



On Transition Design - continuation

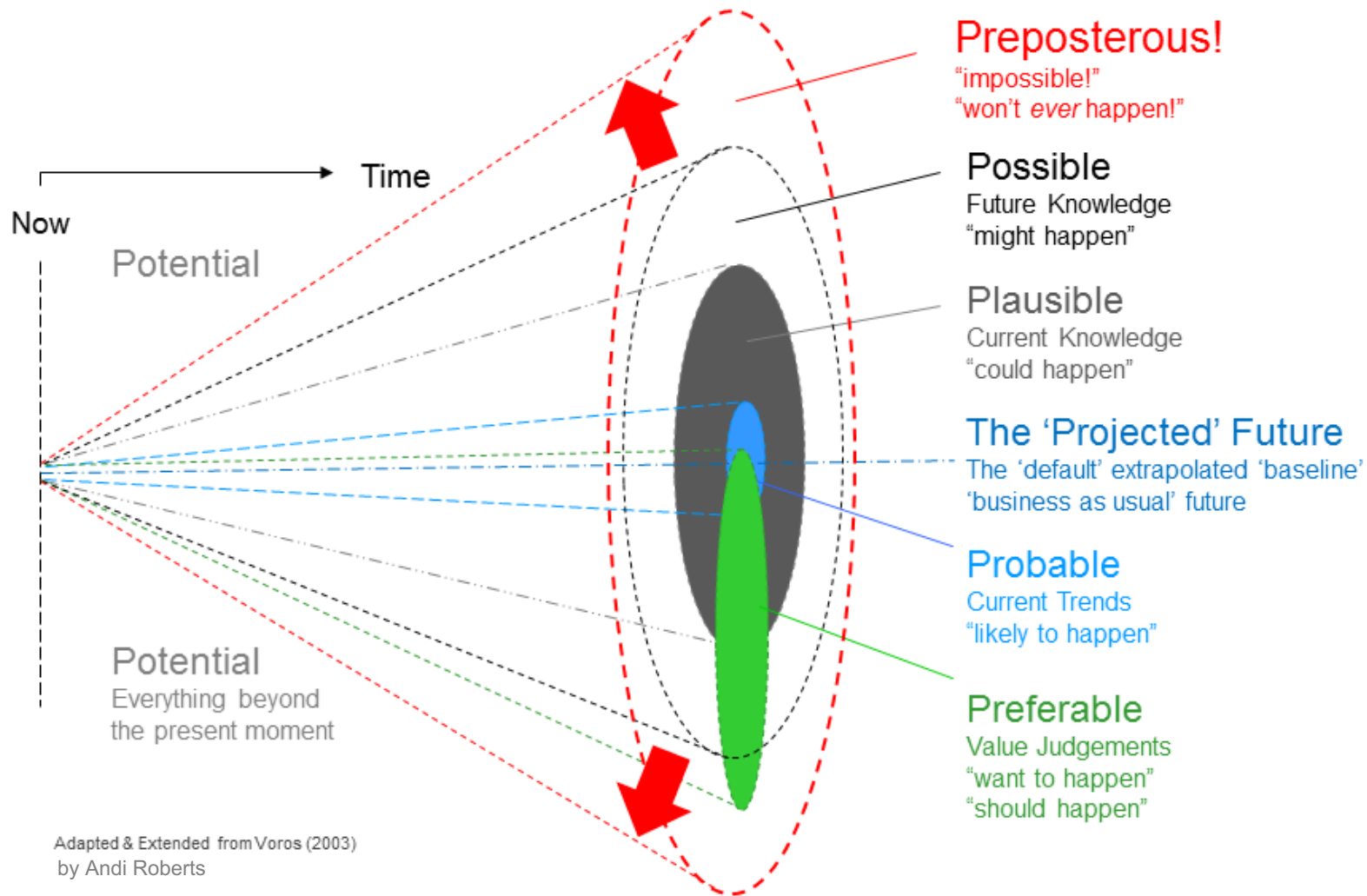
Alma Leora Culén
IN3010 January 31, 2024

1. Vision

Most people would argue that transition toward more sustainable futures is necessary, but until recently, there have been few compelling narratives about what those futures might look like.

