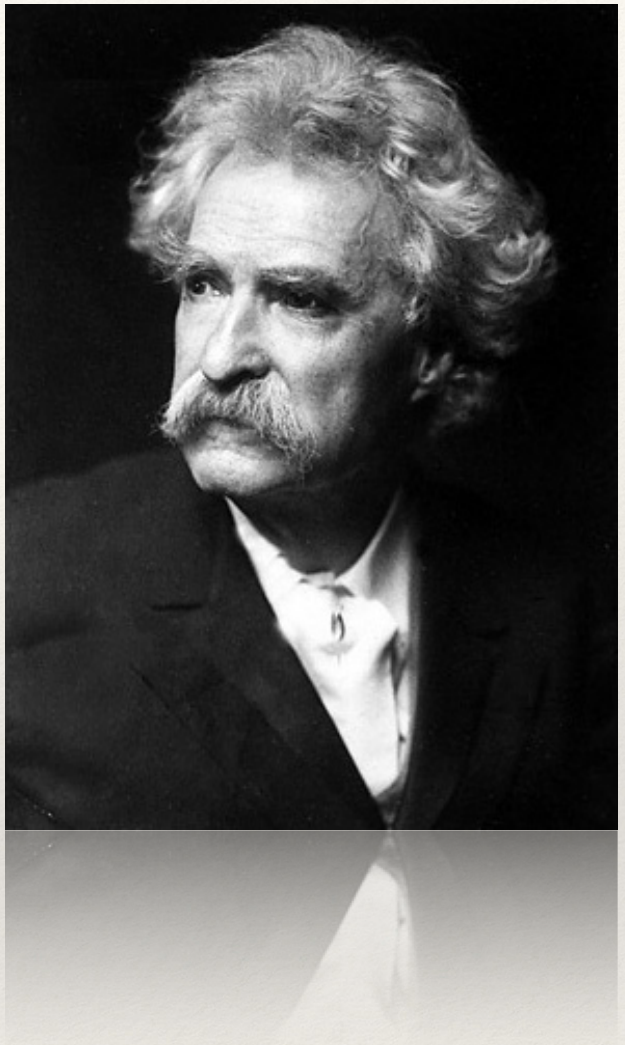
It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.



