

Case Studies in Design Informatics 1 - INFR11094

Week 10, 18th November 2024

Co-Design

John Lee

Professor of Digital Media

john.lee@ed.ac.uk

(slides originally by
John Vines)



THE UNIVERSITY *of* EDINBURGH

design
informatics

What we will do today

- Co-design fundamentals
- Co-design theory
- Co-design in practice

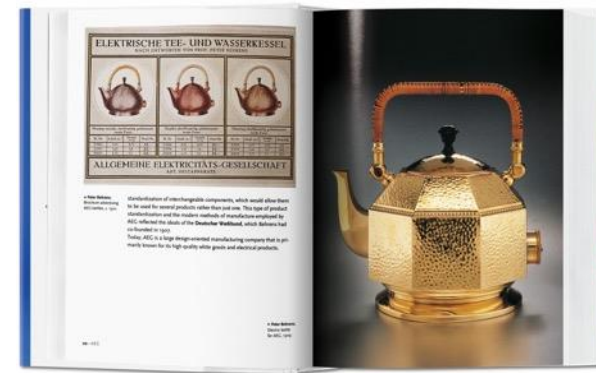
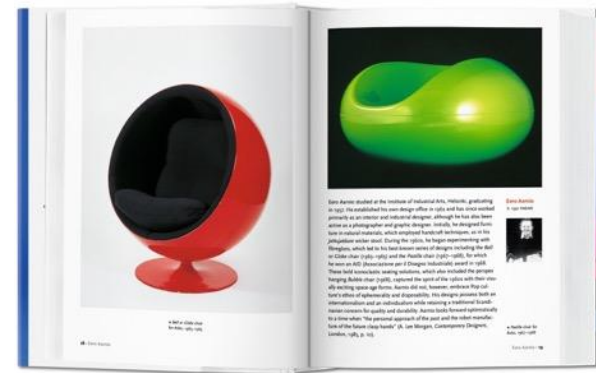
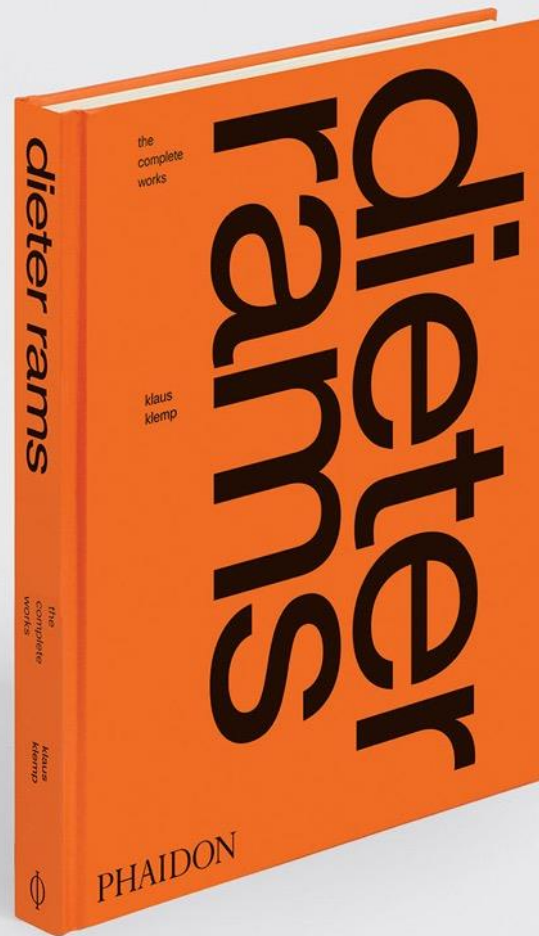


Co-design fundamentals

A brief history of “design”



A very brief history of “design”



THE UNIVERSITY of EDINBURGH

design
informatics

A very brief history of designing interactive technologies



Bundesarchiv, Bild 183-1089-0130-010
Foto: Grubitzsch (geb. Raphael), Waltraud | 30. Januar 1989

Since the 1970s, it's been recognized that to “design” complex interactive systems, you need expertise across multiple fields and disciplines:

- Expertise about how people think – psychology (perception, cognitive, ecological, social)
- Expertise on how people physically interact (human factors)
- Expertise on how people talk and communicate and interact (linguistics, ethnography)
- Expertise on how the systems work (computer science, AI)
- Expertise on how to translate this into user interfaces (interface and interaction design).

Grubitzsch (geb. Raphael), Waltraud. Copyright terms and licence:CC-Att-SA-3 (Creative Commons Attribution-ShareAlike 3.0)



THE UNIVERSITY of EDINBURGH

design
informatics

But ... what expertise is missing?

the person who uses the technology!



A question for you all...

Why should we involve users in the design process of new technologies (and products, services, systems) that they use, work and live with?

https://miro.com/app/board/uXjVLF7m1h8=?share_link_id=805114095118



THE UNIVERSITY of EDINBURGH

*design
informatics*

Student question!

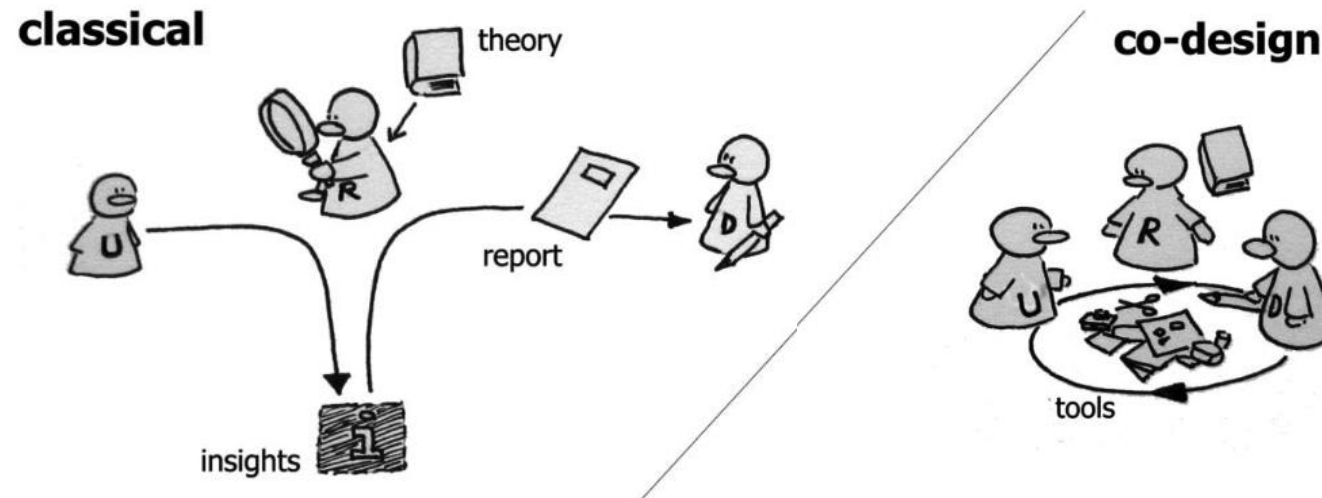
How is the role and skills required of a designer changing as a result of increasing co-design?



Co-design – what is it?

‘[an] approach towards computer systems design in which the people destined to use the system play a critical role in designing it.’

Schuler & Namioka, 1993, p.xi. Participatory design: Principles and practices



User = expert in experience and a creative agent
Researcher/Designer = expert in facilitation and technical knowledge

Sanders & Stappers. 2008. Co-creation and the new landscapes of design.



THE UNIVERSITY of EDINBURGH

design
informatics

Co-design – what is it?



What is CoDesign?

Folk definition:

Inclusion of non-designers in design activities

More precise definition:

Inclusion
of people that will be affected by design, often along professional designers,
in activities that alter the material and social shape of design for/in its eventual use context
in a direct way, and not only “by proxy” through informing, consultation or funding,
in decision making during the process and regarding desirable outcomes.

A” Aalto University
School of Arts, Design
and Architecture

Hyysalo. 2017. Co-design in the era of user participation.
<https://www.youtube.com/watch?v=a6OpHyxtjOE>



THE UNIVERSITY of EDINBURGH

design
informatics

Student questions!

Is it possible to think of co-design as a sub-component of co-creation, with co-creation being the broader concept?

Does Co-creation mean that designers and users co-create? What is the difference between this and co-design?