The environmental movement has long been criticized for its inability or failure to develop visions that are based upon a high quality of life rather than impoverishment and abstention.

Transition Design proposes that more compelling future-oriented visions are needed to inform and inspire projects in the present and that the tools and methods of design can aid in the development of these visions. Tonkinwise (2014) argues for “motivating visions as well as visions that can serve as measures against which to evaluate design moves, but visions that are also modifiable according to the changing situation.” Dunne and Raby (2013) argue that visioning is crucial; it creates spaces for discussion and debate about alternative futures and ways of being and it requires us to suspend disbelief and forget how things are now and wonder about how things could be.



Adapted & Extended from Voros (2003)
by Andi Roberts

2. Posture (attitude) and Mindset

- Transition Design argues that living in and through transitional times calls for **self-reflection** and a new way of “being” in the world.
- This change must be based upon a new **mindset or worldview** and **posture (internal)** that lead to different ways of interacting with others (external) that informs problem solving and design. All of these are mutually influencing.
- Our individual and collective mindsets represent the beliefs, values, assumptions, and expectations that are formed by our individual experiences, cultural norms, religious/spiritual beliefs, and the socioeconomic and political paradigms to which we subscribe.
- **Designers' mindsets and postures often go unnoticed and unacknowledged** but they profoundly influence what is identified as a problem and how it is framed and solved within a given context. Yet, **design methodologies and process rarely take these important factors into account.**

3. Theories of Change

Any planned course of action (design) is based upon a theory of change: a hypothesis is formulated about what type of change is needed and an assumption is made about the correct approach for intervention, based upon a predicted outcome.

Often, the assumptions and predictions that form the basis of this action are unconscious or go unnoticed, therefore change itself has not been adequately understood by designers, nor has it been viewed as an important area for study and research in design

A new transdisciplinary body of knowledge related to the dynamics of change within complex systems is emerging that challenges these assumptions and has the potential to inform new approaches to design and problem solving.

Ideas and discoveries from a diversity of fields such as physics, biology, sociology, and organizational development have revealed that change within open, complex systems such as social organizations and ecosystems manifests in counterintuitive ways. And, although change within such systems can be catalyzed and even gently directed, it cannot be managed or controlled, nor can outcomes be accurately predicted.

4. New ways of designing

The transition to a sustainable society will require new design approaches informed by different value sets and knowledge.

Transition Designers see themselves as agents of change and understand that transition calls for a commitment to work iteratively at multiple levels of scale, over longer horizons of time. Because Transition Designers develop visions of the “long now”, they take a decidedly different approach to problem solving in the present.

Transition Designers learn to see and solve for wicked problems and view a single design or solution as a single step in a longer transition toward a future-based vision.

Transition solutions might have intentionally short lifespans where obsolescence is a given because it is a step toward a longer-term goal. Or, a solution might be designed to change and evolve over long periods of time. Transition Design is also a process and methodology for making connections. Transition Designers have the skill, foresight, and ability to connect different types of solutions together for greater leverage and impact because they are guided by, a longer-term objective or vision.

