



We know *why*, but *how*?

Methods and tools to support collaborative ecosystems

Rebecca Earley

Professor of Circular Design Futures

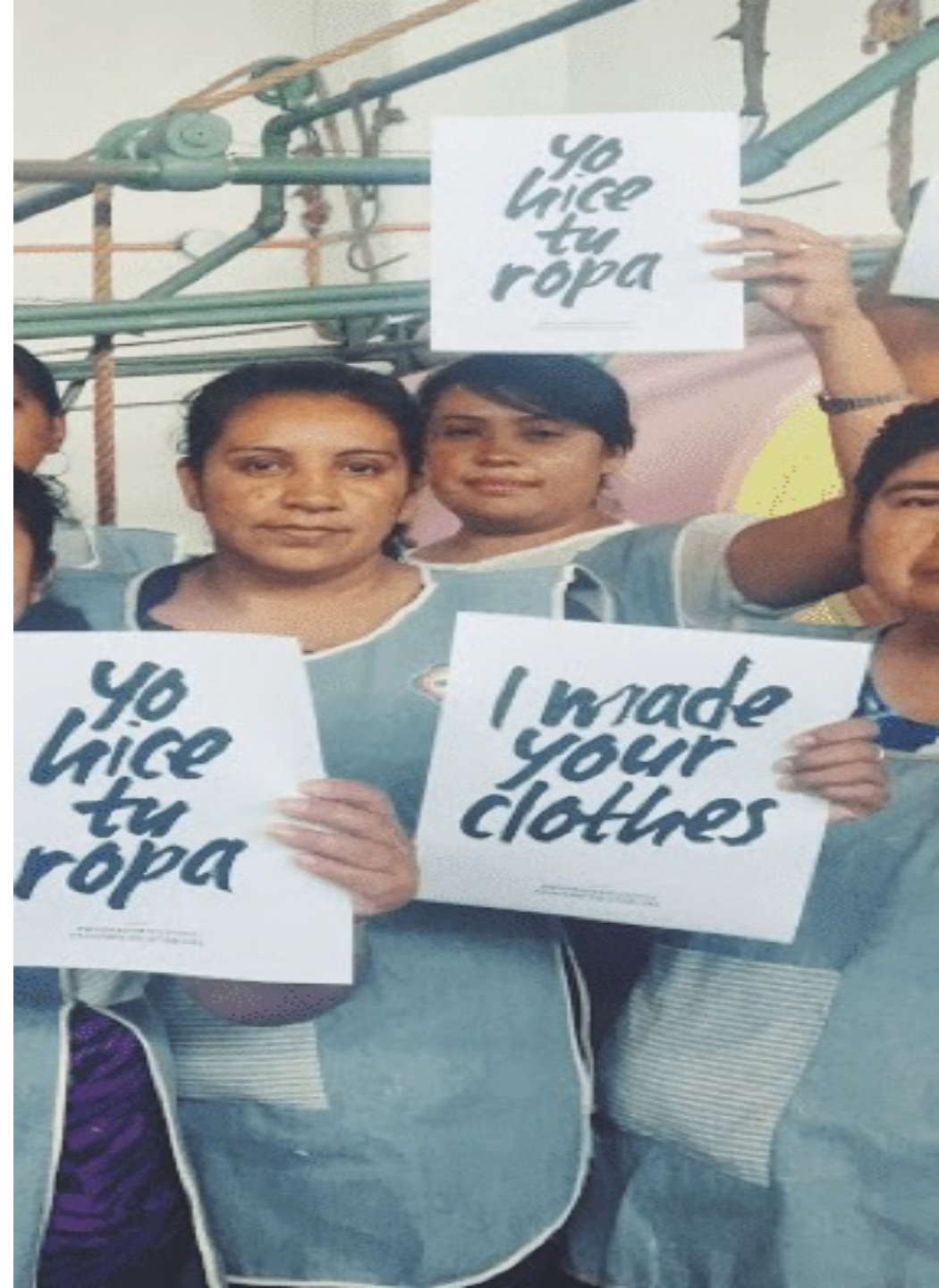


Gender inequality is one of the many 'wicked problems'

Rittel and Webber (1973)



Tackling it requires **systemic**, transdisciplinary and collaborative design approaches...



Overview

- **Systems Thinking** -
 - Mapping
 - Participatory Design
 - Transition Design
 - Theory of Change
- + Complexity, Compassion & Courage
- >> A new model for **female-led design for change?**



Shemakes values

- **Equal** – women and girls participate and are rewarded equally in T+C education and work
- **Collaborative** – women and girls are working with others sharing similar values
- **Welcoming difference** – women and girls and their contributions are valued independent of their backgrounds and gender self-identification
- **Empowering** – women and girls to lead change in T+C and not to be held back by gender stereotypes
- **Inspiring** – women and girls about the opportunities in textile and clothing



**EMPOWERING
FUTURE FEMALE
INNOVATORS
OF THE SUSTAINABLE
FASHION INDUSTRY
THROUGH INSPIRATION,
SKILLS AND NETWORKS**



>> A **methods question...**

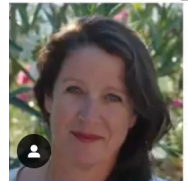
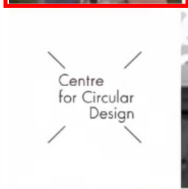
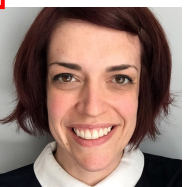
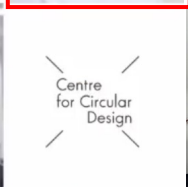
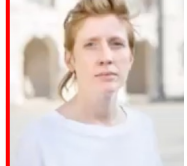
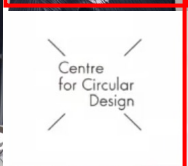
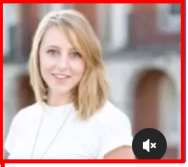
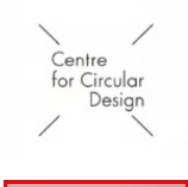
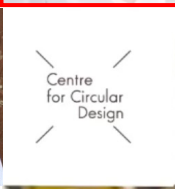


How can we work collaboratively and inclusively to empower and inspire women and girls - to labour on equal terms with others - through textiles/fashion technology and culture?

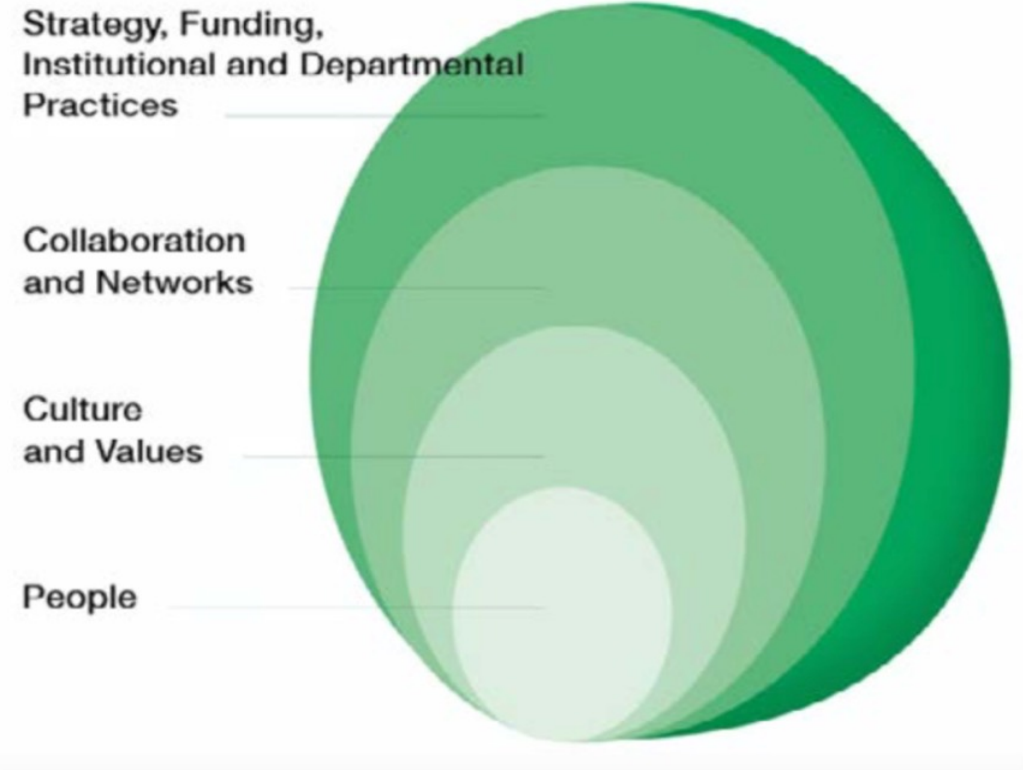
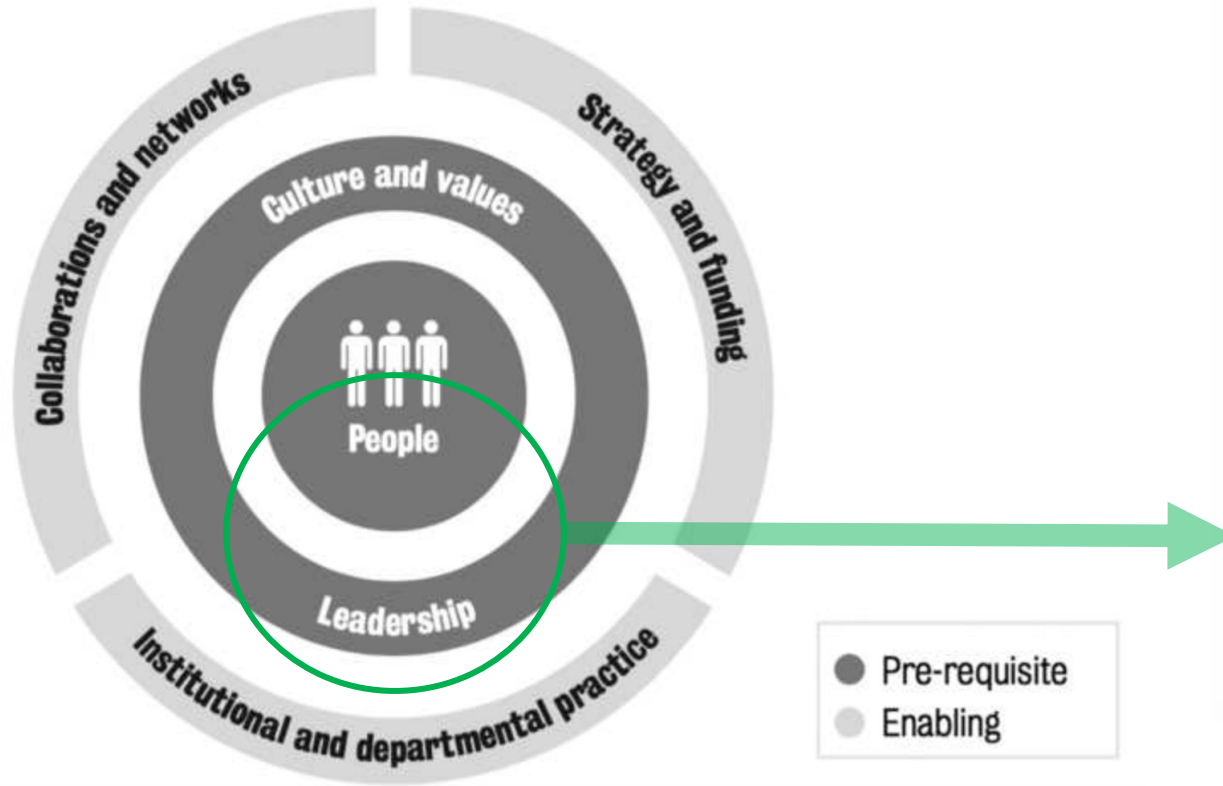
**EMPOWERING
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CCD values...



