

**Participatory design : co-creation | co-production | co-design combining imaging and knowledge**

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# Participatory Design

co-creation | co-production | co-design  
combining imagination and knowledge

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“For knowledge is limited to all we now know and understand.  
Whilst imagination embraces the entire world and all  
there ever will be to know and understand.”

- I live and work in Sheffield - and have done for 20 years.
- Sheffield is an industrial city; a producer, a maker.
- It is said of the people of Sheffield that they have making in their DNA.
- The name of Sheffield has travelled across the globe; stamped into blades, pressed into girders, etched into records.
- Sheffield makes across all scales from mass produced products to individually crafted items.
- And this isn't all history - it is still going on today
  
- Sheffield is an innovator.
- It was never just about the steel or metal, but about the ideas behind them.
- Utopian architecture and streets in the sky, world changing graphic design, award winning films and video games, new musical movements

# Design

**Design** is not a science at all – and nor, incidentally, is it an art. Design is a **practice** – specifically, an uncertain, paradox-laden, judgement-dependent, science-using, technology-supported practice, catalysed and driven by creativity and the imagination.



- today I want to talk to you about co-production from a 'design' perspective.
- So let's start with What is Design?

All too often these days, design practice is seen as the final embellishment, the bit that makes it look nice, someone being let loose with coloured pencils, markers and stickie notes. Or perhaps as a formularised process that anyone can pick up and apply.

Design can be conducted in these ways. Where the outputs of a piece of knowledge, market research or scientific research are communicated to the designer (using words - written and oral) along with an idea of the audience - and the designer fills in the gaps. But each step in this chain of passing on information is a filter, a step in a Chinese Whispers game where the true meaning can begin to lose fidelity or clarity, where a little of the understanding is potentially missed or lost in the translation.

Modern Design is not concerned with understanding how the world is but how it could be, and therefore it uses knowledge or evidence in a different way; not for understanding but as a way of achieving something that doesn't yet exist - to apply it to make something new, to make something feasible. But in making a change, the knowledge is evolved and new 'stuff' is learnt.

# Design

“**Design**” is what links creativity and innovation. It shapes ideas to become practical and attractive propositions to users and customers. Design may be described as creativity deployed to a specific end”

(Sir George Cox)

- Design makes ideas tangible
- Design is human centred
- Design is collaborative

(Matt Hunter)

– **Sir George Cox**

- Pro-Chancellor and Chair of Council of Warwick University
- President of the Institution of Engineering Designers
- President of the Royal College of Speech and Language Therapists
- Previous Chairman of the Design Council

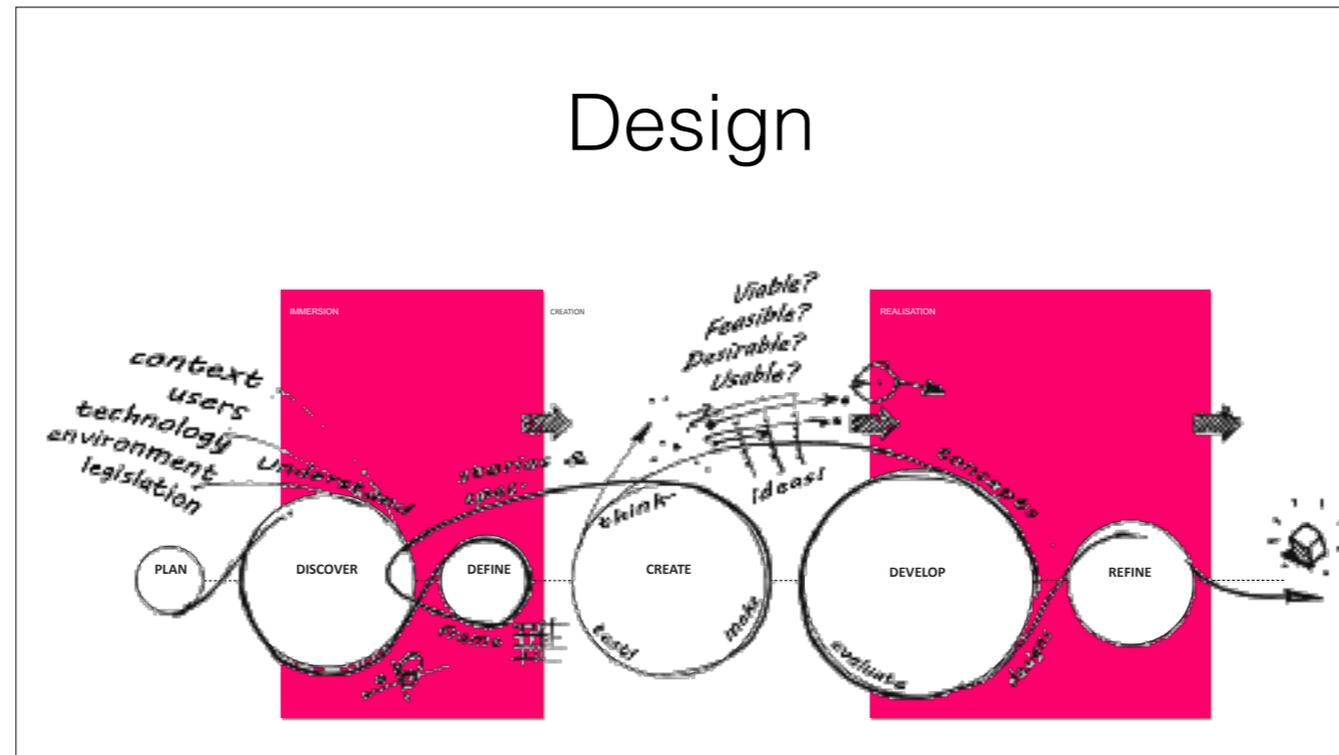
Design” is what links creativity and innovation. It shapes ideas to become practical, viable and attractive propositions to users and customers. Design may be described as creativity deployed to a specific end