Discussion

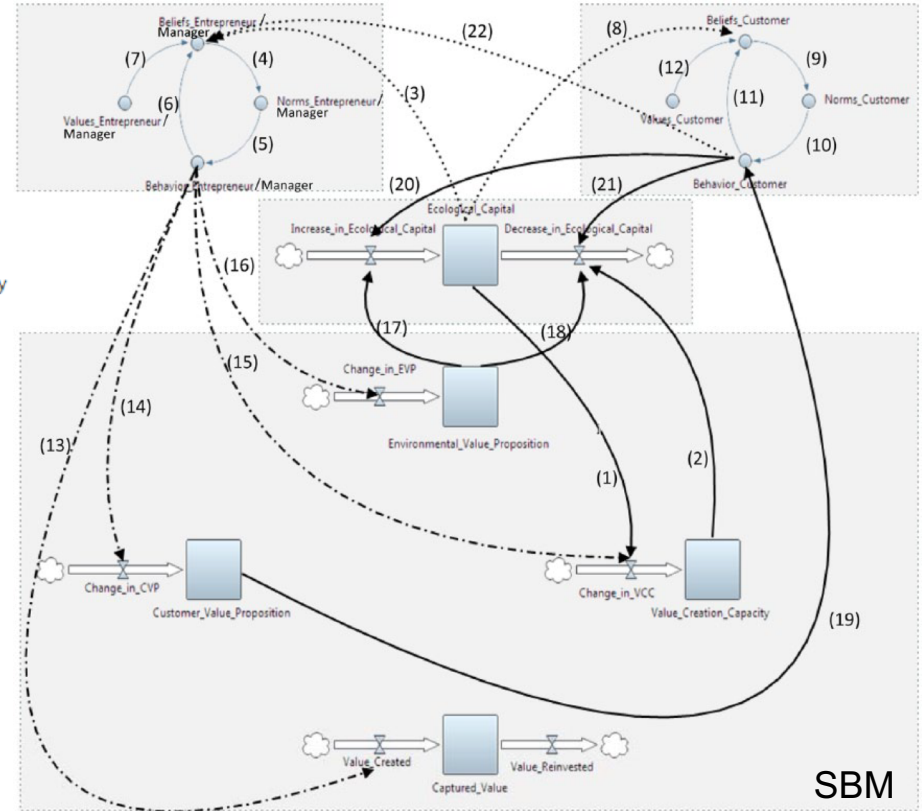
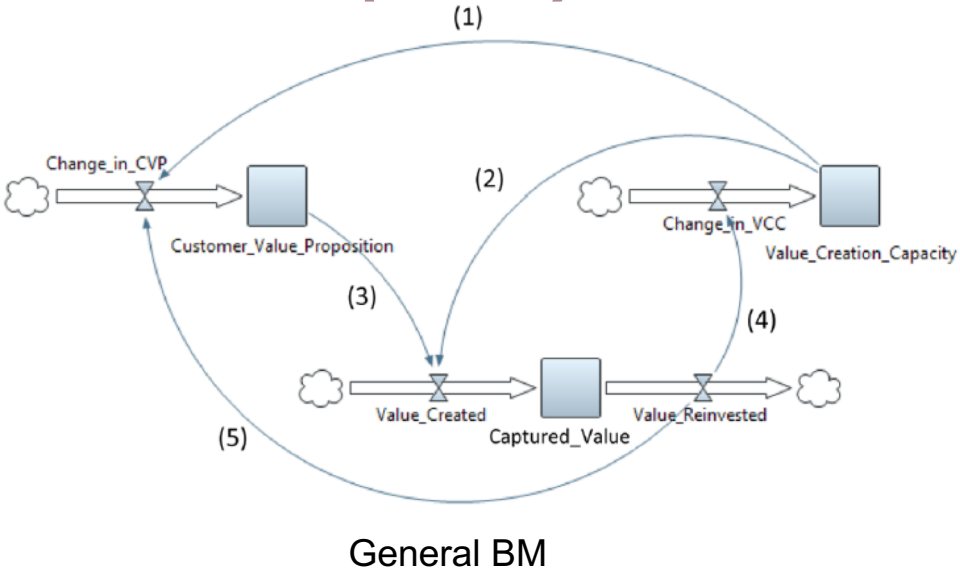
- 1) What is likely to happen if our societies do not intentionally transition toward sustainable futures?
- 2) In what ways is the discipline of design (and designers) suited to contribute to seeding and catalyzing societal transition and systems-level changes?
- 3) Why does Transition Design argue that a new area of design focus is needed?
- 4) What is meant by the argument 'fundamental change at every level of our society is needed to address the issues confronting us in the 21st century'?
- 5) Why are the challenges of societal transitions and systems-level change inherently transdisciplinary?

