plays an important factor in challenging behaviour (CB). Identification of stressors causing CB is hampered by impaired communicative abilities. Nowadays, stress-related variables (e.g. heart rate variability, blood volume pulse and skin conductance) can be measured via a wearable (wristband). It is unknown if and how wearables can be used in reducing or preventing CB in clinical practice. We collect expert opinions, after experiencing stress during a VR experience.

To get in touch with the designers, email: m.peeters@fontys.nl
Babbelbord: A Personalized Conversational Game

University of Twente, Human Media Interaction; Psychology Healthy & Technology
Designed by D.S. Nazareth, C. Burghardt, A. Capra, P. Cristoforetti, W. Lam, J. B. van Waterschoot, G. J. Westerhof, and K. P. Truong

Babbelbord is a newly developed board game that is based on an old-fashioned game that is familiar to people with dementia. The purpose of the game is to reconnect people with dementia to their relatives and friends by stimulating narrative reminiscence with a personalized game question approach regarding memories. The game provides interactive and entertaining conversation starters in a gamified way between people with dementia and their relatives.

To get in touch with the designers, email: d.s.nazareth@utwente.nl
Balloons: Feasibility of a Virtual Reality Game in a Daycare Setting

University College Roosevelt & Utrecht University, Department of Science
Designed by G. Andringa, P. Nuijten, B. Bauer, L.R. van den Doel, and A. Roos

Balloons is a fully immersive Virtual Reality game, which focuses on the training of executive functions by means of motor inhibition and visuospatial working memory. The aim of this study is to explore the feasibility and effects of VR as a cognitive training tool in people with dementia in a daycare setting.

To get in touch with the designers, email: g.andringa@ucr.nl
PLAYTIME: Fun Activity to Stimulate Cognition, Mobility and Social Activity

Tranzo Tilburg University, GGzE, and Innovate Dementia
Designed by Linda Wijnen, Iris Geerts, Meike Kleeven, and Liselore Snaphaan

Playtime is made for and by people with dementia in a home situation. They can play individually, in a group, or both. The aim for this innovation was to get more structure in the day and make themselves useful. Playtime is a fun activity to do, but at the same time it trains those areas that often suffer from dementia; cognition, mobility and social activities.

To get in touch with the designers, email: liselore.snaphaan@ggze.nl
Envisioning Dementia
Enable Jackets: OK Dementia

Enable Foundation
Designed by Yanki Lee and Ire Tsui

Enable Foundation collaborates with London-based designer, Pascal Anson to create a series of Dementia Jackets to explore further how design objects can inspire everyone to be creative and open-minded with Dementia. Dementia Going is an action research/design project to engage young and old citizens to co-design possibilities for super ageing society. The key message is to invite everyone to “let go” with dementia. Exhibited at TAC during Dutch Design Week 2019.

To get in touch with the designers, email:
info@enable.org.hk
Hagu: Hugging Heals

University of Technology Eindhoven, Industrial Design & Kempenlef
Designed by Ayesha Nabila, Jing-cai Liu, and Silvia Cazacu

Inspired by the kimono, a traditional Japanese garment commonly known for the two sides wrapped around the torso, Hagu is a vest which tightly enfolds its owner giving the sensation of being hugged. Moreover, without necessarily knowing, the person living with dementia will wear an intelligent piece of clothing that reads their body’s behaviour, interprets it and when it senses distress, it starts giving a warming hug.

To get in touch with the designers, email: s.cazacu@student.tue.nl
Moving Memories

Design Academy Eindhoven
Designed by Aurore Brard

As a daily activity throughout our lives, cooking is largely automatic as our hands know what to do. This is known as procedural memory and is the last to slip away in people with dementia. Moving Memories is a set of playful, intuitive tools, that mimic familiar movements in cooking, stimulating the senses and encouraging curiosity. There is no wrong way to handle them. In a world that has become confusing and foreign, these movements are comforting in their familiarity.

To get in touch with the designers, email: info@aurorebrard.com
Seven Ways to Foster Interdisciplinary Collaboration

University of Applied Science Utrecht
Designed by Daan Andriessen, Marieke Zielhuis, Kees Greven, Wilke van Beest, Berit Godfroij, and Remko van der Lugt

Analyzing the startup phase of ten interdisciplinary projects, we found seven strategies to overcome these barriers: use boundary brokers, combine theory, combine research approaches, organize for collaboration, joint activities, separate activities, and use artefacts. As the projects involve exploring new products and technologies, particularly the use of artefacts might be a strategy to foster collaboration of healthcare and creative research disciplines.

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Alzheimer Nederland

Hubble, Campus Café