Nurturing **Whole** Circles



The Whole Circles Model (Earley 2018)

HEFCE model 'Attributes of High-Performing Research Units' (HEFCE 2015)

>> Distributed leadership...

SYSTEMS THINKING



System(s) and system thinking

“A systems is an interconnected set of elements that is coherently organized in a way that achieves something. A system must consist of three kinds of things:

- Elements
- Interconnections
- Function or purpose”

Donella Meadows, 2008



Dancing with Systems

The Dance
1. Get the beat.



Industrial world systems thinking mistake. They are not analysis, in the power of prediction and the mindset of here is a key to assumed it, as institution called wanted by what we did what rated our own id so not with the expression open. Systems than subtle, ing to Make

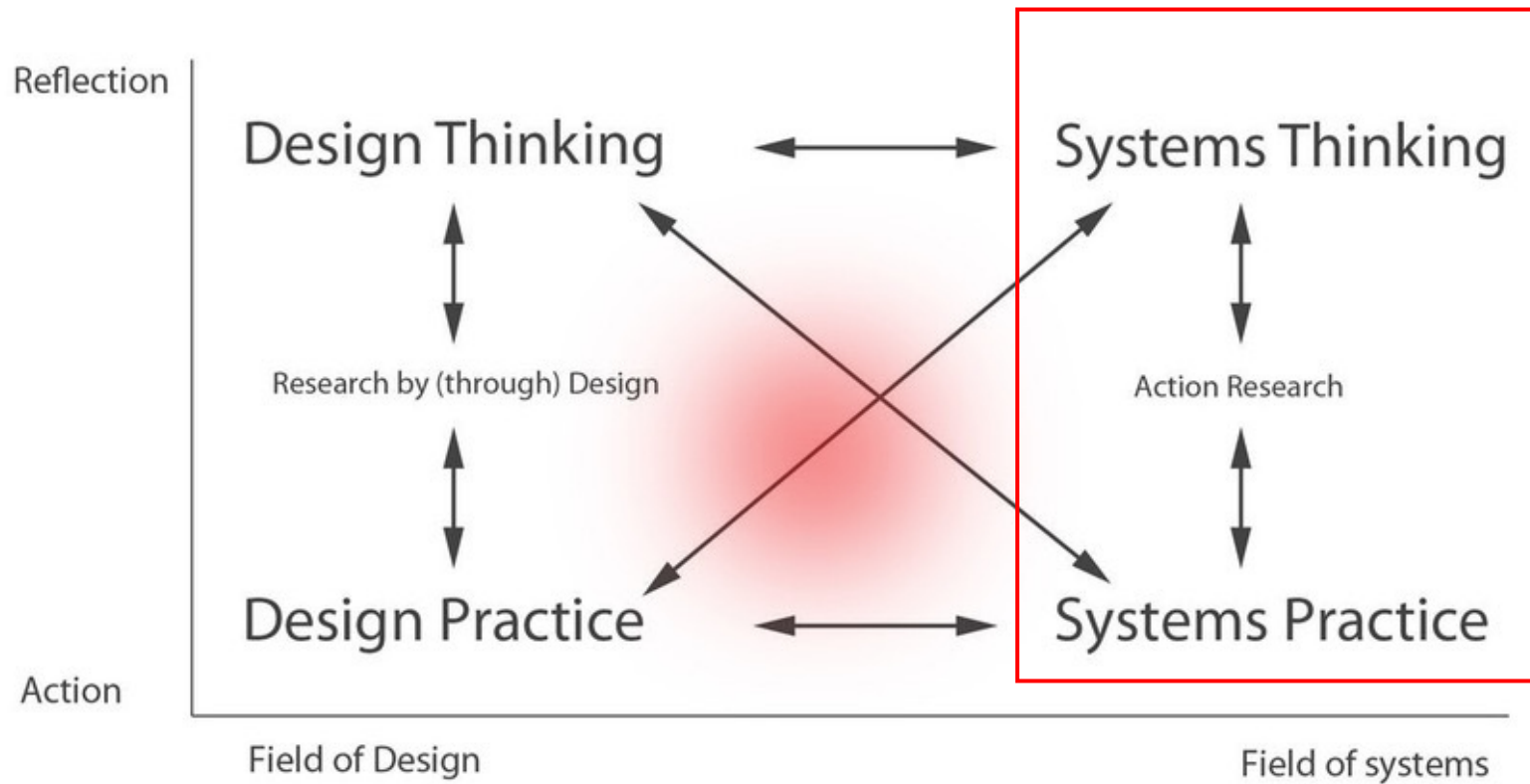
What one organizing, economic, feedback systems are inherently unpredictable. They are not controllable. They are understandable only in the most

Donella Meadows

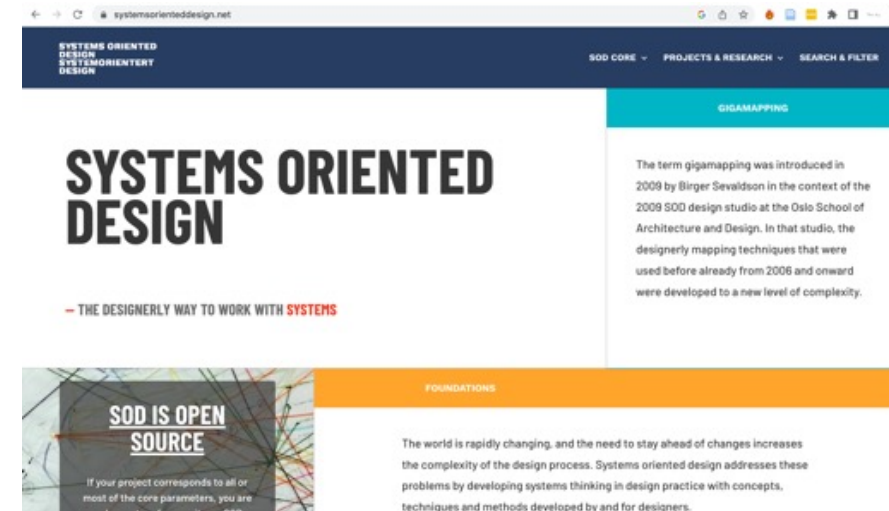
An excerpt from her unfinished manuscript Thinking in Systems



Systemic Design – an orientation, not a discipline



Sanders (2008) Map of design research-research types



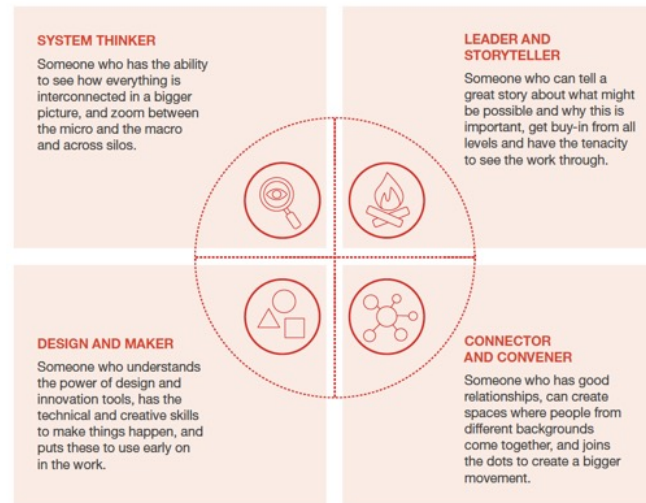
- Systemic Design Toolkit
- Systemic Design Lab, Politecnico di Torino
- Systemic Design Lab, ETH Zurich
- Systemic Design Association
- Systems Oriented Design



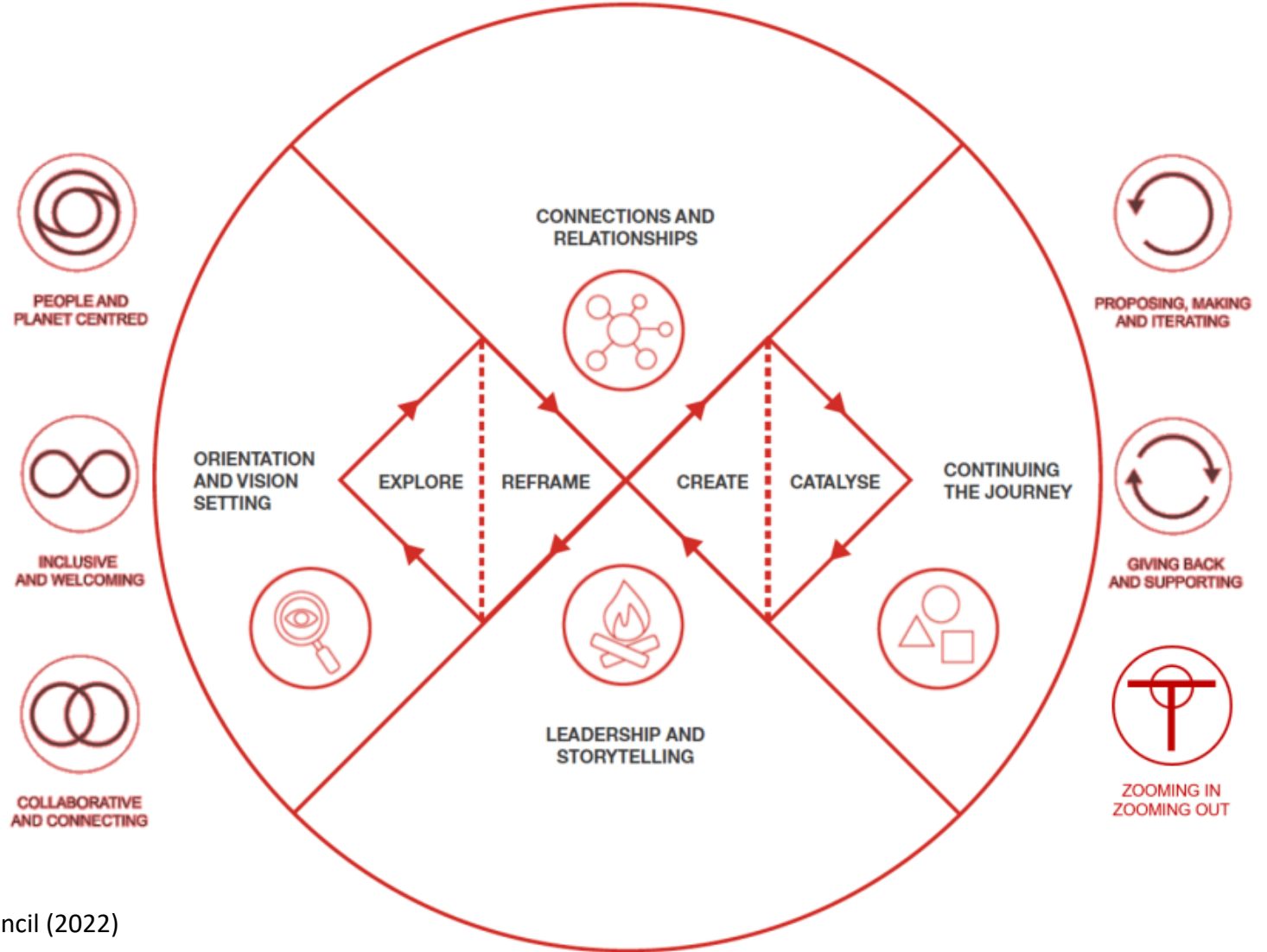
>> Design Council's Systemic Design Framework