Pensum article (please read):
Connecting the dots Fritjof Capra and Pier Luigi Luisi

Design Methodologies, Methods, Toolkits and Guidelines

The next lecture introduces concrete methods and methodologies

Increased Complexity



Abdelkafi, Nizar, and Karl Täuscher. "Business Models for Sustainability from a System Dynamics Perspective." *Organization & Environment* 29, no. 1 (2016): 74–96.

Wicked Problems

Horst W.J. Rittel and Melvin M. Webber, professors of design and urban planning at the University of California at Berkeley, first coined the term **wicked problem** in “Dilemmas in a General Theory of Planning” (1973).

10 Characteristics Wicked Problems

1. There is no definitive formula for a wicked problem.
2. Wicked problems have no stopping rule—there’s no way to know whether your solution is final.
3. Solutions to wicked problems are not true or false; they can only be good or bad.
4. You cannot immediately test a solution to a wicked problem.
5. Every solution to a wicked problem is a "one-shot operation" because there is no opportunity to learn by trial and error—every attempt counts.
6. Wicked problems do not have a set number of potential solutions.
7. Every wicked problem is essentially unique.
8. Every wicked problem can be considered a symptom of another problem.
9. There is always more than one explanation for a wicked problem because the explanations vary greatly depending on the individual's perspective.
10. The planner/designer has no right to be wrong and must be fully responsible for their actions.

[What is A Wicked Problem and How Can You Solve It?](#)

Design & sustainable futures - outline

- ① What? – Sustainable things (digital products and services) and Things (at the more abstract level, like governance, economies, strategies...)

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- ② Why? – Change is becoming necessary as economic and competitive pressures increase and resources become constrained. Preparing for the future where sustainability is at the core is becoming an imperative
- ③ How? – **Transition Design**, also other efforts within science and design