“Co”-what?

co-operative design

The original term for Participatory Design used in Scandinavia in the 1970s-late 1980s

Participatory design (with a big P)

A view of end-user involvement in design to destabilise power structures and empower workers/users

participatory design (with a little p)

A view of end-user involvement in design to inform more approximately designed systems and provide grounded insight

co-design (collaborative design)

A balanced and integrative approach to broad stakeholder and user involvement in design

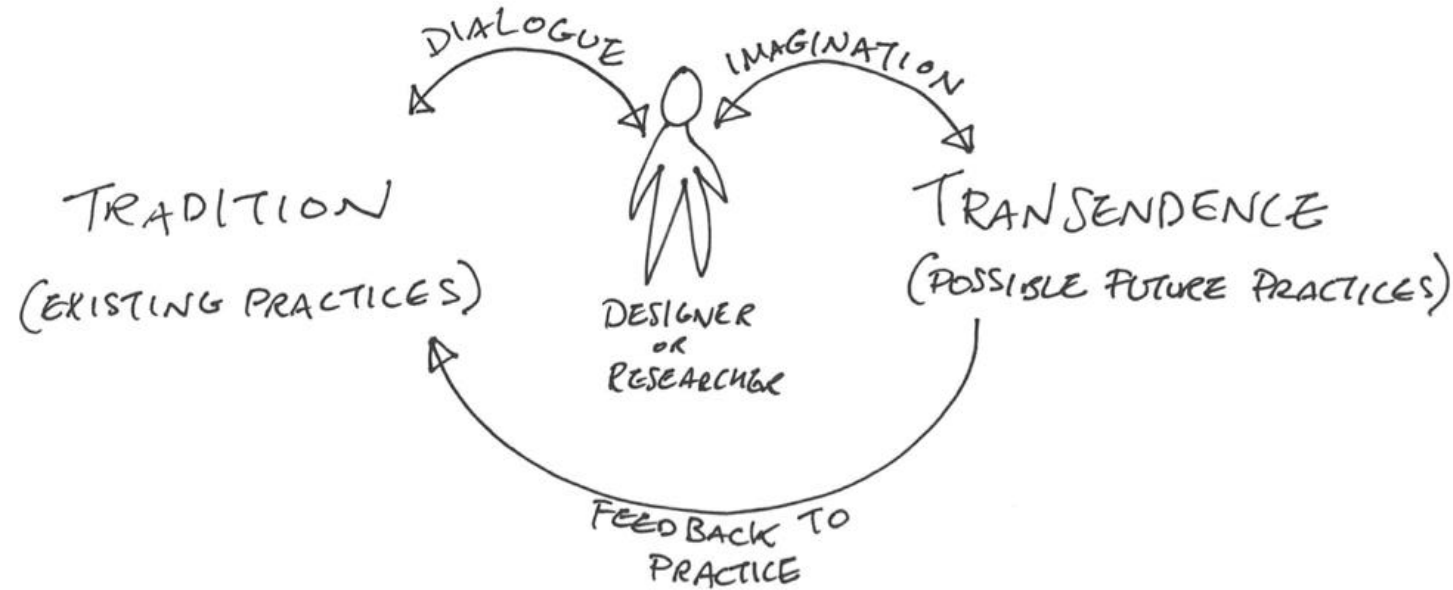
co-creation

As per co-design, but with core principle that all people (and not just designers) are creative and create their own systems



A bit of co-design “theory”

Traditions vs Transcendence



a fundamental tension in all 'user-focused' systems design is balancing an understanding and incorporation of existing traditions with providing opportunities for individuals to transcend and break existing boundaries

Ehn. 1989. *The Art and Science of Designing Computer Artifacts*



THE UNIVERSITY of EDINBURGH

design
informatics

Workshops in co-design

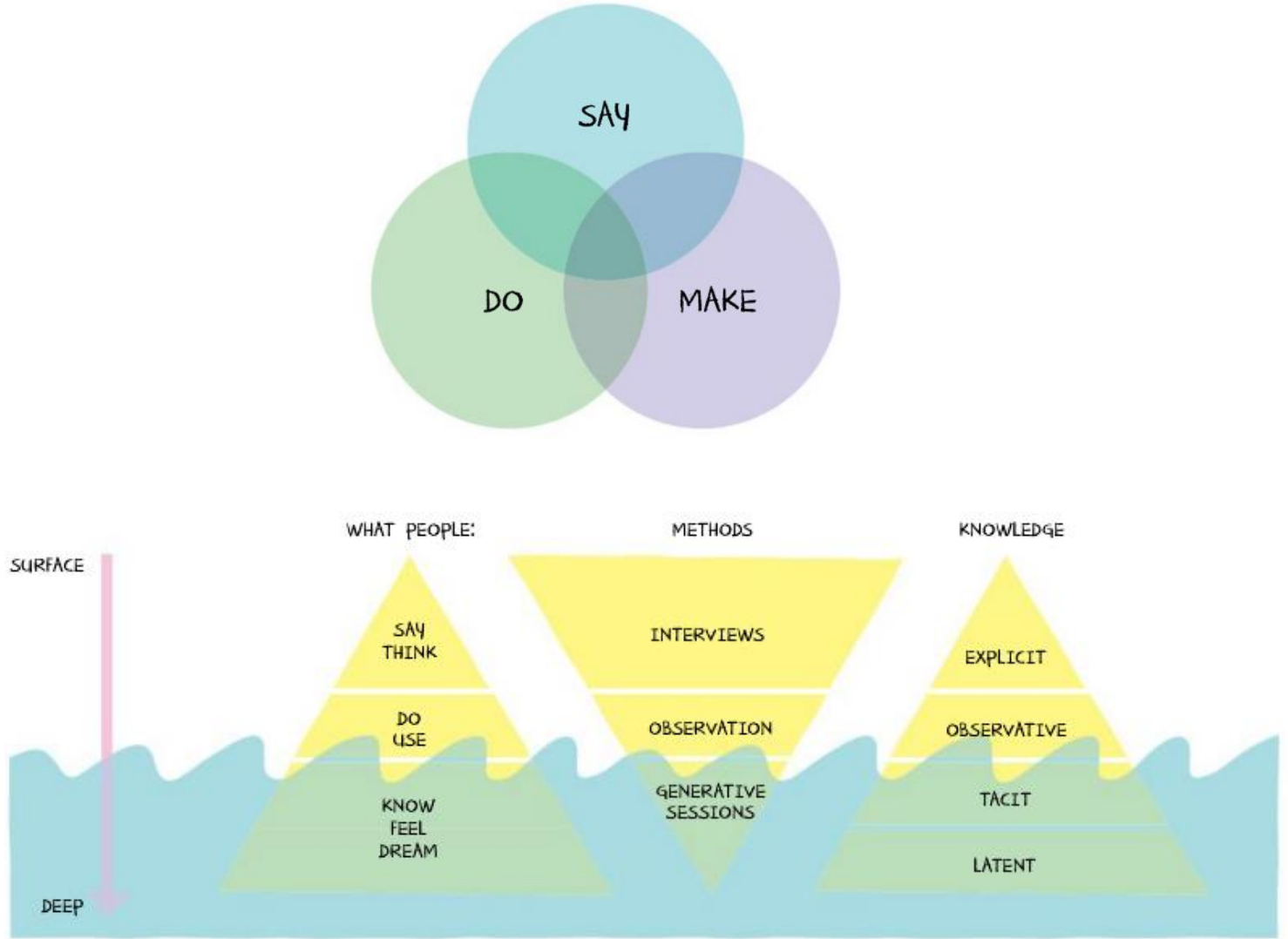
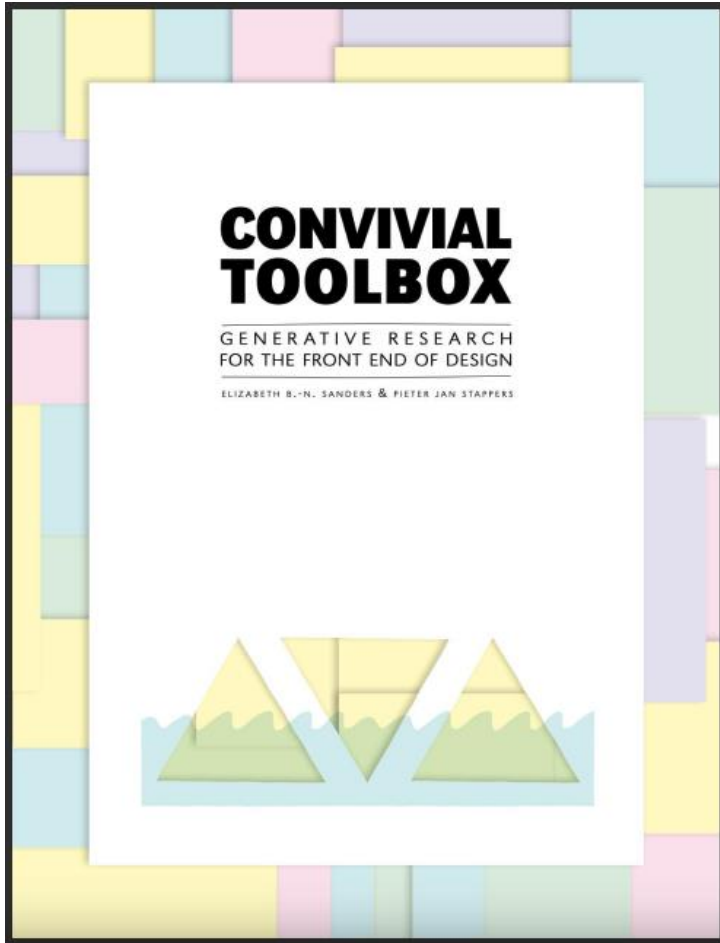
‘... workshops are usually held to help diverse parties (“stakeholders”) communicate and commit to shared goals, strategies, and outcomes (e.g., analyses, designs, and evaluations, as well as workplace-change objectives). Workshops are often held at sites that are in a sense neutral – they are not part of the software professionals’ workplace, and they are not part of the workers’ workplace.’