Attributed to Mark Twain

Integrated EA Westminster February 2014

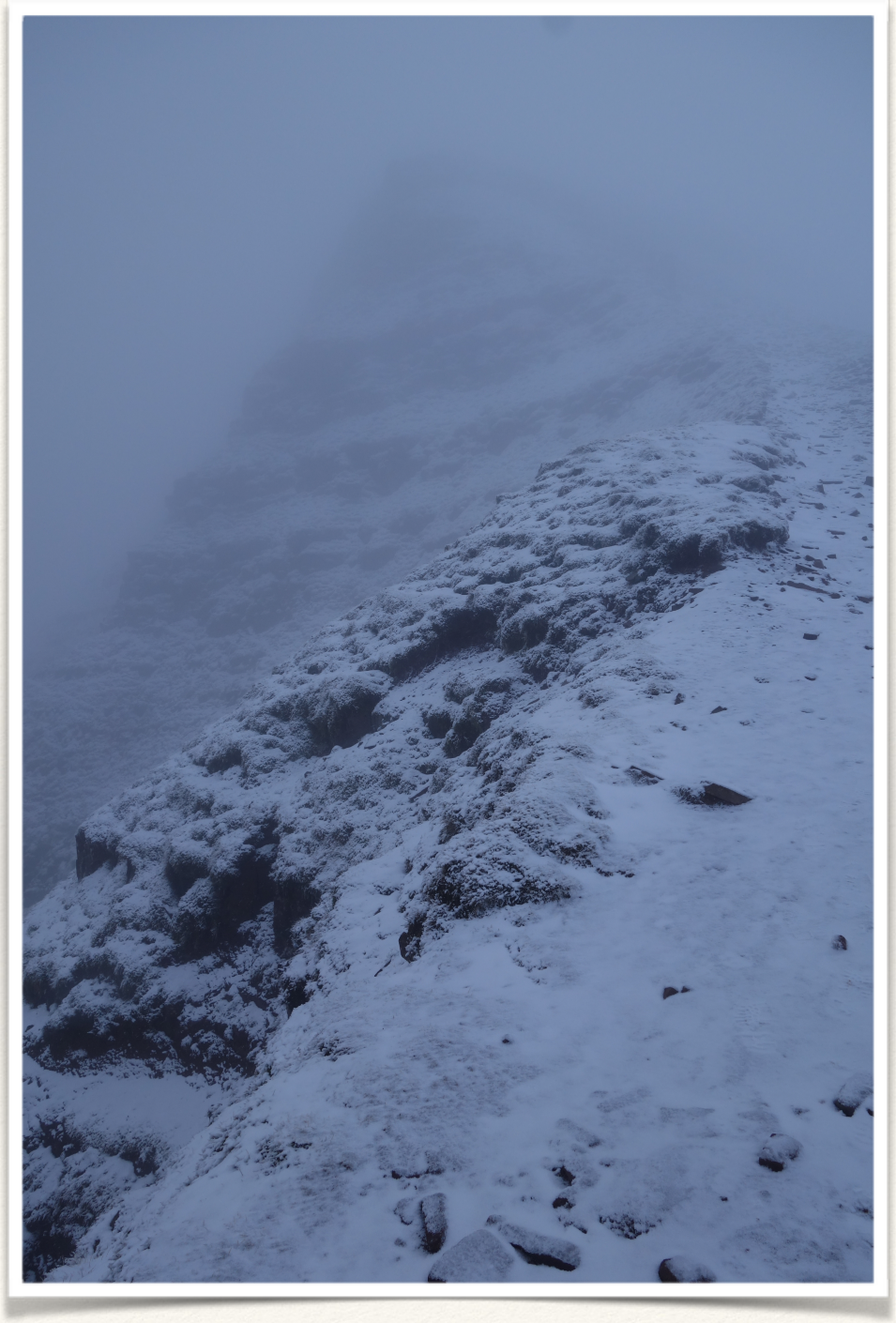
The new simplicity

Cognitive complexity
Naturalising sense-making

From evolutionary biology
Co-evolution & Exaptation

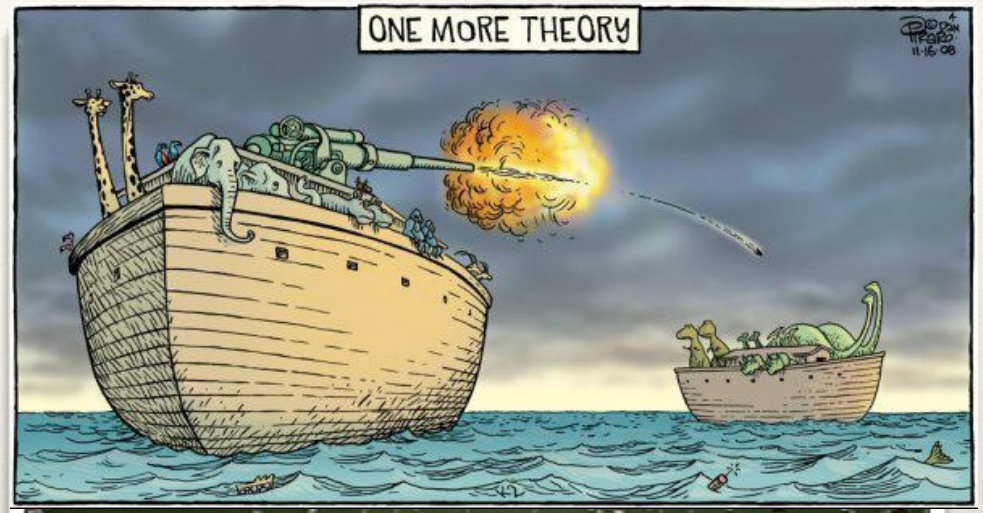
From induction to abduction
Dealing with samples of one or less

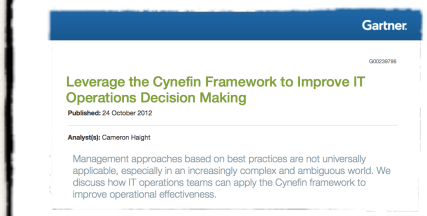
Human metadata enabling
Human sensor networks &
an asymmetric response to asymmetry



Types of system

- A system is a network with coherence (key concept)
- An agent is anything which acts within the system
- So we get three types:
  - **Order**: full constrain of agent behaviour
  - **Chaos**: no constrains, random
  - **Complex**: system & agents co-evolve





Understanding Cynefin

The basic framework

In Cynefin order is divided into 'obvious' and 'complicated' based on peoples' perception of the relationship between cause and effect.

Disorder (the fifth domain) is the state of not knowing which domain you are in and is divided into 'transitionary' and 'inauthentic'.

The boundary between Obvious and Chaotic is show as a cliff, or a catastrophic failure arising from complacency.

Defined by common narratives & is fractal in nature allow fast feedback between strategy & operations