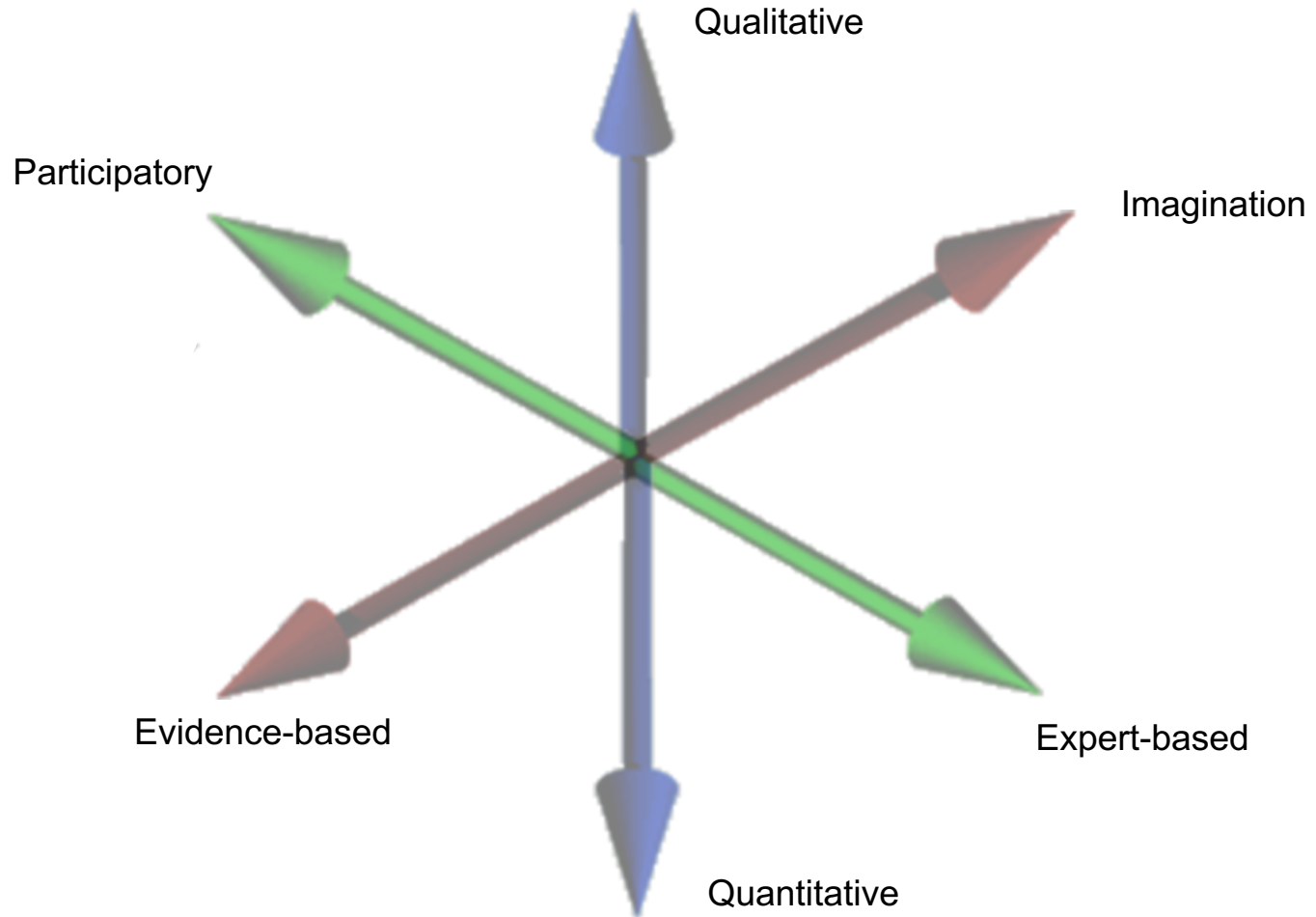
Futuring – a critical and emancipatory tradition

- Has been used for decades but for a different purpose
- Allows for re-politicization of governance and decision-making
- Critical perspective needed due to systemic interrelatedness (ecological, social, economic), a growth in the forward-looking socio-economic paradigm, and the challenge of theory development
- Design futuring looks for comprehensive solutions that work
- Good collection of methods from diverse fields + designers continuous adjustments that make them work in practice, within a given context of use

Ahlqvist, Toni, and Martin Rhisiart. "Emerging Pathways for Critical Futures Research: Changing Contexts and Impacts of Social Theory." *Futures* 71 (2015): 91–104.

Methods sample

Forecasting	Scenarios
Backcasting	Speculative artefacts
Cross-impact analysis	Design fiction
Data-mining	Imaginaries
Ethnographic foresight	Visioning
Futures wheel	Simulated modeling
Futures polygon	Structural analysis
Gaming	Speculative and critical design
Horizon scanning	Trend impact analysis
Megatrend analysis	Wild cards





Three different sectors

1. Industry - Horizon Scanning

Horizon scanning, also called environmental scanning, is a collection of techniques for identifying, collecting, and exploring the meaning of emerging issues, trends, and other signals of change that may point to new opportunities or threats. Many techniques such as

- Scanning

- Scoping

- Collecting

- Interpreting

- Strategies for “hunting and gathering” signals of change at the periphery

[Shaping Tomorrow](#) uses an AI-driven horizon scanning system.

2. Academia - Visioning

Identifying a shared and desirable image of the future.

“The most critical task facing humanity today is the creation of a shared vision of a sustainable and desirable society” (Costanza, R. 2000. Visions of alternative (unpredictable) futures and their use in policy analysis. Conservation Ecology 4(1):5).