Muller, 2003, p.1060. Participatory design: The third space in HCI



“future workshops” - Kensing and Madsen. 1991. Generating visions. Future workshops and metaphorical design.

Say, Do and Make



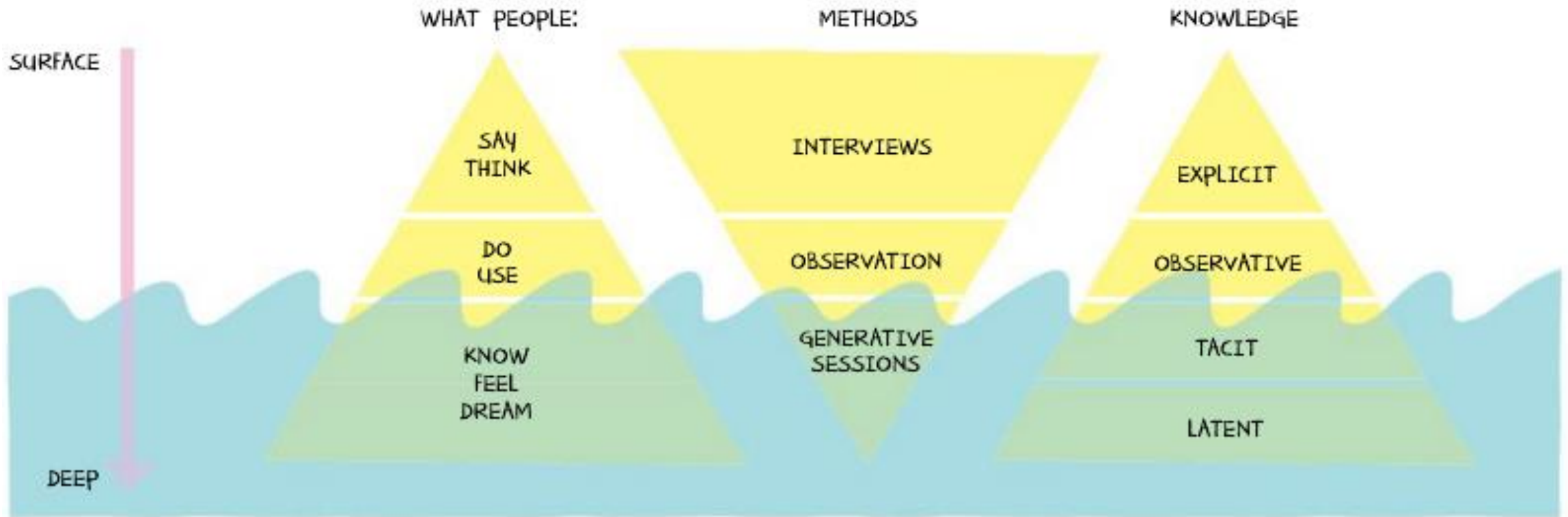
Sanders & Stappers. 2012. Convivial toolbox: Generative research for the front end of design.



THE UNIVERSITY of EDINBURGH

design
informatics

Say, Do and Make



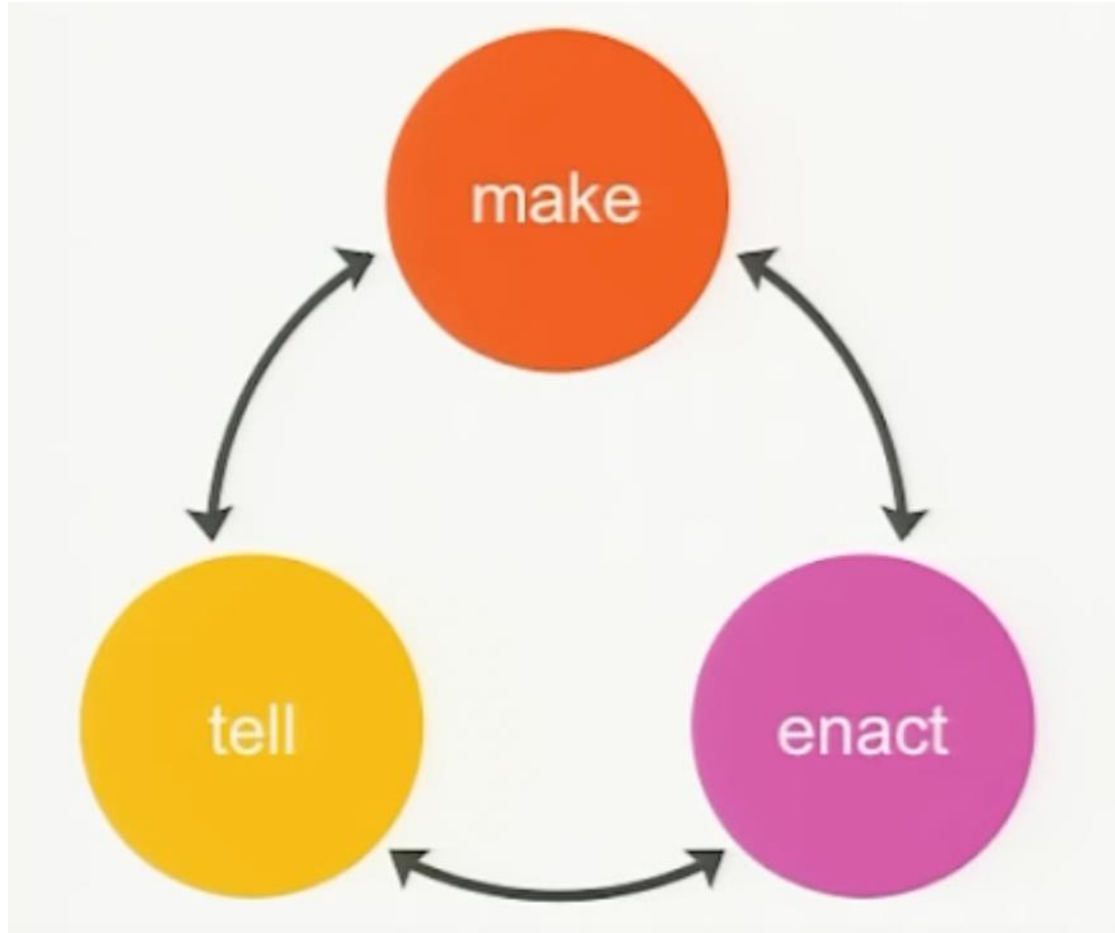
Sanders & Stappers. 2012. Convivial toolbox: Generative research for the front end of design.



THE UNIVERSITY of EDINBURGH

design
informatics

Make, Enact, and Tell



You can break down “Make” methods further and think about them as:

- **Make** – inviting people to “make” things that representing their knowledge, their feelings, their dreams
- **Enact** – inviting people to enact ideas and the things they make, to try things out, to walkthrough future situations
- **Tell** – inviting people to tell us stories, about their lives now but also their lives in the future and how their future lives might change through the things they have made and enacted

Take a break!
Back at 16:10



Co-design in practice

Co-design

Student ... reflection

... learning about probes and codesign, it seems that these design processes need to be designed themselves [...] it does make me wonder about whether a formal design process should be used to, for example, design probes.



Student question!

Can probes be used as part of the co-design process? Do they have any affiliation or connection?

I think they both involve stakeholders in the design of the project? Is it possible to give some case studies for comparison?