- System thinker
- Leader & storyteller
- Design and maker
- Connector and convener

FOUR CHARACTERISTICS



Systemic Design Framework **four key characteristics**, Design Council (2022)

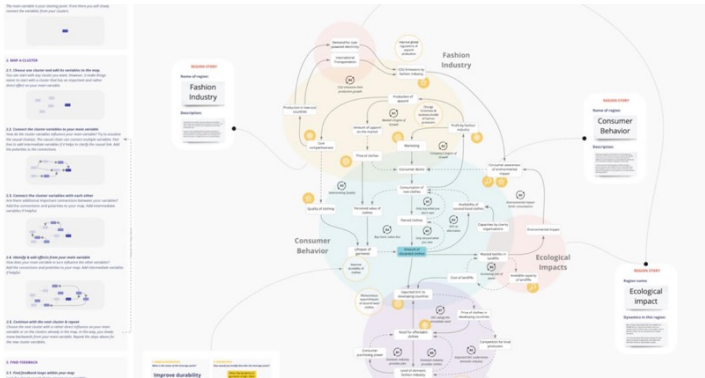


Systemic Design Framework including the **six key principles**, Design Council (2022)

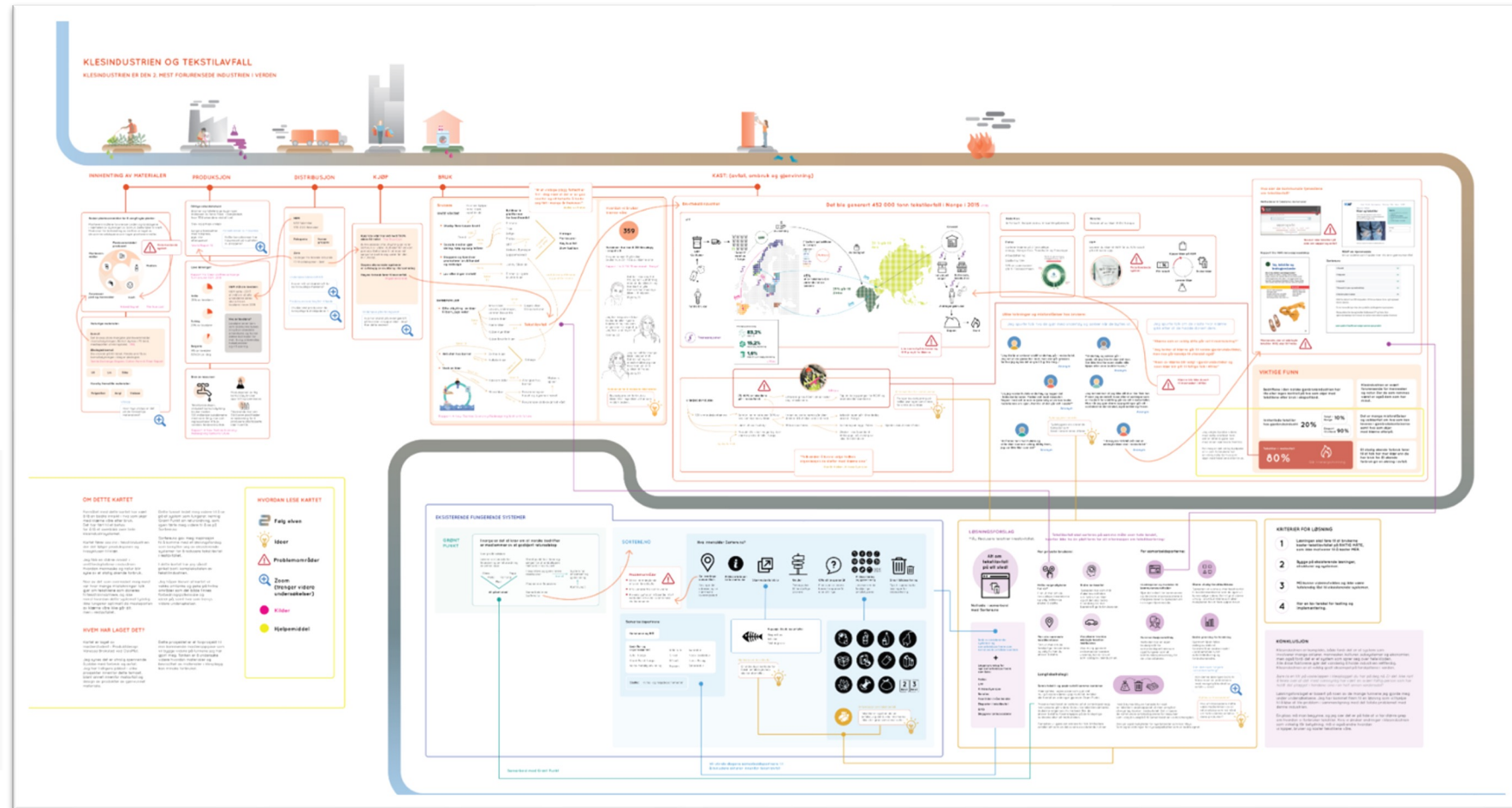


System mapping

- Stakeholder maps
- Causal loop diagrams
- GIGA maps



Systemic Design Group System map Miro template:
<https://miro.com/miroverse/system-mapping-toolkit/>



Brokstad (date unknown) Giga Mapping of Textile- and Textile Waste- industry, accessed via <https://vanessabrokstad.webnode.page/giga-mapping-of-textile-and-textile-waste-industry/>

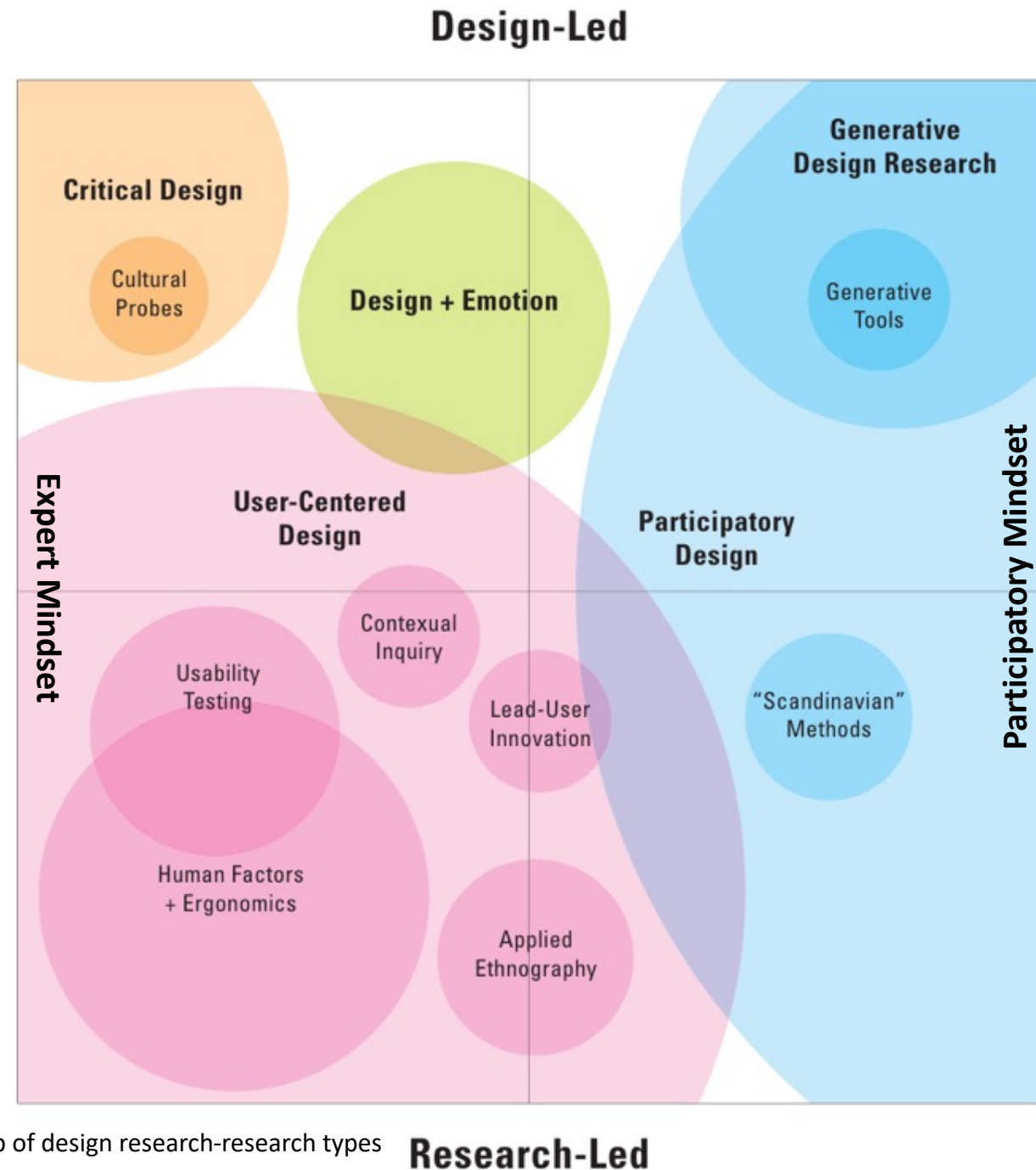


Participatory Design, or 'co-design'

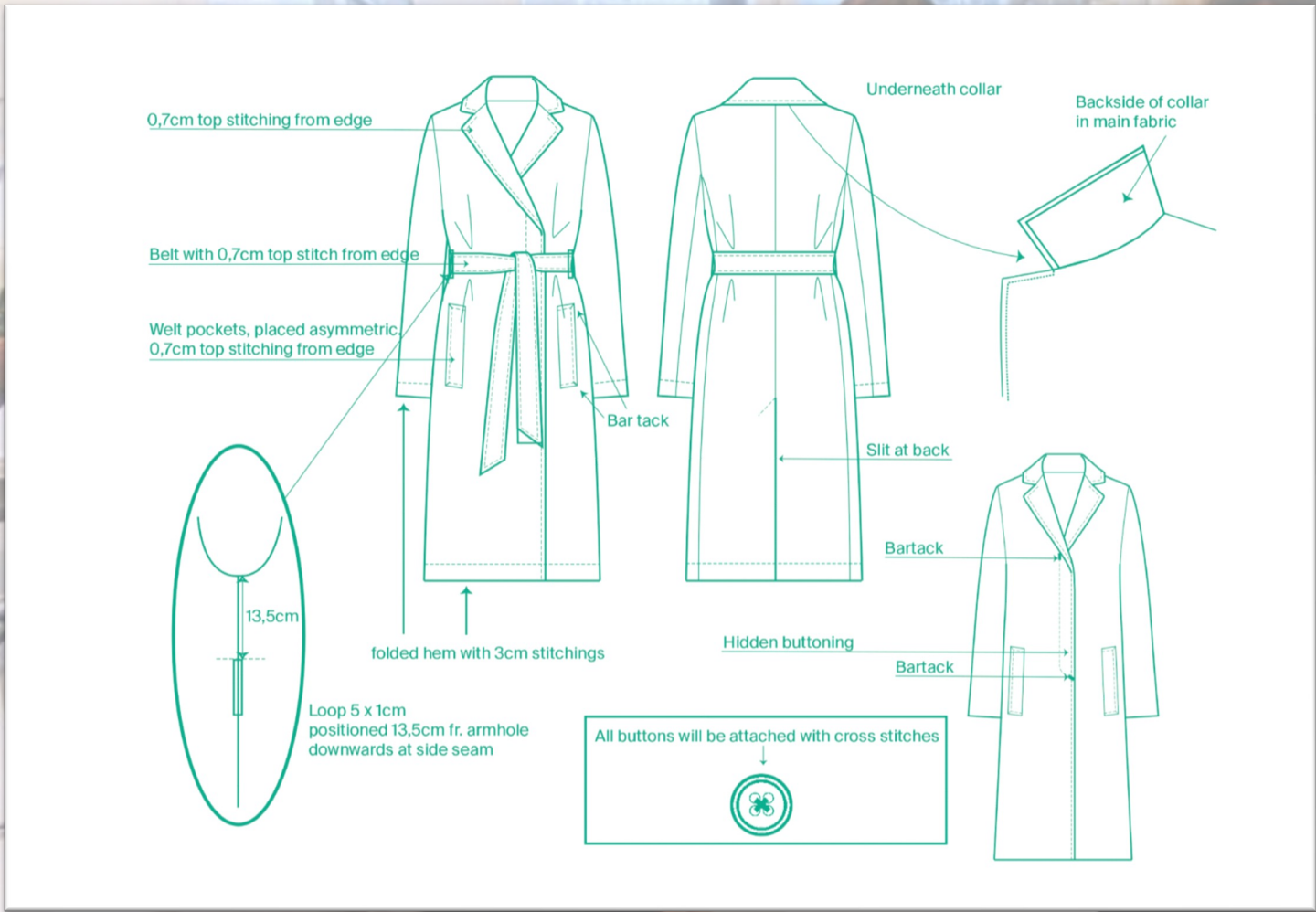
Instead of designing *at* people or *for* people (user-centred design), Participatory Design (PD), or currently also more widely known as co-design, is design *with* people

“PD is an approach to design that attempts to actively involve the people who are being served through design in the process to help ensure that the designed product/service meets their needs.”