Design makes ideas tangible

Design is human centred

Design is collaborative

# Design



- Design is about production - it is aimed at producing something new
- taking a new idea and making it real

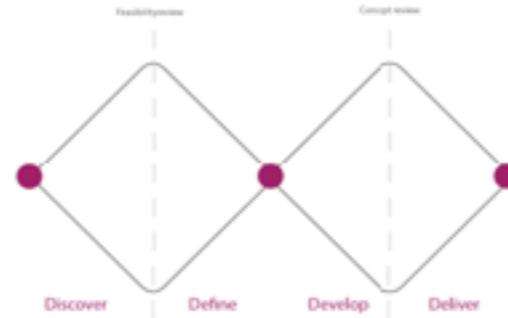
# Design



- at its core is an iterative making process, making things 2D, 3D, digital or physical
- it makes things to learn about a problem, a context, stakeholders, and possible solutions
- with each iteration it refines the understanding of the problem, the context, the stakeholders and possible solutions
- It makes things to change the abstract or conceptual into something real
- making is also a form of thinking - combining the learning process of our hands and the material world with our thoughts processes. This is defined as cognitive interaction.

However, it is the visual and physical language that lies at the very heart of design practice, its uniqueness, its primary contribution to knowledge mobilisation and its strength... this language cuts across disciplines, cultures, and time to share experiences, create common understanding, empathy, new ideas and new knowledge. It makes ideas tangible, translating thoughts into something 'concrete' that others can visualise and importantly, respond to immediately. The sketches, illustrations, artefacts created are not always developed or evolved as propositions or proposed solutions. They can sometimes be what is known as sacrificial concepts - developed to test the priorities that stakeholders claim as being significant or to challenge pre-conceptions.

# Design



importantly the design process is not just about making

As you will hopefully see for our market stall later, within the divergent, explorative phases of a design process, many other investigations and modes of enquiry can happen - lit reviews, engineering simulations, comfort assessments, etc etc...

But the making process acts as a way of synthesising these different forms of evidence and knowledge; finding ways in which they can all be pieced together and still satisfy the criteria for practicality, viability and attractiveness to users and customers.

# Participatory Design



Involving other people in design, is what we call co-design or participatory design

Include other people for practical and democratic reasons

George Bernard Shaw -

“If you have an apple and I have an apple and we exchange apples then you and I still have one apple.

But if you have an idea and I have an idea and we exchange ideas, then each of us will have two ideas.”

Difference between co-design and participatory design is that co-design is still owned and managed by the expert designers. They still make things with the participants as a way of accessing their knowledge, lived experiences, their priorities, their ideas etc. But the expert designers still interpret, combine with other knowledge and produce their own concepts informed by the making activities with the participants

Participatory design is where expert design act more as facilitator and expert advisors to a group of people who own the process and the outputs.

Participatory design is a method of including people in a design and development process of a product or service; specifically people whose lives will be affected by the product or service being designed.