Co-design in practice – Connecting Carers

Initial data gathering

semi-structured on
transitions to being
a caregiver

Getting to know each other



Cultural probe co-analysis



Making “magic machines”



Celebration and policy event



Handover and evaluation



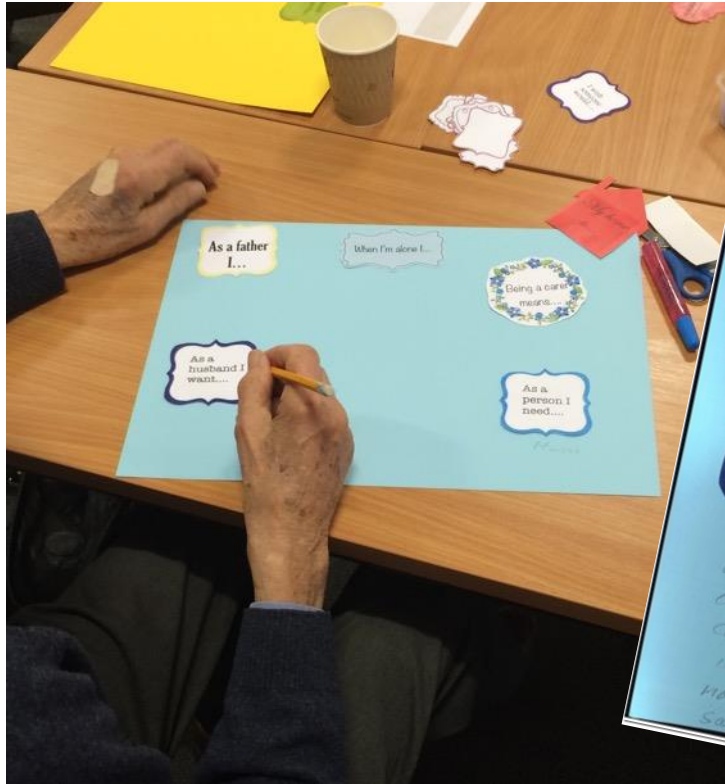
Development postcards



Low-fi testing of concepts



Co-design in practice – Getting to know each other



Co-design in practice – Getting to know each other



Co-design in practice – Connecting Carers

Initial data gathering

semi-structured on
transitions to being
a caregiver

Getting to know each other



Cultural probe co-analysis



Making “magic machines”



Celebration and policy event



Handover and evaluation



Development postcards



Low-fi testing of concepts



Co-design in practice – Cultural Probe co-analysis



in the right mug, tea is so comforting.

This is a Source of Comfort P.3

calming
cat!



Please take a picture of:

- | | |
|----------------------------------|------------------------------------|
| 1. Your home | 8. A source of wisdom |
| 2. What you enjoy | 9. What is significant to you |
| 3. A source of comfort | 10. What helps you |
| 4. Where you spend a lot of time | 11. What you'd like to give others |
| 5. What you'd like more of | 12. What is time consuming |
| 6. What you rely on | 13. A thing of beauty |
| 7. What you find difficult | 14. Something ugly |



Hospital: TBA



Something I'd like to give
Others p. 11.



THE UNIVERSITY of EDINBURGH

design
informatics

Co-design in practice – Cultural Probe co-analysis



Co-design in practice – Connecting Carers

Initial data gathering

semi-structured on
transitions to being
a caregiver

Getting to know each other



Cultural probe co-analysis



Making “magic machines”



Celebration and policy event



Handover and evaluation



Development postcards



Low-fi testing of concepts

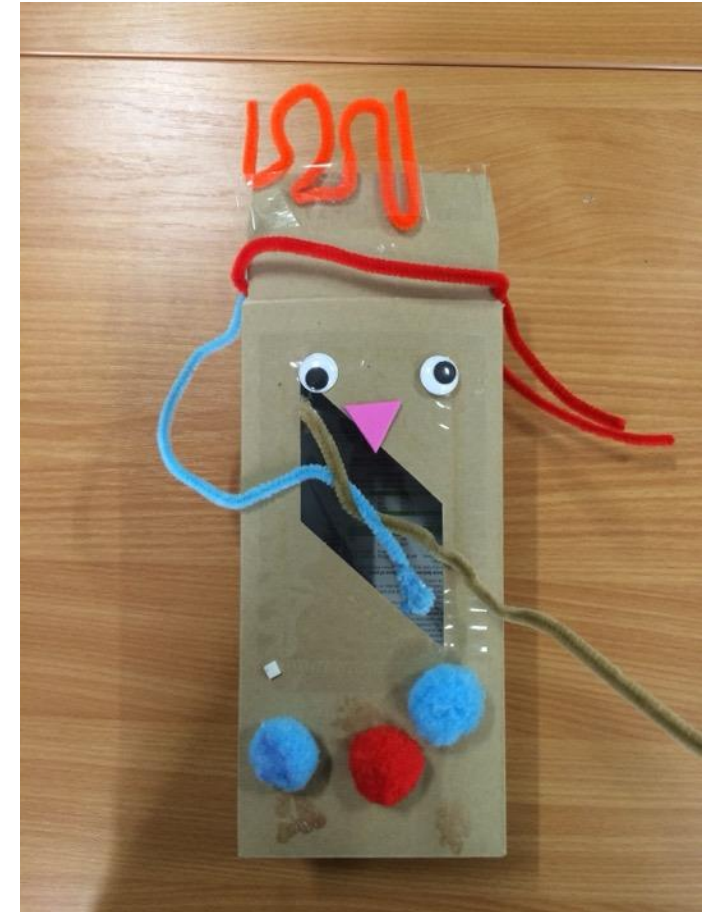


Co-design in practice – Making magic machines

“imagine you are transported through time from 2116 to the present day. You have brought back a magical device that is used by carers of the future to communicate with one another. What is it?”



Co-design in practice – Making magic machines



Co-design in practice – Connecting Carers

Initial data gathering

semi-structured on
transitions to being
a caregiver

Getting to know each other



Cultural probe co-analysis



Making “magic machines”



Celebration and policy event



Handover and evaluation



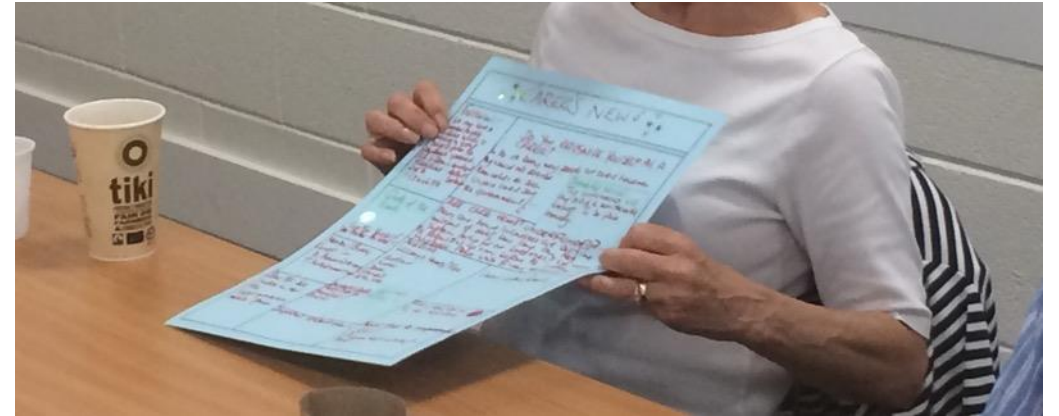
Development postcards



Low-fi testing of concepts



Co-design in practice – Low-fi testing of concepts



Co-design in practice – Low-fi testing of concepts

ENRICH.

<u>Weekly Column By Carer.</u> Funny! 	APPS • Headspace • Fitness • Food • Games	Courses ie. Age UK for IT & 1 packs.
<u>Singing For the Brain</u> Photo Story	5 Love Languages • Words of affirmation • Giving & gifts • Quality time • Acts of Service • Physical touch	Podcasts iPlayer
<u>Accessible Places To Visit</u> Feature.	What's On • Tea Dance • Craft Fayre • Talk • Cinema - Silver Screen - Action etc.	Book Review?

Explanation.....

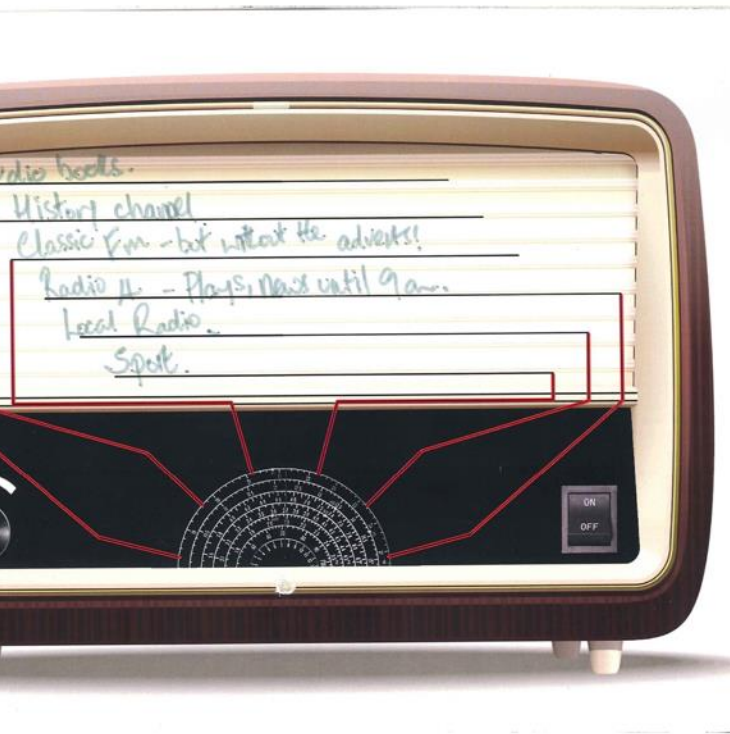
CARER'S NEWS

Editorial:- We now have a mentor/buddy scheme which is proving a great success from the feedback received. All 4 Jean's contact telephone details below. 12340689	Do You RECOGNISE YOURSELF AS A CARER? In the UK today many people are carers however they would not describe themselves as such. Unpaid carers save the government/.... Breaking news! The government will pay carers a non-taxable amount. To be paid annually.
Quote of the week. ☺ 'Care For Yourself You Matter As Well!' Mentor/Buddy Carer:- A. Brown@uk.com J. Smith@qmail.com	ARE CARE HOMES UNDERFUNDED? Many care home businesses are carrying millions of debt. How long can they sustain caring for our loved ones? We need to follow this up now before the system implodes. Please write to your MP, example:- Accessible Holiday Homes/Trips Scotland Wales Devon Cornwall etc, etc.
Plans for Sale Walker as new Fox Large numbered mobile 'phone.	Care's Letter/Emails Courses for Carers:- Important Contact Nos:- SW... OT... Fingnes dept LA dept... BNP....