Various approaches to visioning have been applied in many fields.

Design related example:

Visioning was used to synthesize analytical research and creative futures investigation in development of four alternative future scenarios for low-carbon, resilient cities in Australia ([Shifting conversations for sustainability transitions using participatory design visioning](#), [Al Gaziulusoy](#), [C Ryan](#) - The Design Journal, 2017)

3. Government - innovation and community engagement

Example: Audrey Tang, Taiwan's Digital Minister

After the elections in 2016, the need arose for the perfect candidate to lead a highly ambitious 'Asia Silicon Valley' project that would boost the Taiwanese economy. Tang was asked to help position the plan, and did this so convincingly that she was tasked with *"finding a minister without portfolio to discuss policy issues with citizens."* The best candidate would soon turn out to be Tang herself. But she insisted on *"crowdsourcing opinion, so all decisions could be made collectively."*

- In a nutshell, that's how **Audrey Tang** became the Digital Minister of Taiwan without a portfolio. And not only that: she's also the youngest minister and the first-ever trans official in the Taiwanese cabinet.

How can governments innovate?

- Her work with g0v has offered Tang unique insights into the relationship between governments and innovators, and the ways they can cooperate. According to Tang, governments have to keep two things in mind in order to be able to truly innovate. Firstly, and this might sound like a contradiction: it's **not necessary to reinvent the wheel** for the millionth time. It's normal and even recommended to look at what other governments are doing, and what can be learned from their process. *"For governments to truly innovate, they have to realize that many tools and mechanisms have already been tried by other governments. The problem is not that there are not enough options, but that there's no horizontal transfer of knowledge and expertise,"* says Tang. Secondly, governments should remember to **show flexibility** with regard to rules and regulations. *"It's impossible to make innovation happen if the innovator is then punished for breaking old laws or regulations. They should be encouraged to break regulations, on two conditions: they should propose alternative regulations during a one-year trial, and should open all data."*

Audrey Tang

“In my office, we abide by **three main principles: saving time, reducing risk, and improving trust.** We never trade one for the other two. First, we say: do no harm. Then we can improve one of the three in a piecemeal fashion.

Audrey Tang

- [TEDx talk](#)

Citizen lab Mission:
CitizenLab's mission is to build stronger democracies by making public decision-making more inclusive, Participator, and responsive.



// Case Studies

How community engagement helped reimagine public spaces in Philadelphia

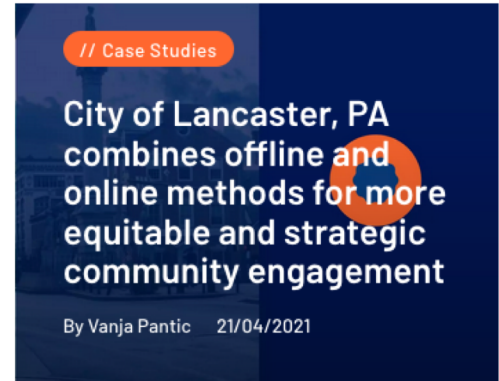
By Vanja Pantic 14/12/2021



// Case Studies, Civic Engagement

Stirling's centralised community engagement promotes safe and impactful participation