At its heart are pragmatic and democratic values; pragmatic in that engagement is likely to lead to more ideas and eventually more appropriate, usable and empathetic design solutions. Democratic in the sense that end users have a fundamental right to have a say in the project.

In instances where users are engaged, a clear distinction defines true participation from more consultatory methods; namely the ability to influence the process as well as the output. Co-creation takes this step further, no longer merely informing the process and the outcome but taking a more active role in the creative and iterative prototyping elements of the process thereby influencing the process from the inside and being a part of the outcome.

**{click}**

The inclusion of more people inherently increases the potential for more ideas which increases the potential for good ideas. Different perspectives have the capacity to reframe problems which can be an invaluable tool when seeking ideas and solution validation. However, there are risks in bringing diverse groups together - there is an inherent potential for discomfort in such a process.

Finding an appropriate approach for participation is key. Some people are not comfortable with ‘post-it note sessions’ or with creative workshops, or with thinking about the world in terms that bear no relationship to their physical and social experiences. One of the key things about the the approaches used to engage participants is that it has to be culturally relevant in order to make them comfortable with the process

We’ve used stop frame animation, lego, creative writing and poetry, drawing, clay and plasticine modelling, cardboard mock-ups and other rough mock-up kits, Buck-a-roo, Top Gear’s Cool Wall, Dragon’s Den and Britain’s Got Talent, Cinema of the Future, Minecraft and Civilisation building games, photography and many more creative and culturally relevant ways of engaging users and identifying key aspects of their experiences relevant to the topic in question...

Teenagers are comfortable with the Top Gear Cool Wall for rating and voting on new ideas, with Dragon’s den for new pitching ideas, with ‘Cinema of the Future’ setting in a real cinema with pop-corn for viewing futuristic possibilities.

The trick is to have a few possibilities for ways to engage with a specific group of people and, if you detect a distinct lack of engagement, be prepared to iterate... change the method of engagement either during a workshop or at the

# Challenges of participatory making



## Challenges of participatory making.

It is vital to select a media and mode of making that is 'accessible' to the stakeholders - physically, mentally, emotionally.

And this is a balance - there is value to the 'making' be out of the norm as a means of expressing oneself because it enables participants to reframe issues and problems, see them from new perspectives.

However, there are some forms of making that are too out of the 'norm'.

To give you some ideas....

Stop frame animation is a media we have used to capture the lived experiences of cared for children. They were completely unfamiliar with the technique but were externally engaged when we pitched this as the way that big films (chicken run, wallace and gromit etc) had been made. they were willing to learn.

With teenagers, we have used BitStrip story boarding - a digital cartoon story building system that is available through Facebook - many participants have used it previously and were familiar with it. They could fall into the process very easily. Using this with older adults might not work, so we have used an alternative form called 6 picture story boarding.

We've used Buck-a-roo, dragon's Den, Britain's got talent, plasticine modelling, Future forum theatre, hacks, physical prototyping, etc.. etc...

At present, I have no manual to provide to others about what works and what doesn't. I do this based on experience and am still surprised when some things work and others don't. The key things to consider are:

- try things out with smaller groups first and be prepared to fail
- have backups - alternative making activities you can roll out if you sense that there is no engagement

# Participatory Design

**think**  
**WITH YOUR HANDS**

The concept of 'Cognitive Interaction'  
- from 'How designers work' by Henrik Gedenryd

The benefits are huge:

for the participants it:

- empowers
  - gives people voice
  - levels hierarchies
  - creates a common language and removes jargon
  - it lets them know that you are listening - when something physical is made in response to an idea that they proposed, they know that you are not merely listening but acting on their contribution - what they say is valued
- 
- It takes complex ideas and abstract concepts and makes them 'real'/tangible
  - With something physical, people can then enquire, what does this bit mean? etc
  - Participatory making can act as a form of real time knowledge synthesis, blending knowledge from different participants in different models and prototype artefacts

# LEGO® SERIOUS PLAY®



Tomorrow we will be trying out some of these things using one specific form of making - Lego.

We will be asking you some questions relevant to implementation and asking you to create models. The questions are very relevant to you as a community so by the end of the day, the outputs themselves will be of value.

But we hope that the experience will be too. That through experiencing 'making' as a 'form of thinking' and 'participatory making' as a 'form of synthesis' you will gain a much greater insight into the value of 'making' and making within a design process, than my poor attempt right now.

Thank you

# Thank you



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please do get in touch

thank you