ITS OKAY

Care Corner Apologise a family of overalls - but one has been over on roll! 	'Motivational Headline Here!' A focus on someone cool - makes you feel proud. Like 'Patrick Stewart Cares for his partner.' 
Podcasts	'What's on the telly?' focus on diversity, carers, disability etc. The A Word Am BBC 1 - but don't worry, it'll be on iPlayer.
Book Summary We summarise books here so you can sound well-read without having to read them.	Have you looked after yourself today? Here are some reminders: • Be mindful with a cup of tea. 'You can't pour from an empty cup.'

Co-design in practice – Low-fi testing of concepts



Co-design in practice – Connecting Carers

Initial data gathering

semi-structured on
transitions to being
a caregiver

Getting to know each other



Cultural probe co-analysis



Making “magic machines”



Celebration and policy event



Handover and evaluation



Development postcards



Low-fi testing of concepts



Co-design in practice – Co-designed outcome



Co-design in practice – Co-designed outcome



<https://vimeo.com/uniofbath/tacklingloneliness>



THE UNIVERSITY of EDINBURGH

design
informatics

Another example: Co-design for Social Innovation



“Manzini distinguishes between *diffuse design* (performed by everybody) and *expert design* (performed by those who have been trained as designers) and describes how they interact. He maps what design experts can do to trigger and support meaningful social changes, focusing on emerging forms of collaboration.”

From ***The Open Book of Social Innovation*** — SI involves:

- alliances between the top and the bottom, ... the ‘bees’ (the creative individuals with ideas and energy) and the ‘trees’ (the big institutions with the power and money to make things happen to scale)
- the creative blending of ideas from multiple sources
- creative blending and recombination of disparate elements and ideas
- the use of mapping techniques to reveal hidden needs and unused assets

Murray, R., Caulier-Grice, J. and Mulgan, G. (2010). The open book of social innovation. National endowment for science, technology and the arts, London.

<https://www.nesta.org.uk/report/the-open-book-of-social-innovation/>

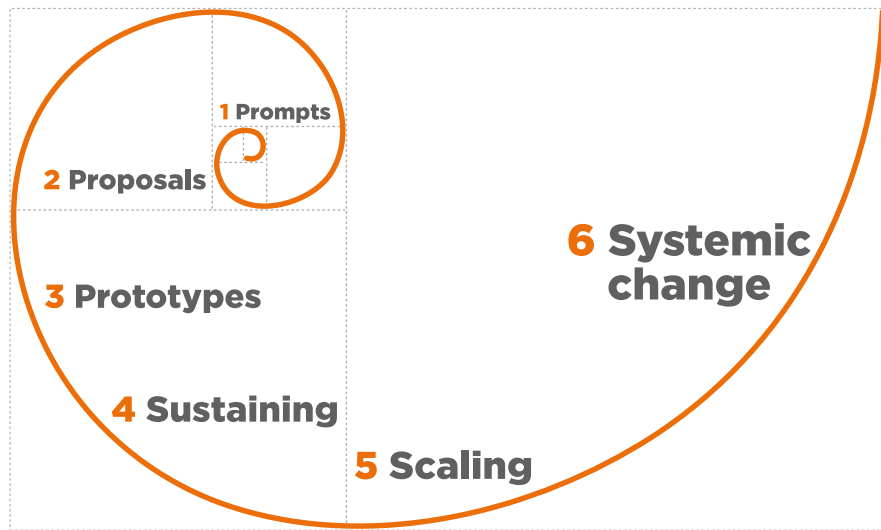
Ezio Manzini (2015). Design, When Everybody Designs: An Introduction to Design for Social Innovation. MIT Press.
<http://dx.doi.org/10.7551/mitpress/9873.001.0001>



THE UNIVERSITY of EDINBURGH

design
informatics

Another example: Co-design for Social Innovation



The “Social Innovation spiral”:
from the bees to the trees

Cheung-Nainby, P., and Lee, J. (2018) Transformative Learning: co-design with communities’ collective imagery as data for social innovation, in Storni, C., Leahy, K., McMahon, M., Lloyd, P. and Bohemia, E. (eds.), *Design as a catalyst for change - DRS International Conference 2018*, 25-28 June, Limerick, Ireland.
<https://doi.org/10.21606/drs.2018.360>

Mezirow, J (1997). "Transformative Learning: Theory to Practice". *New Directions for Adult and Continuing Education*. 1997 (74): 5-12.
<https://doi.org/10.1002/ace.7401>

Participatory co-design workshops, aiming to produce prompts and proposals

- “collective imagery” as codesign framework
- shared by codesigners for conceptual structuring
- realised in a tangible, embodied form
- a collective space to envision/enact design complexity
- perhaps also a process of *transformative learning* (Mezirow)
— “becoming critically aware of one’s own tacit assumptions and expectations and those of others and assessing their relevance for making an interpretation”

Challenge: to capture the local workshop outcomes and relate to broader, perhaps global scales

- approached by treating “weave” structure as data

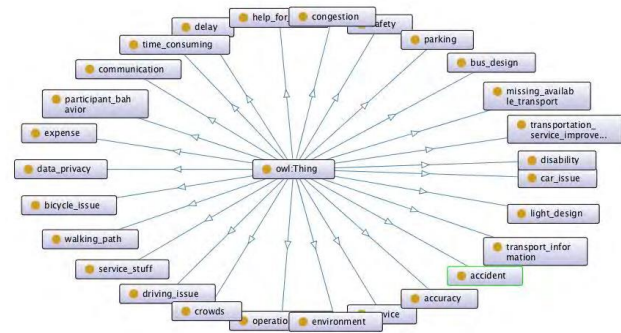


THE UNIVERSITY of EDINBURGH

design
informatics

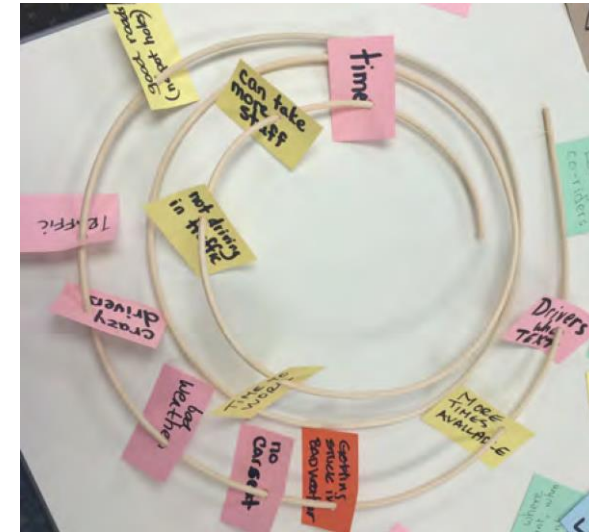
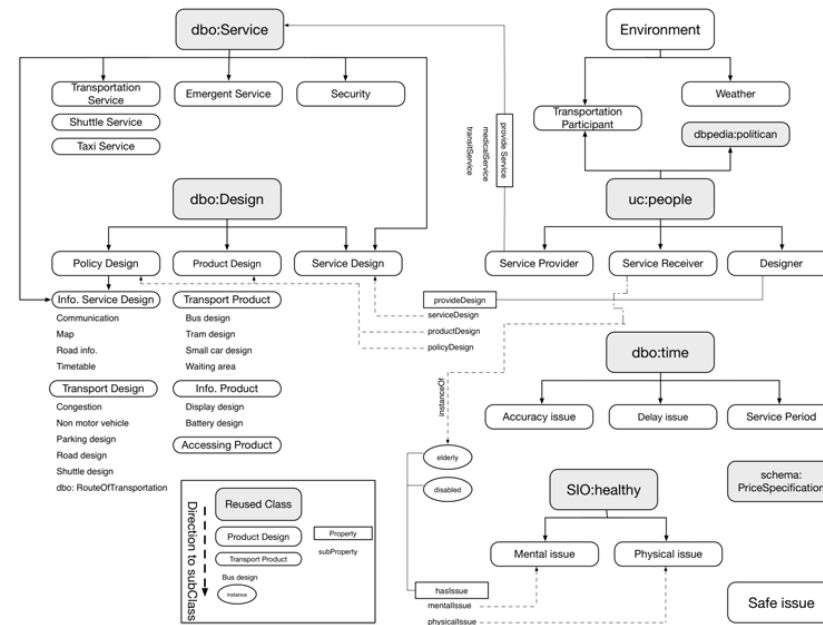