By Vanja Pantic 10/08/2021



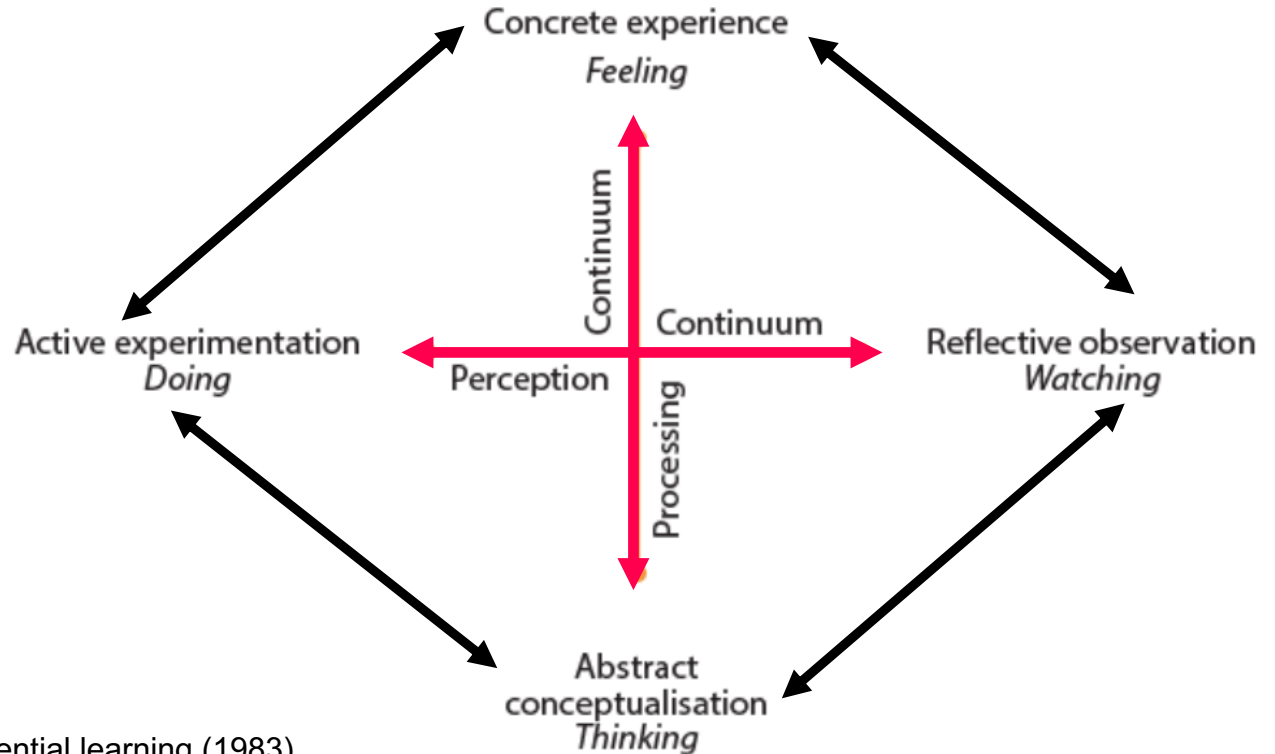
// Case Studies

City of Lancaster, PA combines offline and online methods for more equitable and strategic community engagement

By Vanja Pantic 21/04/2021

4. Education

Constructivist and experiential learning





Research through Design (RtD)

The Lab, the Field and the Showroom

Examples of projects

From RtD course

The Tekhné Academy

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TA0345 Dreams becoming Reality

TA0136 Create your Very-Real VR-Reality



TA0342 Ethics and AI

Previous students at Tekhne Academy

Victoria
Year of 2032

Current position:
The Robot Hospital

Current yearly income:
\$ 320 000

Graduated with TekhneKarma points:
179 500



Andrea
Year of 2031

Current position:
Google Dream Centre

Current yearly income:
\$ 219 000

Graduated with TekhneKarma points:
199 990

video tracking analysis

"My football skills have improved 174 % since I have been part of the newly developed microGoolge skills analytics program. It uses ML and AI with real time muscle impulse to correct your technique I am aiming for 26% more improvement in the next quarter"

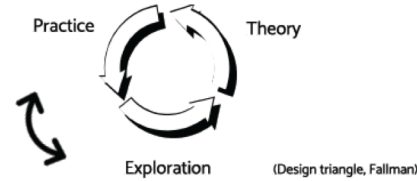


Ryan Jones
6th form student
predicted winner of "most improved talent 2030"
Karma silver winner 2029