(Sanders, 2008)







>> Super Slow Fashion

(Earley & Goldsworthy 2019)



>> Ultra Fast Fashion

(Earley & Goldsworthy 2019)

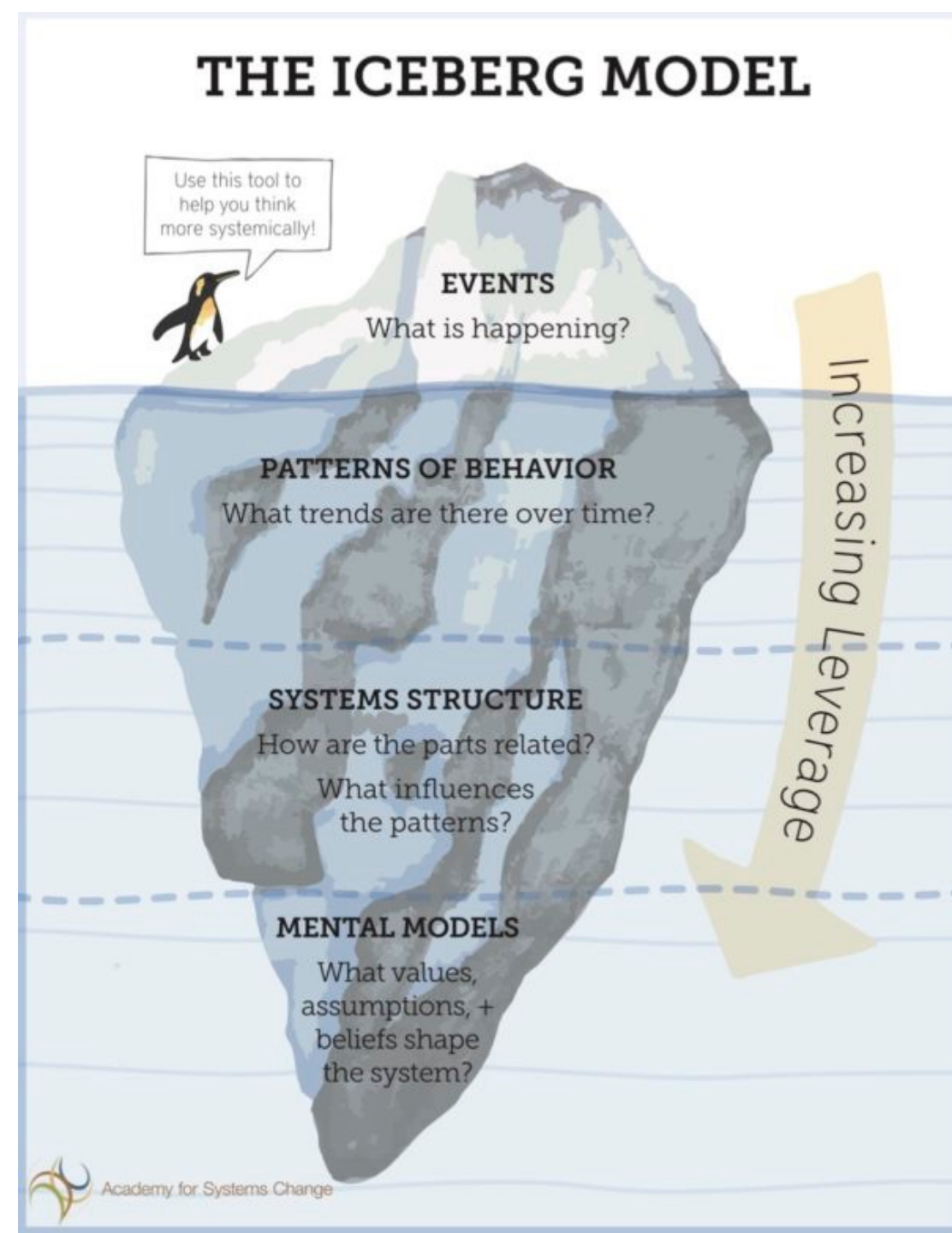


Orientation:

Identifying the problem(s)

Iceberg model -

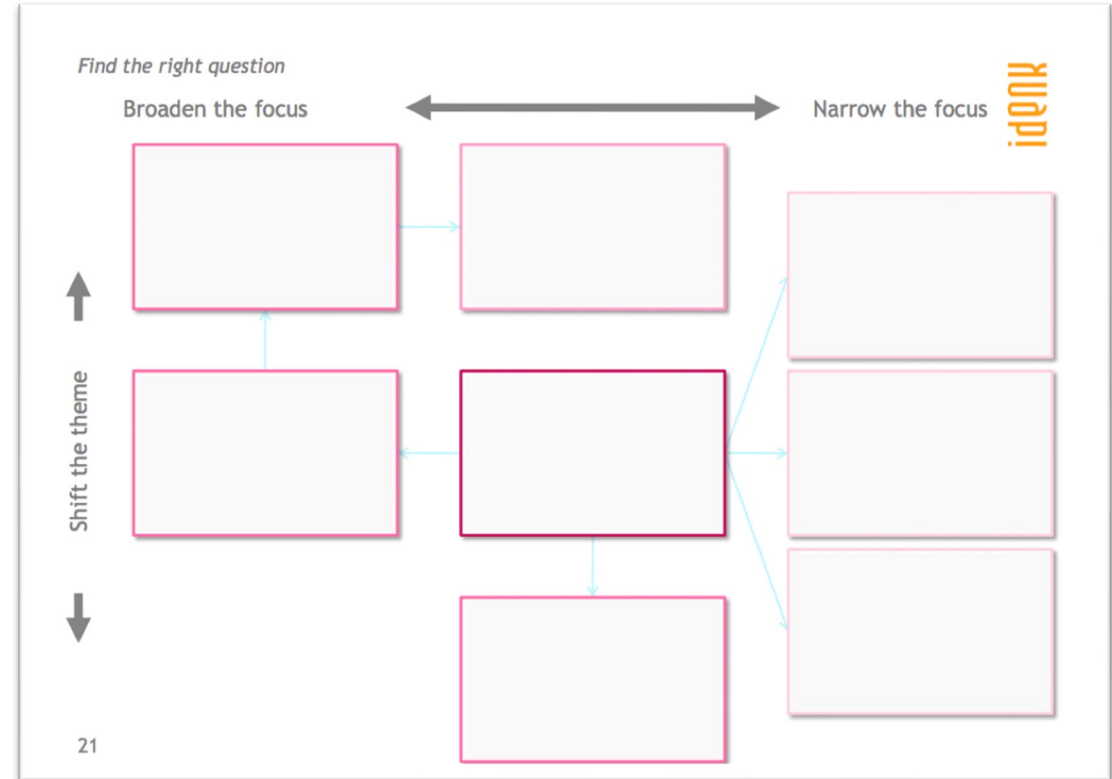
The iceberg model of systems thinking is a way of understanding the origin of a problem



Orientation: Identifying the problem(s)

Question Fanning -

An Idenk method we use often to check our research questions and make sure we are asking the right question at the outset.



Ideation phase

- **'How Might We'**

Constructing how-might-we questions generates creative solutions while keeping teams focused on the right problems to solve

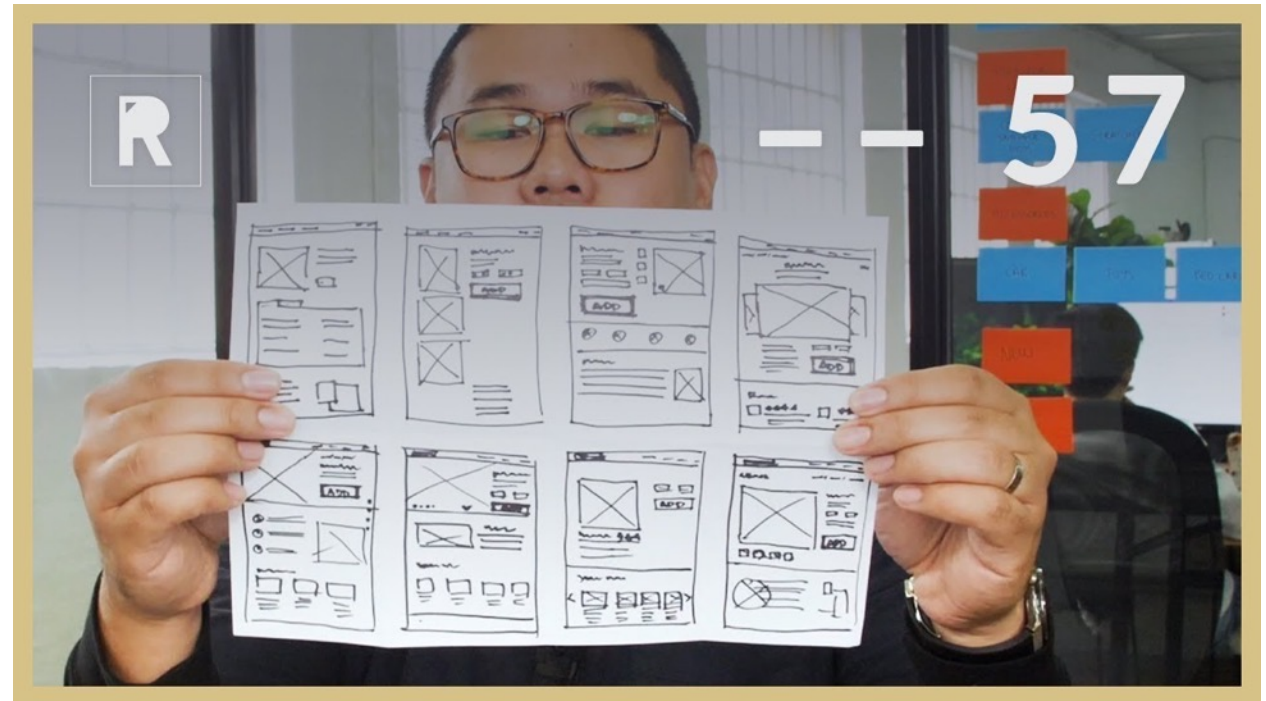
- **Crazy 8**

Is a design sprint, which includes a fast sketching exercise that challenges people to sketch eight distinct ideas in eight minutes.