Approaches to analysis (1)



“Ontologising the workshop”

185	Avoid congestion	ideal	Orange	20		14/06/2016 Coventry
186	Bus not arriving	fear	Green	20		14/06/2016 Coventry
187	Just in time taxi	ideal	Orange	20		14/06/2016 Coventry
188	live bus time	good	Yellow	20		14/06/2016 Coventry
189	miss appointment	OldAge	Blue	20		14/06/2016 Coventry
190	No bus light	fear	Green	20	I want to get to hospital with an	14/06/2016 Coventry
191				20	appointment, but there is congestion	14/06/2016 Coventry



Group	1	2	3	4	5	6	7	8	9	10
experience	falls	space	falls	clear info	What path	exhaust	confusion	duty	car speed	
injury	access	all day on th	inconvenient	uniform	repair delays	noise	disconnectness	food desert	long time	
late	rudeness	choices	danger	late	confusion	biking	seating area	reserved seat	too fast	
attack	how to pay	isolation	lane switchness	texting while	inconvenient	efficiency of rou	low cost	moving too slow	fun at night	
safe	covered stop	close to h	accommodating s	inexpensive	outdoors	frequent	refresh	timely	can take m	
fast	very clean	density	ease of use	embark	shoveled wall	information	trains	excise	flat terrain	
time	crowds	exhaust	traffic	net/floors	high speed tri	friendly	on time	access for all	stops at cli	
angry	limit	speed	bad weather	distance ser	limited wait	comfortable	courtesy	central resour	bike focus	
quick	\$	environmen	options	quite	crime	physical limitat	bad sidewalks	miss travel	data stolen	
schedule	nice weather	confusion	cheaper	timeliness	crash	crowded bus	being late	jaws of life	safety	
p(M)	0.9	0.9	0.6	0.7	0.6	0.3	0.7	0.8	0.7	1
p(R)	0.5	0.6	0.3	0.5	0.4	0.1	0.5	0.6	0.2	0.5

Work by
Zedong You

See also: Cheung-Nainby, P., Lee, J., Zi, B., and Gardin, A. (2016) A Creative Ontological Analysis of Collective Imagery during Co-Design for Service Innovation, in Lloyd, P. and Bohemia, E. (eds.), *Future Focused Thinking - DRS International Conference 2016*, 27 - 30 June, Brighton, UK.
<https://doi.org/10.21606/drs.2016.407>



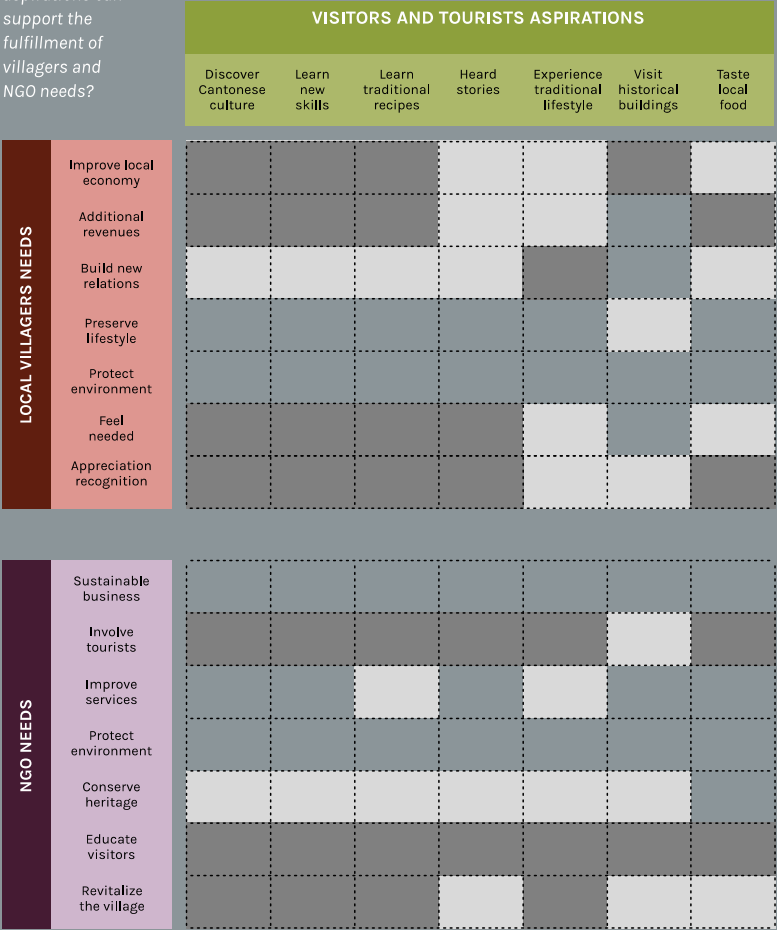
THE UNIVERSITY of EDINBURGH

design
informatics

Approaches to analysis (2)

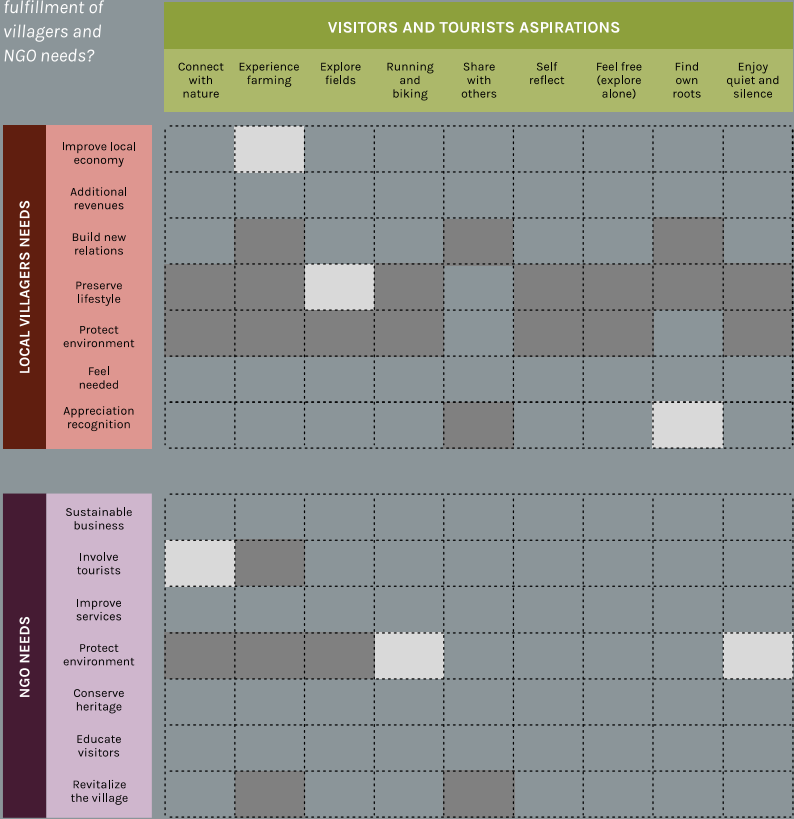
4.29 ASYMMETRIC CLUSTERING MATRIX COLLECTIVE IMAGERY ANALYSIS #1

How much visitors aspirations can support the fulfillment of villagers and NGO needs?



4.30 ASYMMETRIC CLUSTERING MATRIX COLLECTIVE IMAGERY ANALYSIS #2

How much visitors aspirations can support the fulfillment of villagers and NGO needs?



Village 2 CangDong — Envisioning future scenario

Federica Bagini, **VILLAGE REGENERATION**: creating a widespread service-system to enhance educational tourism around CangDong, Master of Science in Product Service System Design, **politecnico di milano**, School of Design, 2015/16

Another question for you all...

What could be the difficulties and challenges for involving people (users, participants, "non-designers") in a design process?

https://miro.com/app/board/uXjVLF7m1h8=/?share_link_id=805114095118



Student question!

What tools and techniques are available for co-designing, how can they be applied in practice?



Method example: Magic machines

Workshop activities – 1 to 2 hours – 6 steps

1. Short introduction: setting the scene for the workshop.
2. Giving a prompt:
 - A short activity related to the topic of the project
 - A simple “on ramp” for participants
 - Example: “Draw the sound you want to make on your hand” ;
“Write down a personal fear you have for getting old” ;
“Write down a desire you have, and somewhere on the body related to that desire.”
3. Asking them to make a machine that addresses their response to the prompt, using available materials.
4. Presenting the machine – usually role play, imagining its use
5. Discussion of each persons machine
6. Documentation – photos of people with their machines



Andersen & Wakkary. 2019. The Magic Machine Workshops. Proc. ACM CHI 2019.