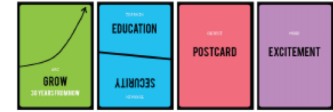


Tools: Miro & Figma

Interplay between theory and practice



Thing from the Future (Candy)



Adjusted to our project:

Arc: Dystopian
Terrain: Education
Object: Random
Mood: Random

Some significant articles:

Annotated portfolios

Gaver & Bowers

Strategies for Annotating Portfolios:

Mapping Designs for New Domains

Culén, Gaver, Børsting

School as ecosystem

Speculative design:

crafting the speculation

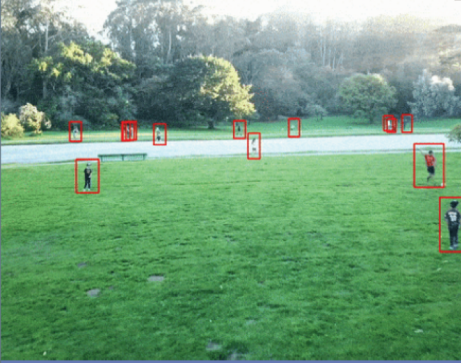
James Auger

Relatability

Speculative futures

drone footage

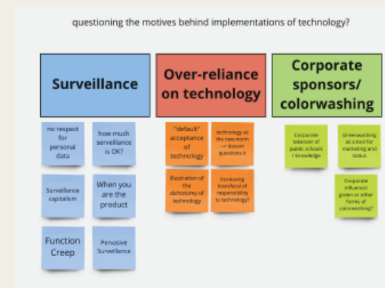
Our drones help out on the sports field by tracking students to help analyse their technique. When they are not on the sports field they patrol the playground looking for littering and other misdemeanors



Annotated portfolios (Gaver & Bowers)

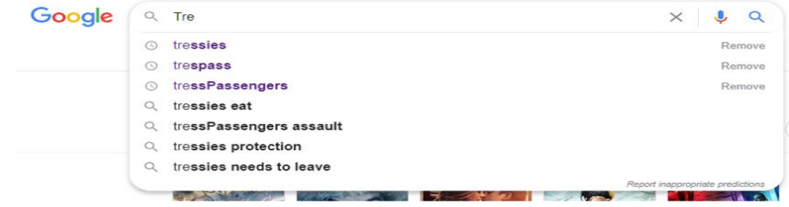
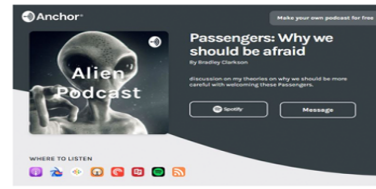
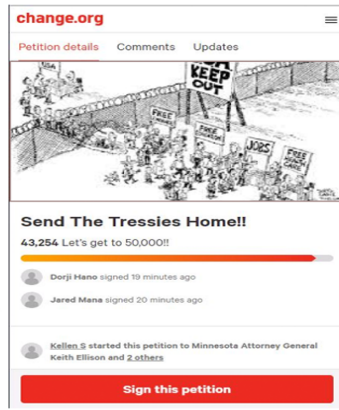
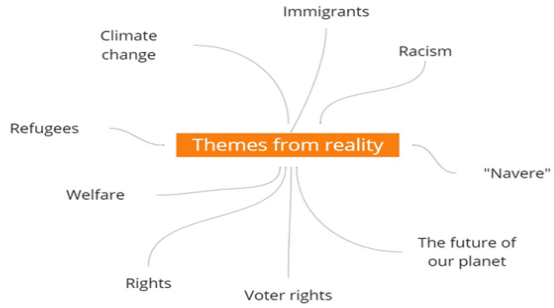
--> theory as analytical tool

1. Defining the issues we wish to portray



2. How we want to portray these issues

Real-life problems wrapped in fiction



The End of Human The Bees