<u>How</u>	<u>might</u>	<u>we...?</u>
Descriptive, solution oriented	Optimistic, generative, not prescriptive	Collaborative, inclusive

IDEO's How Might We method to see a problem

How might we method, originated in the 70s by Procter and Gamble and adopted by IDEO



Crazy 8 design sprint reference often used in UX design



CharioCity project: 'How Might We?' & Crazy 8



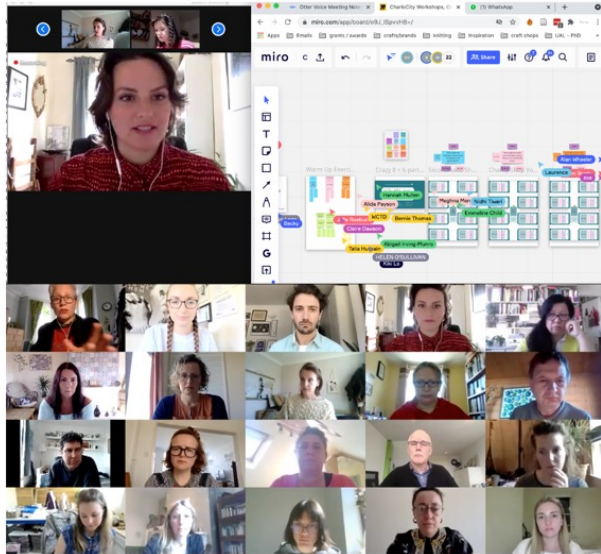
Note-taking
10mins

Crazy-8
8mins

3-part Solution Sketch
30mins

Workshop 2: 'How Might We?'

ual: centre for circular design



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CharioCity project: The P Card Tool



CharioCity

Physical Spaces
Redesign spaces to increase efficiency, storage & user experience

Physical Space

CharioCity

People
Engage more young volunteers; bridge cross-generational & societal experiences

People

CharioCity

Purpose
Elevate charitable cause; bring greater awareness to the value of the work; give the mission more meaning

Purpose

CharioCity

Price
Consider how to make pricing more transparent; new models for pricing; explore ways to increase investment

Price

CharioCity

Pleasure
Enhance the joy of finding gems and experience of 'treasure hunts'; support ways to socialise, interact, meet and learn

Pleasure

CharioCity

Product
Well curated & styled content; increase & focus on quality; build on product & local history; embrace uniqueness

Product

CharioCity

Place
Build and/or support the community in the local area, to enhance the sense of belonging for users; encourage more local activities and interactions

Place

CharioCity

Process
Full transparency and communication of 'back end' (incl. collecting, sorting, distribution, export); develop sorting procedures

Process

CharioCity

Partners
Develop meaningful local & circular partnerships between brands and organisations, to enable charities to be main recipients of resale schemes

Partners

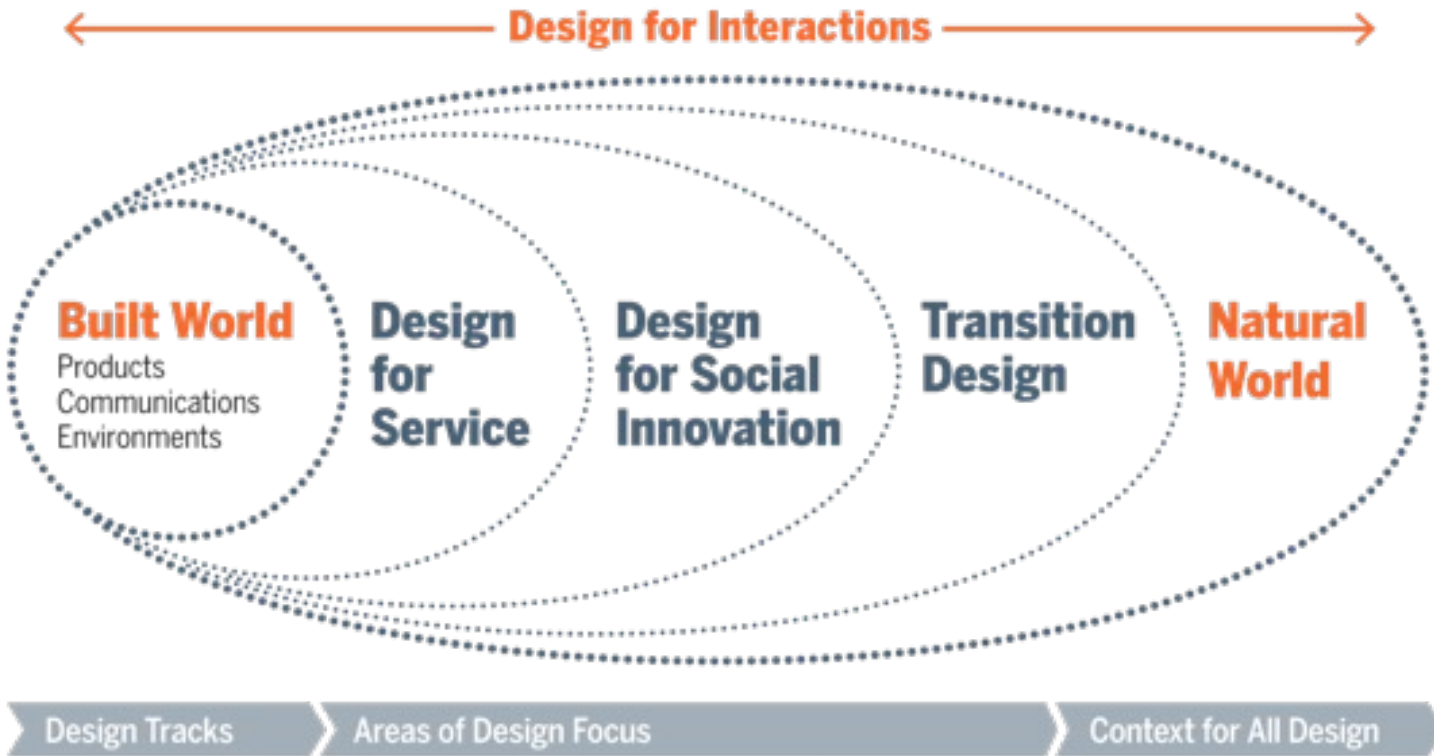
CharioCity

Policy
Pursue legislative changes to secure positive flows of clothing; implementing EPR 2025; encouraging re-shoring through legislation

Policy



Transition Design

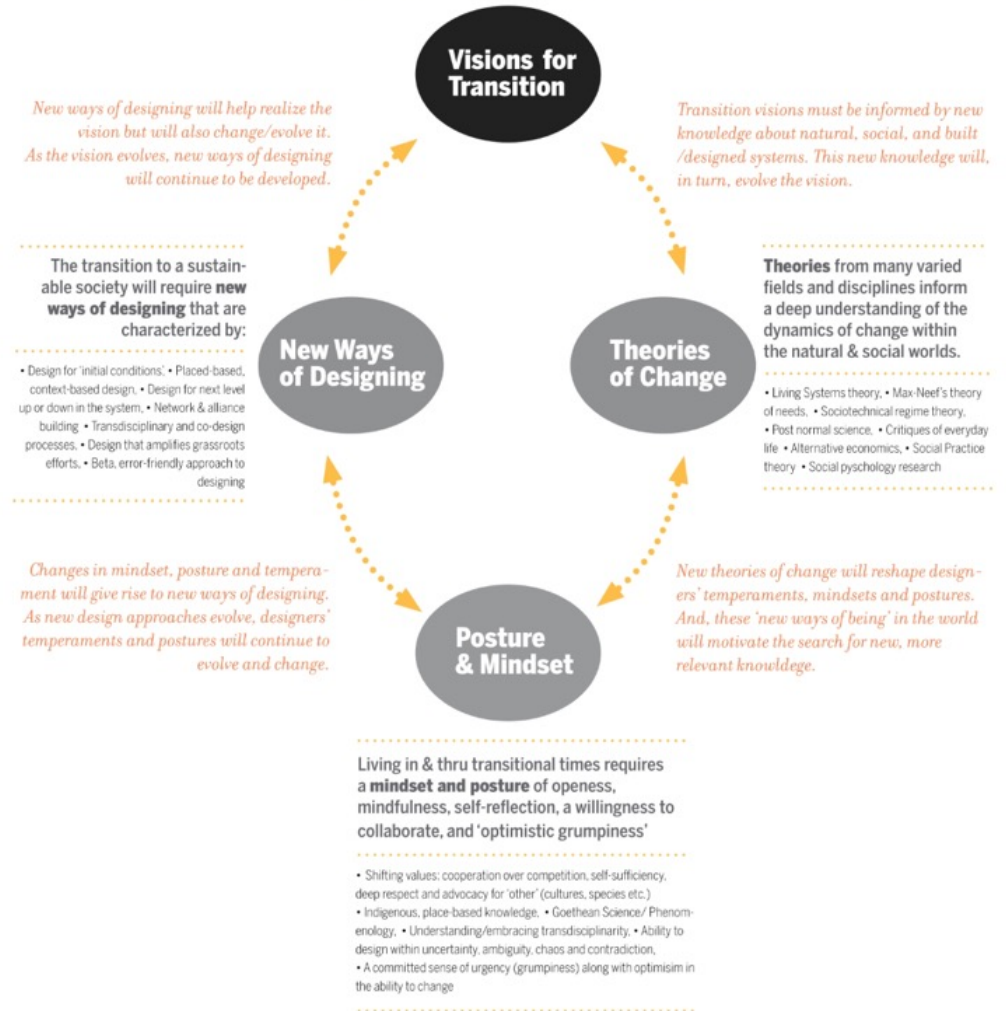


Transition Design in Context, Irwin (2008)

TRANSITION DESIGN FRAMEWORK

Four mutually reinforcing and co-evolving areas of knowledge, action and self-reflection

Visions for transitions to sustainable societies are needed, based upon the reconception of entire life-styles that are human scale, place-based, but globally connected in their exchange of technology, information and culture. These visions are based upon communities that are in symbiotic relationships to the ecosystems within which they are embedded.



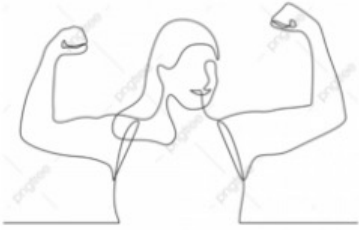
Transition Design Framework, Irwin (2008)



Visioning

1. Scenario development

Money & Time-Saving



Mendaroo!