Method example: Magic machines



Andersen & Wakkary. 2019. The Magic Machine Workshops. Proc. ACM CHI 2019.



THE UNIVERSITY of EDINBURGH

design
informatics

Method example: Magic machines

CHI 2019 Paper

CHI 2019, May 4–9, 2019, Glasgow, Scotland, UK

The Magic Machine Workshops

Making Personal Design Knowledge

Kristina Andersen
Future Everyday, Industrial Design
Eindhoven University of Technology
h.k.g.andersen@tue.nl

Ron Wakkary
Simon Fraser University
Eindhoven University of Technology
rwakkary@sfu.ca

ABSTRACT

New technologies emerge into an increasingly complex everyday life. How can we engage users further into material practices that explore ideas and notions of these new things? This paper proposes a set of qualities for short, intense, workshop-like experiences, created to generate strong individual commitments, and expose underlying personal desires as drivers for ideas. By making use of open-ended making to engage participants in the imagination of new things, we aim to allow a broad range of knowledge to materialise, focused on the making of work that is about technology, rather than of technology.

CCS CONCEPTS

• **Human-centered computing** → **Participatory design**: HCI theory, concepts and models; Interaction design theory, concepts and paradigms.

KEYWORDS

Design Research, Material Practise, Making, Magic.

ACM Reference Format:

Kristina Andersen and Ron Wakkary. 2019. The Magic Machine Workshops: Making Personal Design Knowledge. In *CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2019)*, May 4–9, 2019, Glasgow, Scotland UK. ACM, New York, NY, USA, 13 pages. <https://doi.org/10.1145/3290605.3300342>

1 INTRODUCTION

The HCI and design community makes frequent use of workshops to gather input for design and research processes. As

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than the author(s) must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions.acm.org.
CHI 2019, May 4–9, 2019, Glasgow, Scotland UK
© 2019 Copyright held by the owner/author(s). Publication rights licensed to ACM.
ACM ISBN 978-1-4503-5970-2/19/05...\$15.00
<https://doi.org/10.1145/3290605.3300342>

Paper 112

Page 1

<https://dl.acm.org/doi/10.1145/3290605.3300342>



Figure 1: Early example of a magic machine: The Singing Translator from Transmediale 2009.

technology becomes more complex and ubiquitous, we believe it becomes increasingly important to open up the design process of new technological things.

However, workshop formats tend to look to the outcomes and participants as resources for design and research projects. This is limiting in a number of ways: It overlooks the potential of personal and individual visions and takeaways for the participants themselves, it narrows the scope of what can be addressed within the workshop process – in turn limiting the potential of the outcomes, and finally it controls the extent to which participants can take control of and reframe the focus of the overall research inquiry beyond the context of the workshop itself.

This paper describes a workshop technique, which has evolved over time to leverage artistic tradition and workshop experience for the benefit of supporting the generation of deeply personal material by participants. This inverts the norms of existing design workshops in that it is not aimed solely at providing data for research projects, or groups of imagined users, but rather targets the participant to develop radically personal visions of a potential novel technological thing. While these visions may serve to build personal and critical positions by the individual participants, the benefit for the facilitators lies in enabling a greater diversity in the creative outcomes, vision, and sharing within the group

Problem-solving or not? The Boundaries of HCI Research

#chi4good, CHI 2016, San Jose, CA, USA

Anti-Solutionist Strategies: Seriously Silly Design Fiction

Mark Blythe
Northumbria University
Newcastle
mark.blythe@northumbria.ac.uk

Kristina Andersen
STEIM
Achtergracht 19
1017WL Amsterdam,

Rachel Clarke, Peter Wright
Open Lab, Newcastle University
Rachel.Clarke@newcastle.ac.uk
p.c.wright@newcastle.ac.uk

ABSTRACT

Much of the academic and commercial work that seeks to innovate around technology has been dismissed as “solutionist” because it solves problems that don’t exist or ignores the complexity of personal, political and environmental issues. This paper traces the “solutionism” critique to its origins in city planning and highlights the original concern with imaging and representation in the design process. It is increasingly cheap and easy to create compelling and seductive images of concept designs, which sell solutions and presume problems. We consider a range of strategies, which explicitly reject the search for “solutions”. These include design fiction and critical design but also less well-known techniques, which aim for useless, questionable and silly designs. We present two examples of “magic machine” workshops where participants are encouraged to reject realistic premises for possible technological interventions and create absurd propositions from lo-fi materials. We argue that such practices may help researchers resist the impulse towards solutionism and suggest that attention to representation during the ideation process is a key strategy for this.

Author Keywords

Design fiction, well being, older people.

ACM Classification Keywords

H.5.m. Information interfaces and presentation

SOLUTIONISM AND REPRESENTATION

In *To Save Everything Click Here* Eugeny Morozov castigates the products of silicon valley and many academic research labs for providing solutions to problems that do not exist or prototyping reductive “silver bullet” solutions for complex social, political and environmental problems [31]. He takes the term “solutionism” from Michael Dobbins’s 2009 book “Urban Design and People” [16]. As HCI begins to address the development of “smart cities” it is increasingly important to engage with solutionism as it relates to urban and city planning. Dobbins argues that “solution-driven design” generally reaches for answers before questions have been asked fully:

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored.

Copyright is held by the owner/author(s).
CHI’16, May 07–12, 2016, San Jose, CA, USA
ACM 978-1-4503-3362-7/16/05
<http://dx.doi.org/10.1145/2858036.2858482>

This work is licensed under a Creative Commons Attribution International 4.0 License.



4968

“The disconnect between problem and solution, always likely to be an issue, became exaggerated in the culture and practice of modernism in city design and planning, where problems were “dumbed down” to meet the solutions offered.” (p. 182)

He points out that the history of civic design is littered with failed solutions that presume problems rather than investigate them. Although the “big ideas” of consultants may be very seductive, it is likely that they will only solve part of a problem and may not apply across different contexts. For example, “festival markets” helped regenerate Baltimore’s inner harbor in the nineteen sixties and they were adopted as a strategy to regenerate other areas across the US. Despite working in Baltimore the markets failed in most other places (ibid).

Dobbins’ solutionist critique echoes concerns with technology-driven approaches long familiar in HCI but focuses in particular on the question of representation. He warns that the problem is “potentially disastrous” when very compelling images are used to present a concept:

“The big idea may be so seductive, may get so imageable so fast that people are swept up in the process,” (p.183)

The rise of solutionism in “Silicon Valley” and academic research has been supported by sophisticated future vision representations e.g. short films showcasing Google Glass or the Microsoft Home of the Future. But making things imageable is at the heart of what designers do, from sketching to prototyping. This paper argues that representation is crucial to how we imagine future technologies. It critiques current design representations as overly seductive and explores alternative strategies that reject the search for solutions. The work responds to visions of the smart city as they relate to older people.

SOLUTIONIST CITIES

Adam Greenfield traces twenty first century visions of “smart cities” to the High Modernism of the nineteenth century:

“The smart city replicates in tone, tenor, form and substance most if not all of the blunders we associate with the discredited high modernist urban planning techniques of the twentieth century” [21]

Songdo, South Korea’s “ubiquitous city”, for example segregates work to a central business area in towers along a

<https://dl.acm.org/doi/10.1145/2858036.2858482>



THE UNIVERSITY of EDINBURGH

design
informatics

Cartoonlike expressions often leave room for a variety of interpretations. They can also add an element of fun.

Raw collections of scrap materials can be used for constructing objects or for embellishing rough prototypes.

Emotional toolkit: Photos and words (or phrases) are used for eliciting memories from the past. The backdrop might be blank, allowing the participant to define its structure. Or the backdrop may be predefined to elicit specific content. For example, good memories inside the circle, and bad memories outside the circle.

Storyline toolkit: This toolkit optimized for the expression of a story. A timeline running from left to right defines the flow of time. Visual and verbal elements might be included to facilitate thinking and expression.

Cognitive toolkit: A range of simple and symbolic shapes combined with words can be used to express relationships between ideas or components. For example, how does teamwork work?

Group cognitive toolkit: When a toolkit is created for group use, its elements must be bigger, so that it can be handled by multiple people at the same time, and be read from a distance.

Group cognitive toolkit: When a toolkit is created for group use, its elements must be bigger, so that it can be handled by multiple people at the same time, and be read from a distance.



Student questions!

How can we ensure that the participating users can represent the needs of the majority of users in the co-design process?

I often see the concept of "democratic design" in IKEA products. Can IKEA products be seen as co-design? Why?

<https://ikeamuseum.com/en/whats-on/exhibitions/the-story-of-ikea/democratic-design/>
<https://www.youtube.com/watch?v=apVUIZXeS84>



Student question!

Co-creation seems to lead to more innovative and personalised solutions. Does this mean that every design project needs a unique approach to co-creation? Is there a place for standardisation and scale in co-creation?



Student question!

*Co-creation seems to lead to more innovative and personalised solutions. Does this mean that every design project needs a unique approach to co-creation? Is there a place for **standardisation** and scale in co-creation?*



Student question!

Co-creation seems to lead to more innovative and personalised solutions. Does this mean that every design project needs a unique approach to co-creation? Is there a place for standardisation and scale in co-creation?



Co-design at scale: Metro Futures



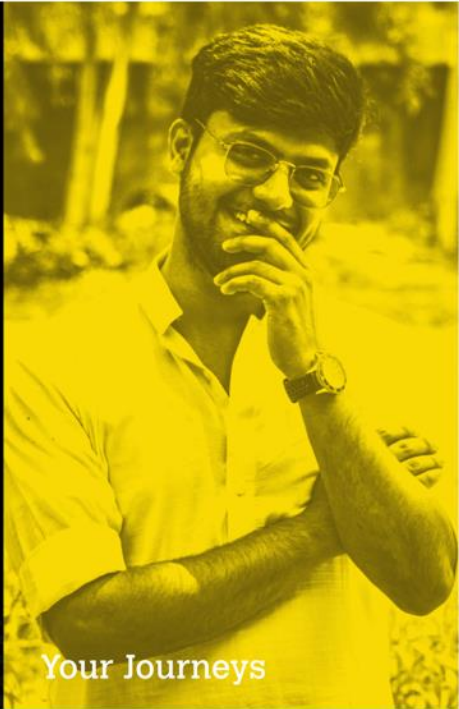
Menu ▾



Explore Your Metro



Configure Your Metro



Your Journeys

The 2020 public consultation is now closed, click here to see the [findings](#). Images are of 2020 proposed design that are currently being revised.

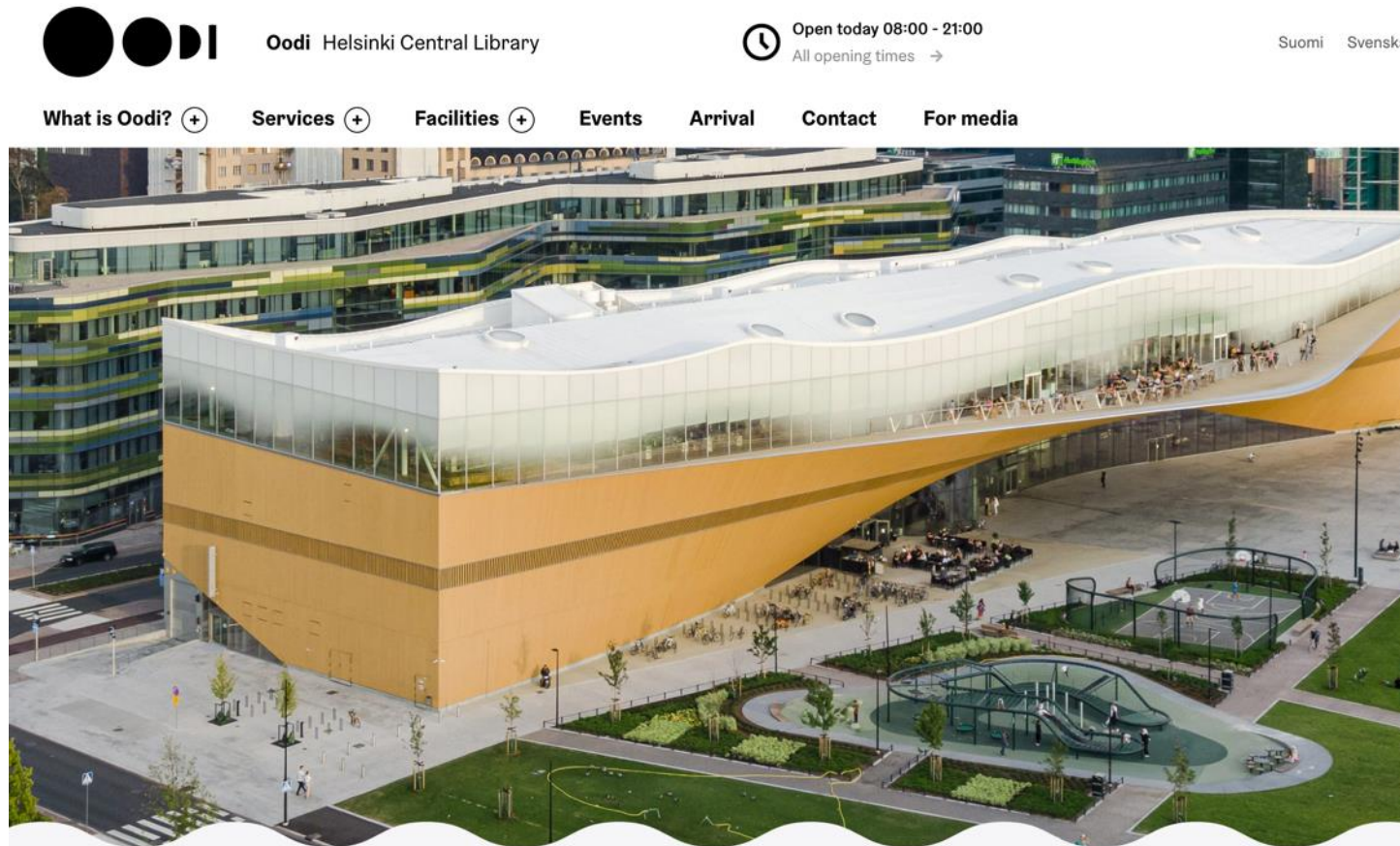


Online Tool Or Activity	Engagements	Depth
Twitter and Facebook polls	14100	Shallow
Website	8160	Mid
Webinar, Active Participants (Slido)	824	Mid
Workshop Attendances	53	Deep
Total	23137	

Simon Bowen, Peter Wright, Alexander Wilson, Andy Dow, Tom Bartindale, and Robert Anderson.
2020. Metro Futures: Experience-Centred Co-Design at Scale. In Proceedings of the 2020 CHI
Conference on Human Factors in Computing Systems (CHI '20). Association for Computing
Machinery, New York, NY, USA, 1–13. <https://doi.org/10.1145/3313831.3376885>



Co-design at scale: Helsinki Public Library



Virve Miettinen. 2018. Redefining the Library: Co-Designing for Our Future Selves and Cities, Public Library Quarterly, 37:1, 8-20, DOI: [10.1080/01616846.2017.1379348](https://doi.org/10.1080/01616846.2017.1379348)

**Oodi** Helsinki Central Library

Open today 08:00 - 21:00
All opening times →

Suomi Svenska

PUBLIC LIBRARY QUARTERLY
2018, VOL. 37, NO. 1, 8-20
<https://doi.org/10.1080/01616846.2017.1379348>

Routledge
Taylor & Francis Group

What is Oodi? + Services + Facilities + Events Arrival Contact For media



Redefining the Library: Co-Designing for Our Future Selves and Cities

Virve Miettinen

Culture & Leisure, Helsinki City Library, Helsinki, Finland

ABSTRACT

Co-design approach gives us new possibilities to redefine libraries. Involvement of the community and users is an important avenue in creating an up-to-date library services that will be adaptable and flexible enough to meet the future. A well-designed and user-friendly library can reflect a community's character back to itself, crystallizing who it is, in all its multiplicity, and what it stands for. Working together with the citizens around common goals is an important step in creating safer, healthier, happier and more inclusive communities and cities.

Helsinki City Library has utilized customer-oriented methods for a long time already. However, in recent years, there has been a shift in thinking. Customer orientation used to mean examining citizens in panels and as targets of design, but nowadays library users themselves participate in planning and decision-making. The aim is to carry out true involvement processes, i.e., processes that have a direct impact on the services and organization. Co-design in library context means a process of collaborative knowledge sharing and solution creation, driven by a belief that everybody is creative and can contribute to planning when provided with knowledge and tools.

KEYWORDS

Co-design; community engagement; Helsinki City library; customer focus; building design; Helsinki City library



THE UNIVERSITY of EDINBURGH

design
informatics

Final question for you all...

**What are the limitations of co-design, co-creation,
participatory design etc.?**

https://miro.com/app/board/uXjVLF7m1h8=?share_link_id=805114095118



THE UNIVERSITY of EDINBURGH

*design
informatics*

The final prep-work...

Tasks for the next 5 days:

In the Class Notebook, please add:

- 3 comments on this lecture
- (at least) 2 questions about coursework or content covered throughout the semester
- 1 thing you have taken away from CDI1

Next week will be a Question and Answer session with Susan – this is an opportunity for you to ask questions that cover:

- Any of the content from the 10 weeks of different topics, or:
- Any of the assignments

And finally! Please consider completing this short feedback survey about the course just now – it should only take about 5 minutes:

<https://forms.office.com/e/08xNR8C1En>

Many thanks!