Flexible Wardrobes

Expanded choice for rental – with easier ways to rent out too

Better Fast



Compostable Non- Wovens
Light, safe and automated production

Transformed Charity Shop Culture



Investment pieces that truly invest

Remanufactured fashion made by enlightened entrepreneurs

Fashion Philanthropy



Expanding lease culture for kidswear

Growing Needs



Sports Style

Sizing & trend driven



Bio-based materials
Lower impact processes



Food & Nature

Quality Subscriptions

Menswear by post –
T-shirts
Pants
Socks
Basic Knitwear



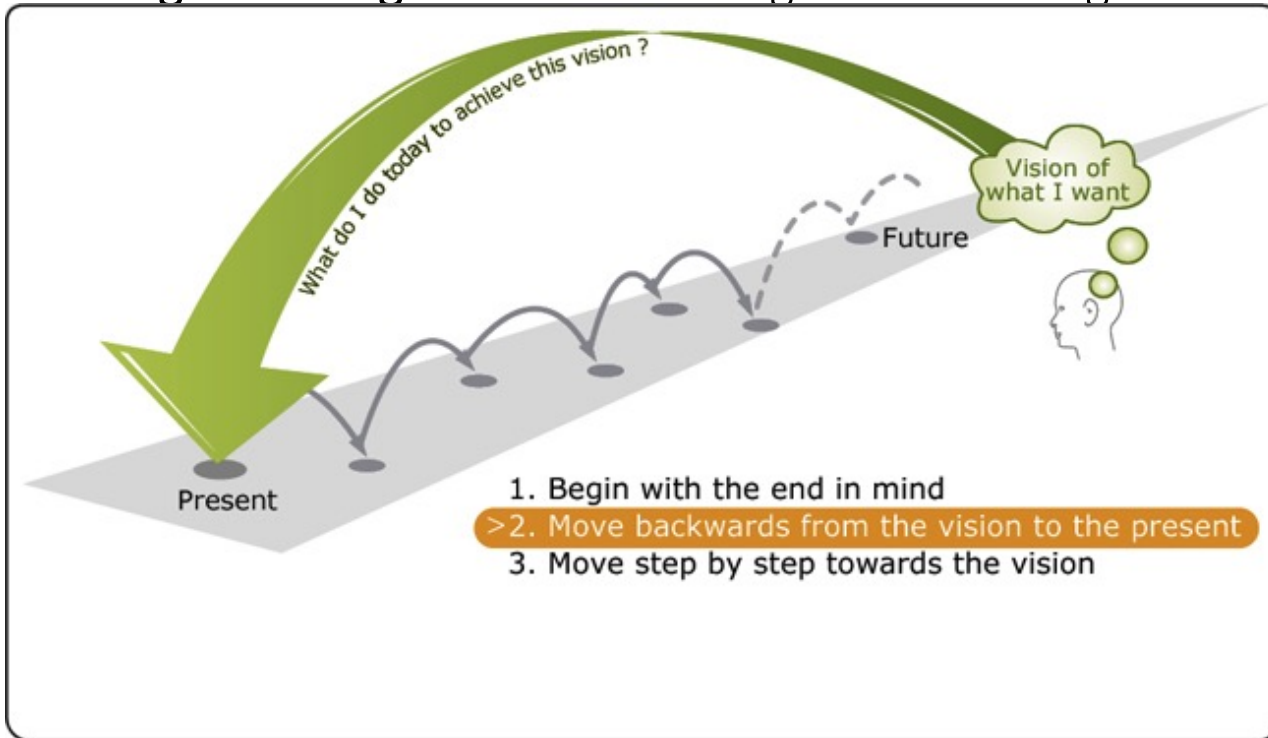
Towards a future ecosystem of material and service solutions

Earley (2020) [The Covid-24 Family Fashion Diary](#)



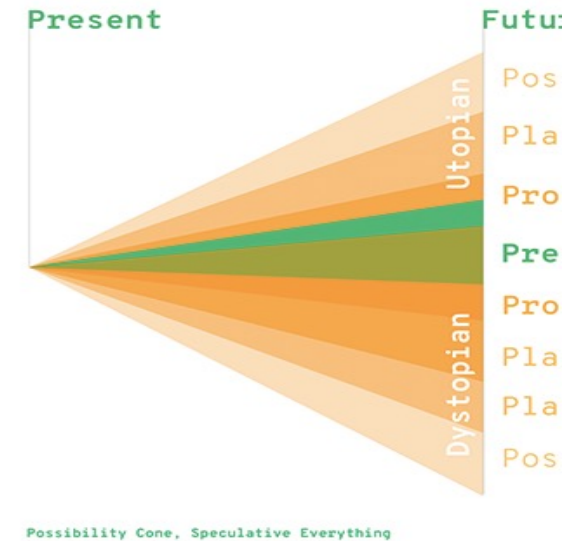
Visioning

2. Design Futuring - from forecasting to backcasting



<https://www.naturalstep.ca/backcasting>

3. Speculative Design



Dunne & Raby (2013) Speculative Everything : Design, Fiction, and Social Dreaming



Fashion Fictions

Dr Amy Twigger-Holroyd

World 178

in which footballers lead the transformation of consumer culture

World 175

in which peak oil leads to the cease of synthetic fibre production

World 172

in which radical anarchist sewists destroy capitalism

World 169

in which clothes are marketed using only personalised images

World 177

in which an identical garment, worn by all, expresses creativity

World 174

in which wearable technology communicates antiracist messages

World 171

in which clothes become part of the extended household

World 168

in which ironing becomes an unstoppable trend among young people

World 176

in which an island has enjoyed a shared wardrobe for decades

World 173

in which sewing clubs are more common than slimming clubs

World 170

in which stitched signatures represent complex identities

World 167

in which traditional handmade costumes are worn across the world

Holroyd (2020), Fashion Fiction, accessed via <https://fashionfictions.org/>



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Shemakes – Gender Visions workshop

10.00/13.00
6 April 2022
Centre for Circular Design

Gender Visions

Bridging the gender gap in the textile industry through inspiration, shared experiences and creating new visions

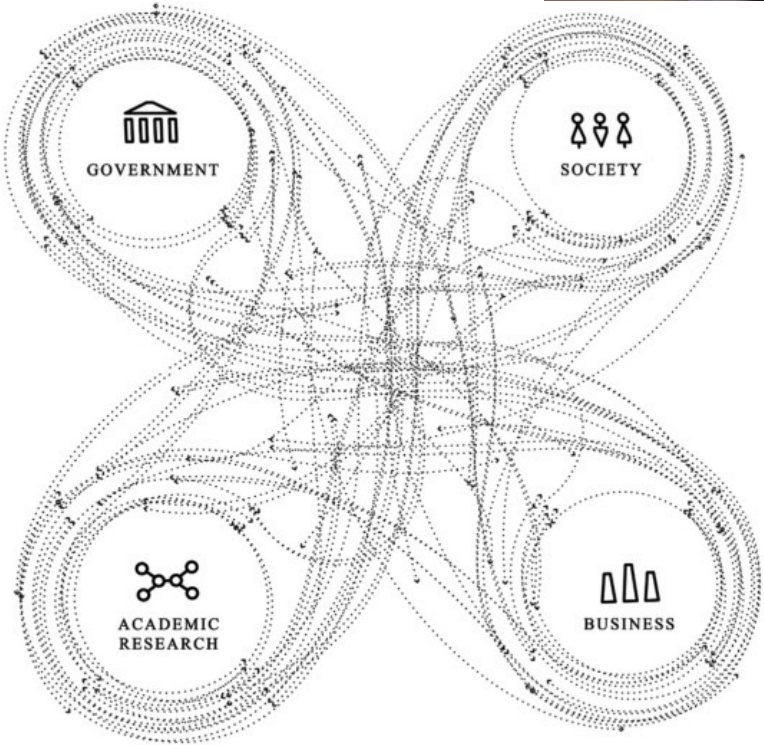
A participatory workshop giving people the opportunity to share experiences, barriers and ideas around the gender gap and enable female empowerment in the textiles industry. A small group of people are invited from across the quadruple helix, to participate in a private workshop session. Findings of this workshop will feed into the Shemakes research project.



www.circulardesign.org.uk

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 10102020

shemakes
shemakes.eu



Quadruple Helix Framework



Gender Vision Workshop at CCD, led by Sanne Visser and Marilena Georgantzi



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'Gender Futures' Workshop - worldbuilding

14.00/17.00
31 March 2022
Centre for Circular Design

ual: centre for circular design

Gender Futures

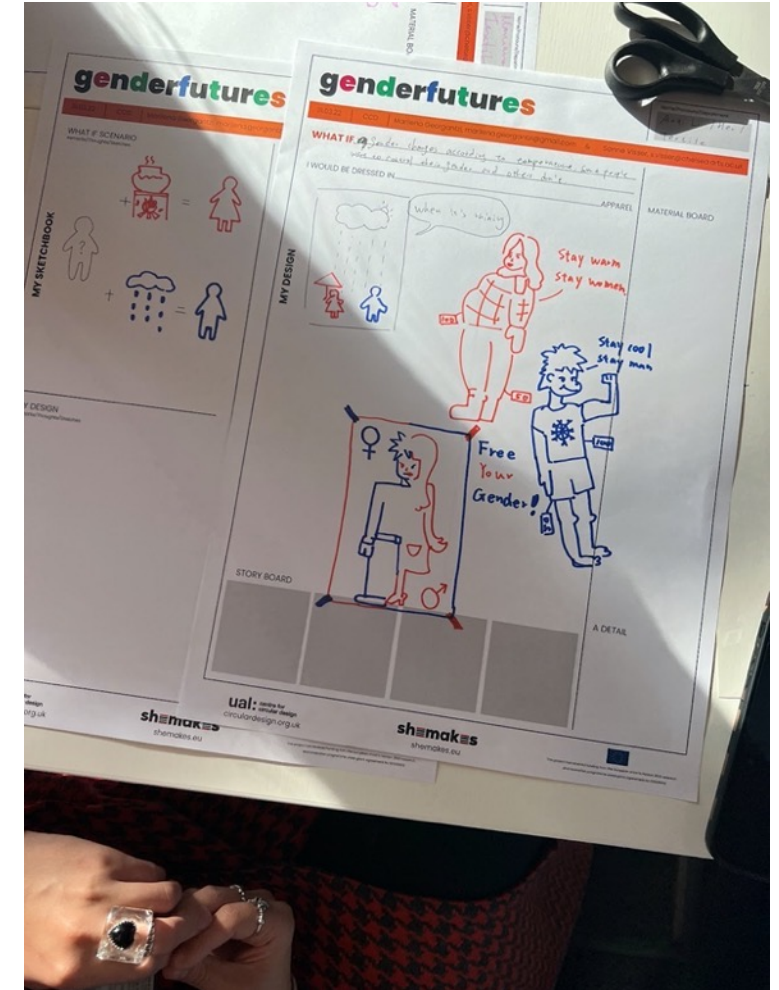
Bridging the gender gap in the textile design industry through world building and speculative design

A 3 hour workshop which aims to raise awareness on gender biases as well as empower self expression and personal vision



circulardesign.org.uk

shemakes shemakes.eu



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Held at CCD UAL), Led by Shemakes Ambassador Marilena Georgantzi and Transferlab lead Sanne Visser

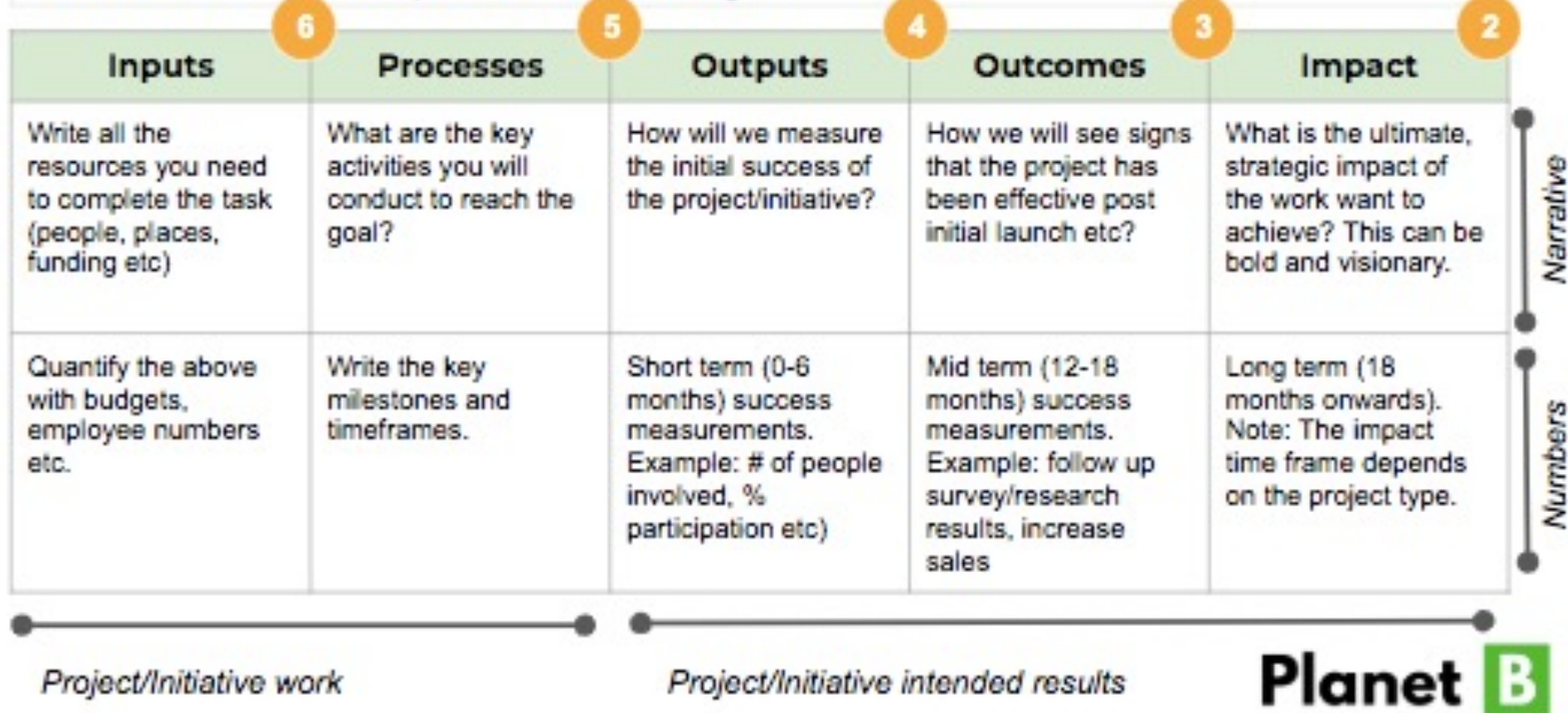
Theory of Change

Step

1

Theory of Change Model Template

The business and/or social problem we are solving is...



intervention

>> Systemic Theory of Change

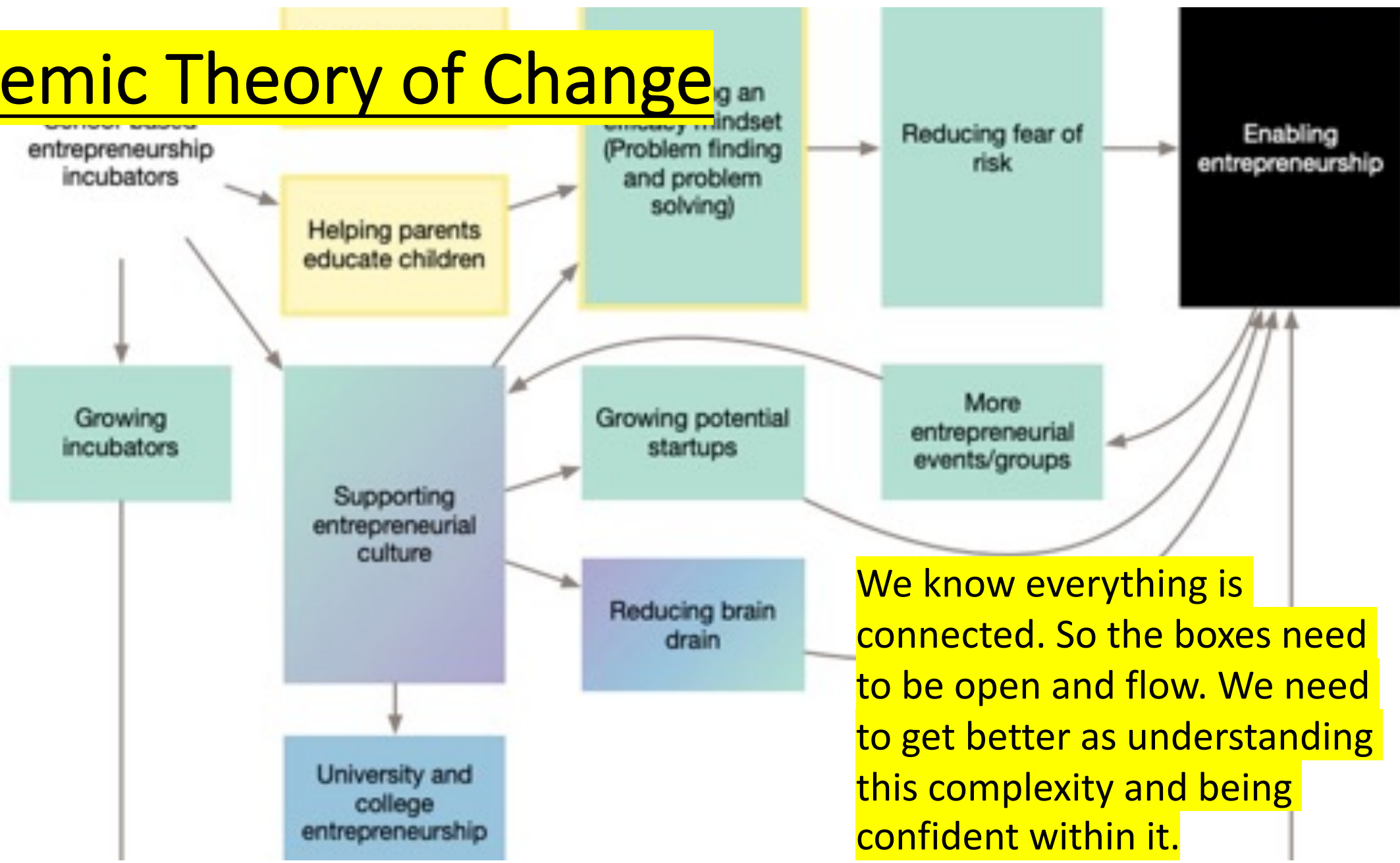
goal

leverage

barrier/
bottleneck

signal

opportunity

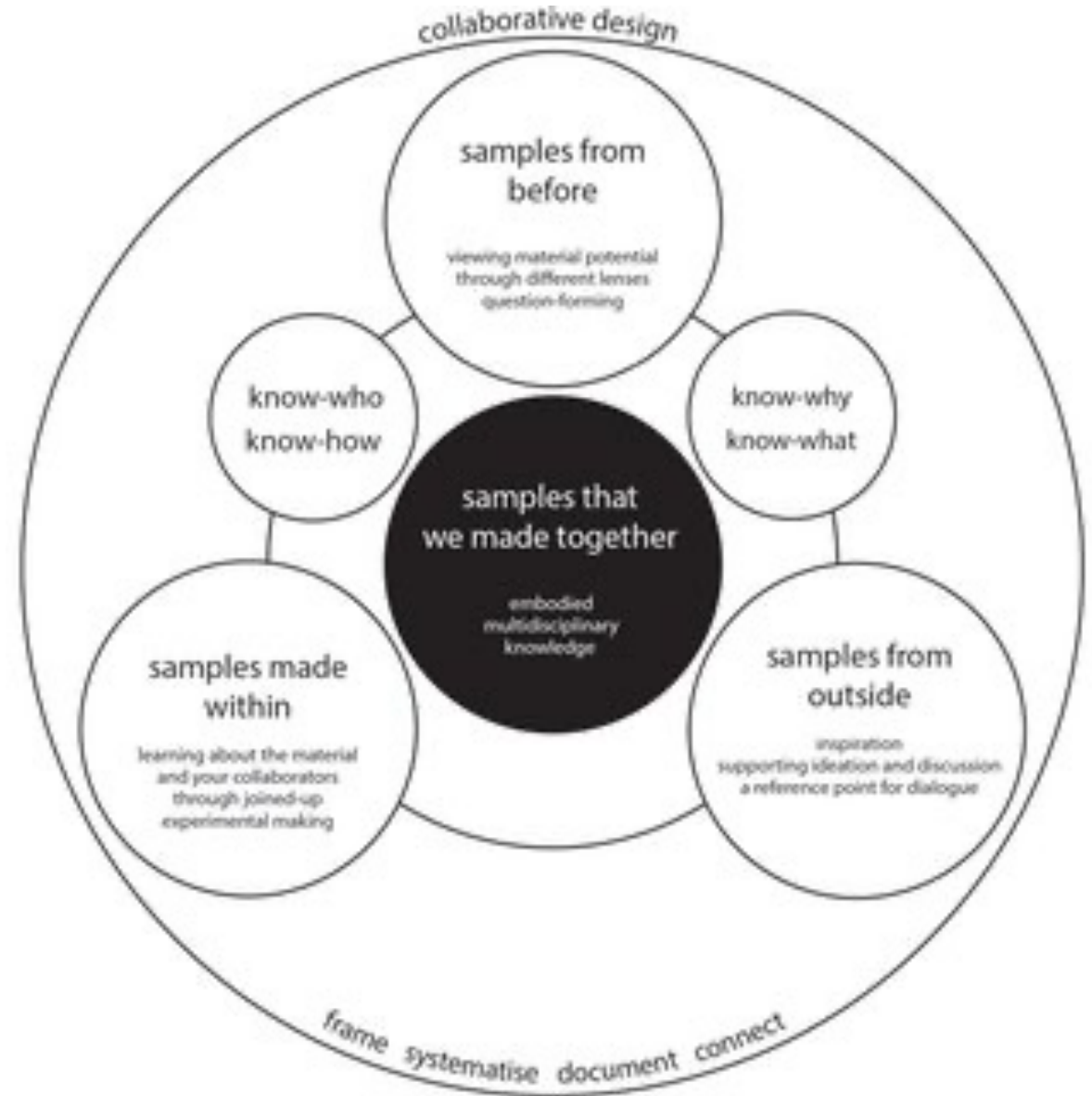


We know everything is connected. So the boxes need to be open and flow. We need to get better as understanding this complexity and being confident within it.

+ COMPLEXITY,
COMPASSION &
COURAGE



Complexity & (Design) Collaboration



Dr Rosie Hornbuckle, PDRF/UAL, brings these frameworks together, along with materials/textile knowledge, communication, network and behavioural insights



Complexity & (Design) Collaboration

Designing the Circular Design Team



Circular Wool UK
Exploring research, creativity, innovation and systemic design

10.00-12.30 BST [online]
15 June 2022
Centre for Circular Design

centre for circular design | shemakes | world circular textiles day

The poster features a large red fingerprint graphic on the left, a central illustration of two people working with wool, and logos for the Centre for Circular Design, shemakes, and World Circular Textiles Day at the bottom.



June 2022

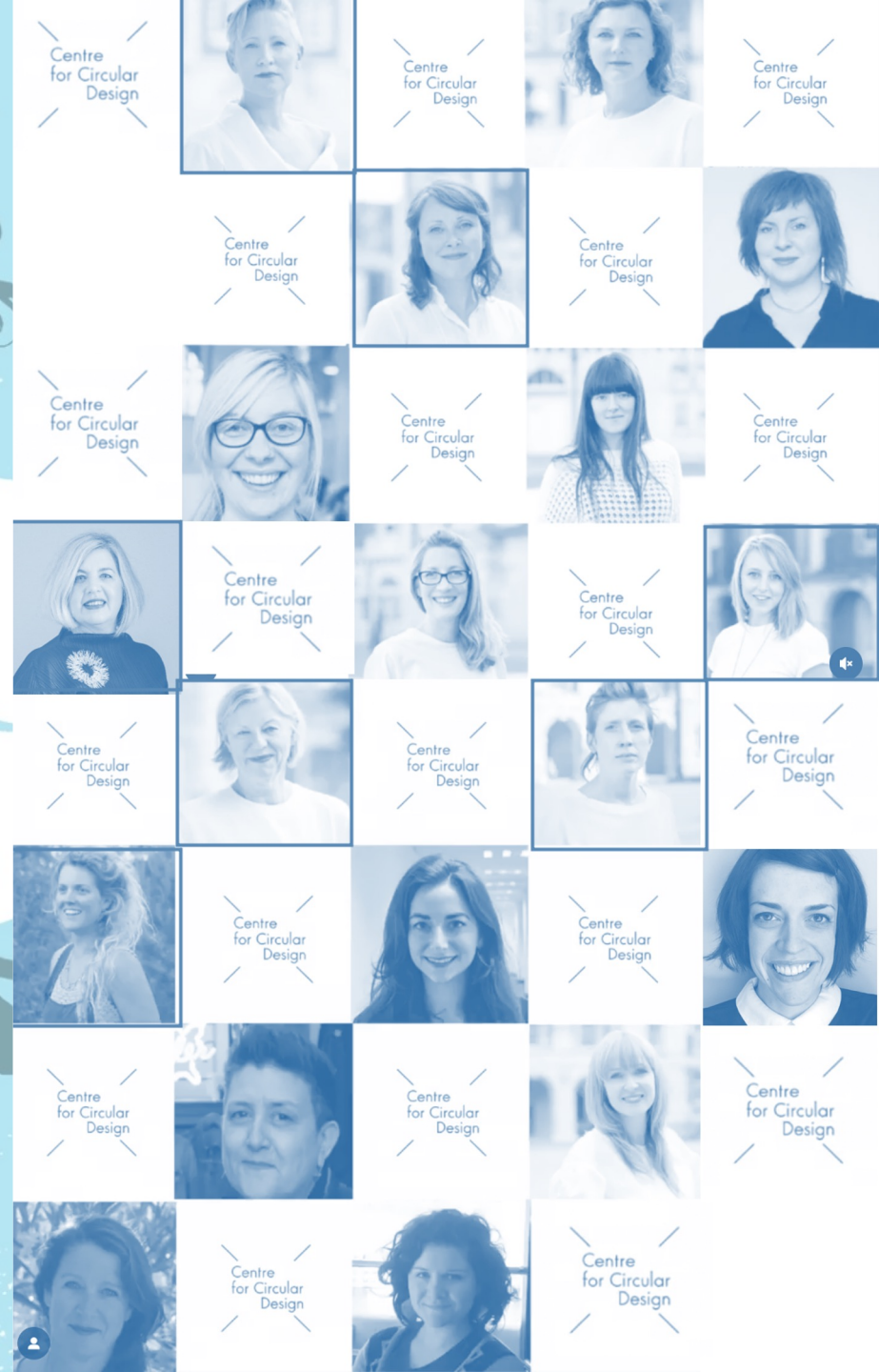
+ Circular Wool UK (seminar)

+ Who is in the Circular Design Team? (DRS workshop)



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Compassion



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Courage



Courage

What fears did you overcome?

What fears do you still need to overcome?

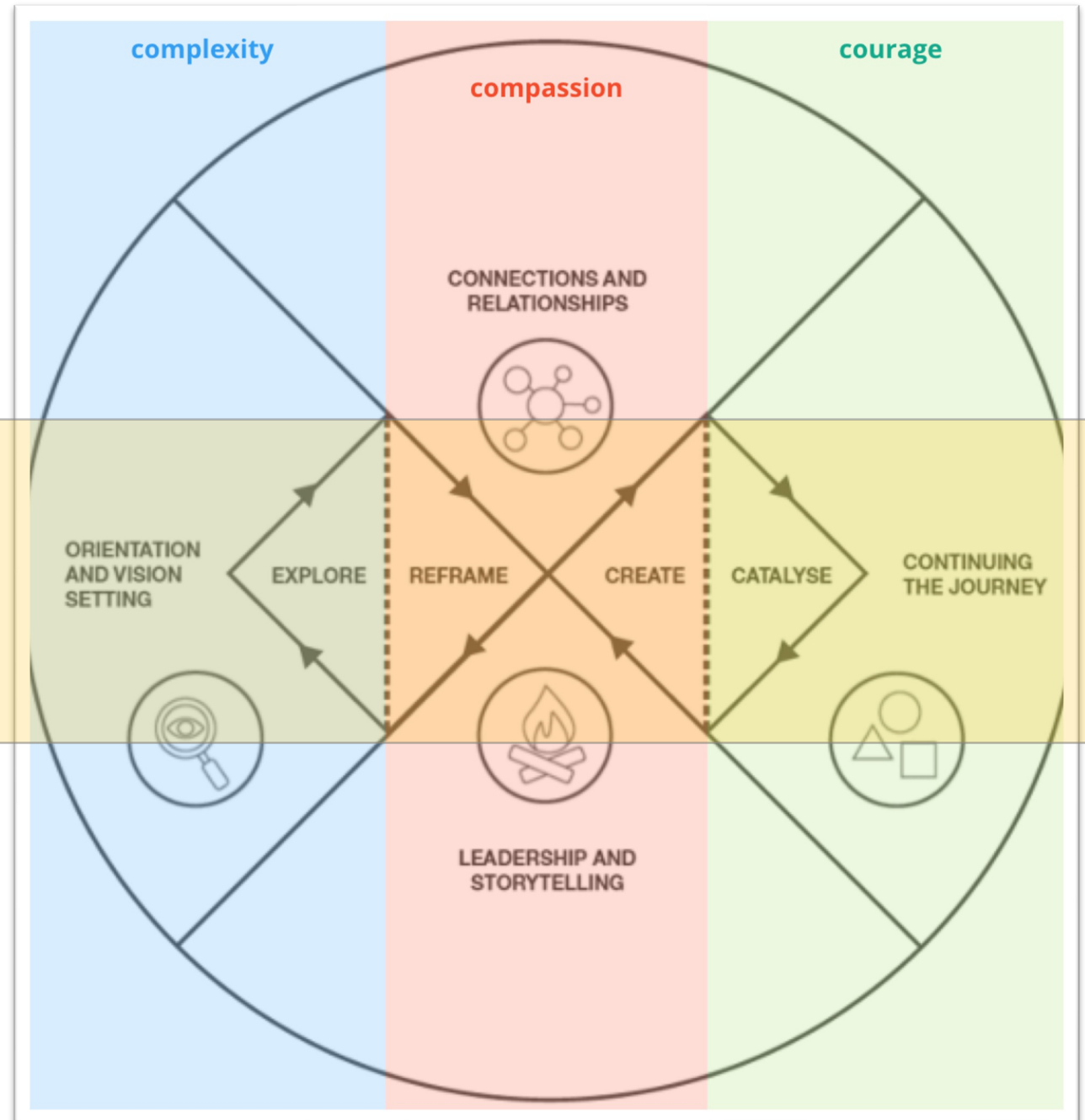


A new model for female-led design for change?

Complex, compassionate & courageous...

- System thinkers
- Leaders & storytellers
- Designers and makers
- Connectors and conveners

Who put people and planet first... working in inclusive and welcoming ways, through collaborating and creating connections – proposing, making and iterating reflexive solutions - whilst seeking to give back and support others.



THANK YOU

Research & KE, UAL

Sanne Visser

Dr Lynn Wilson

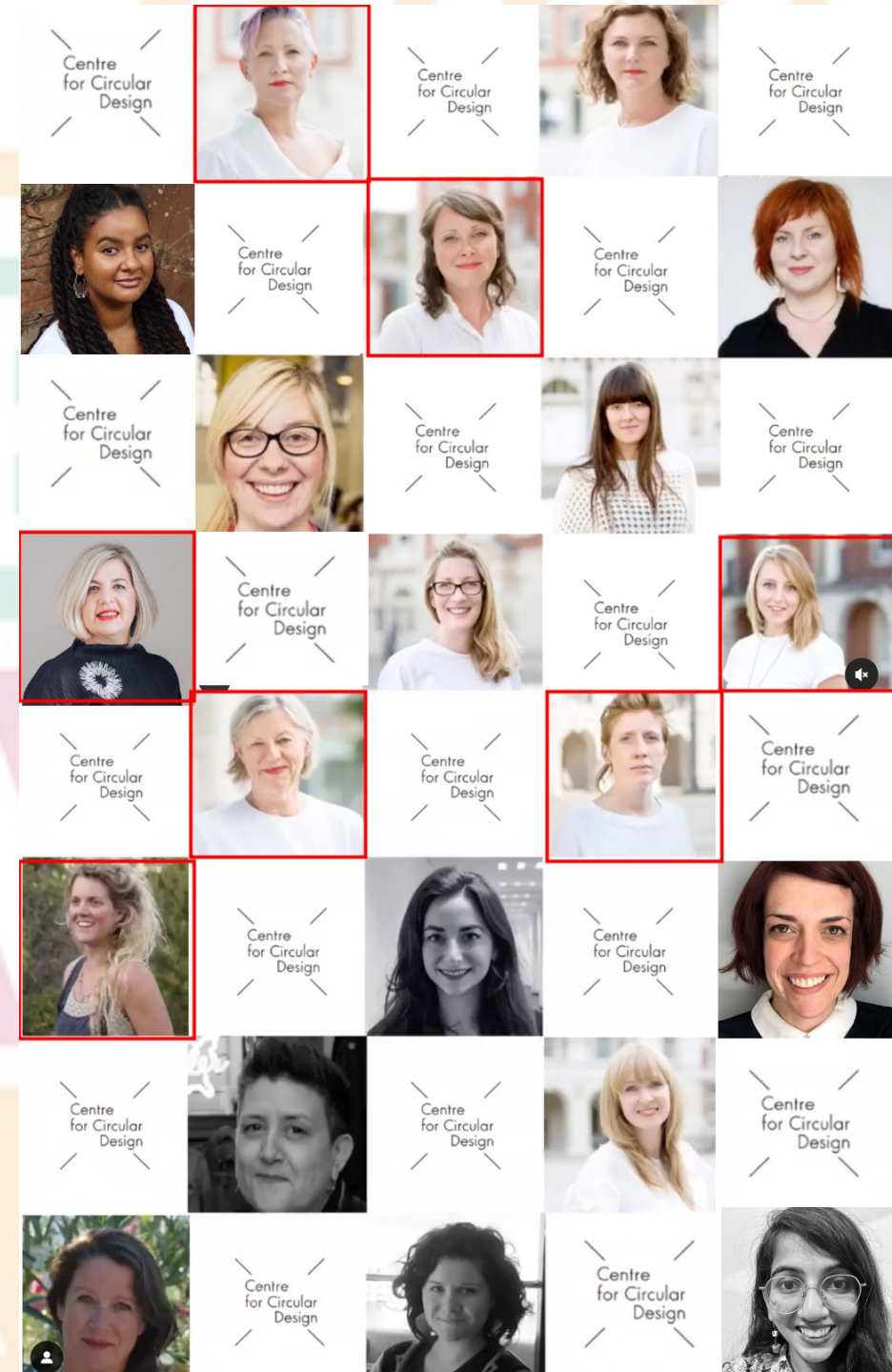
Clare Lowther

Dr Rosie Hornbuckle

Dr Bridget Harvey

Dr Cathryn Hall

Prof Kay Politowicz



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