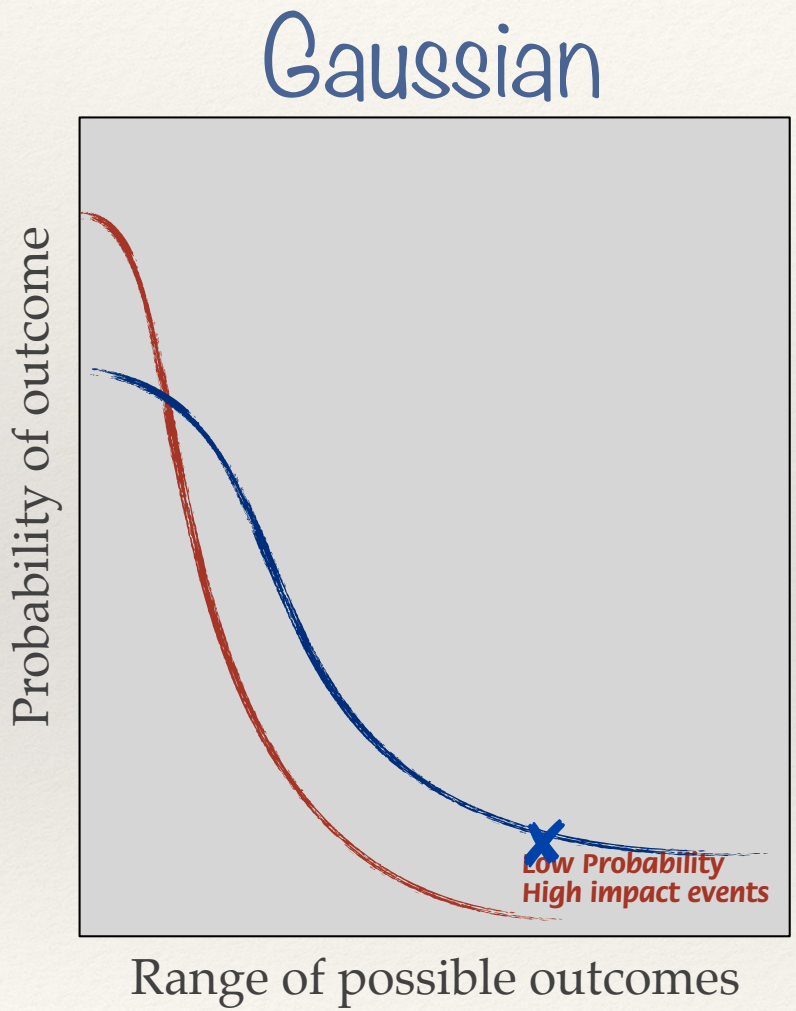
Dynamics are key to its use

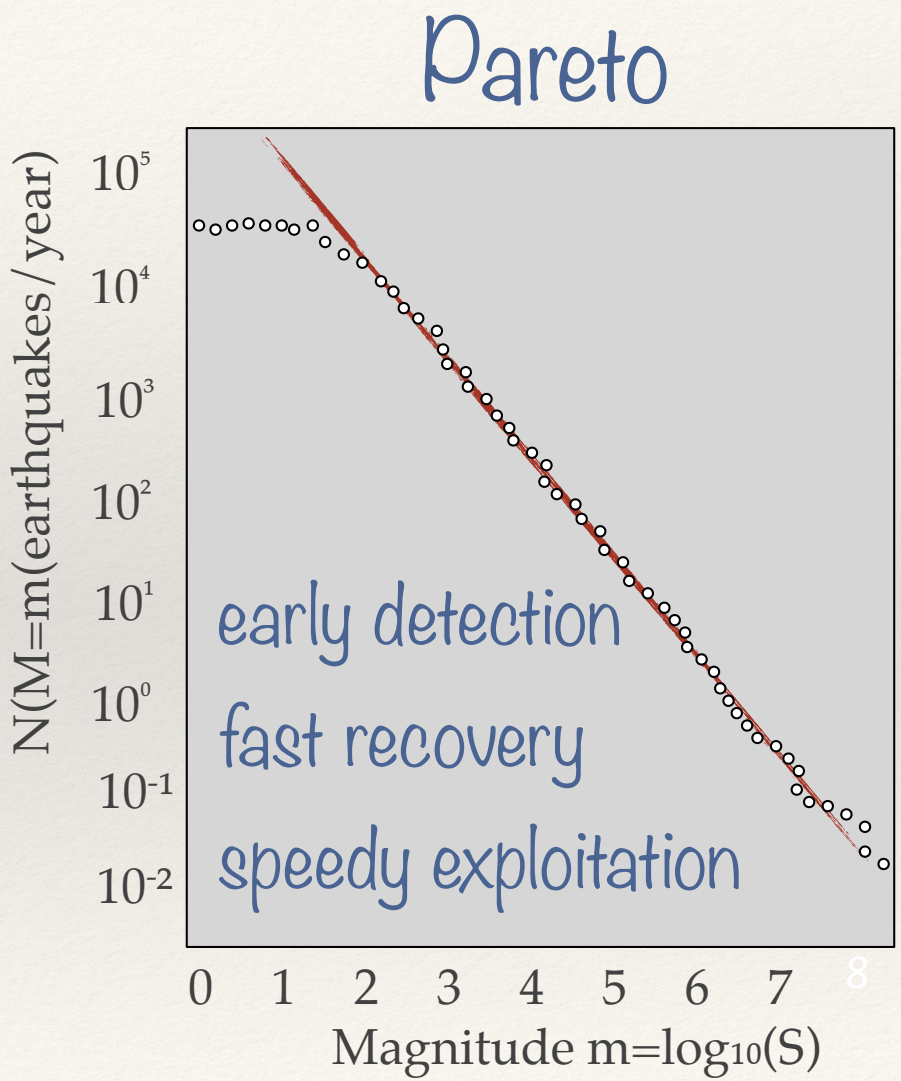
CognitiveEdge

Nothing pleases people more than to go on thinking what they have always thought, and at the same time imagine that they are thinking something new and daring: it combines the advantage of security and the delight of adventure.

T S Eliot

A new context: from robustness to resilience





Derived from material created by Max Boisot
Academy of Management Montreal 2010

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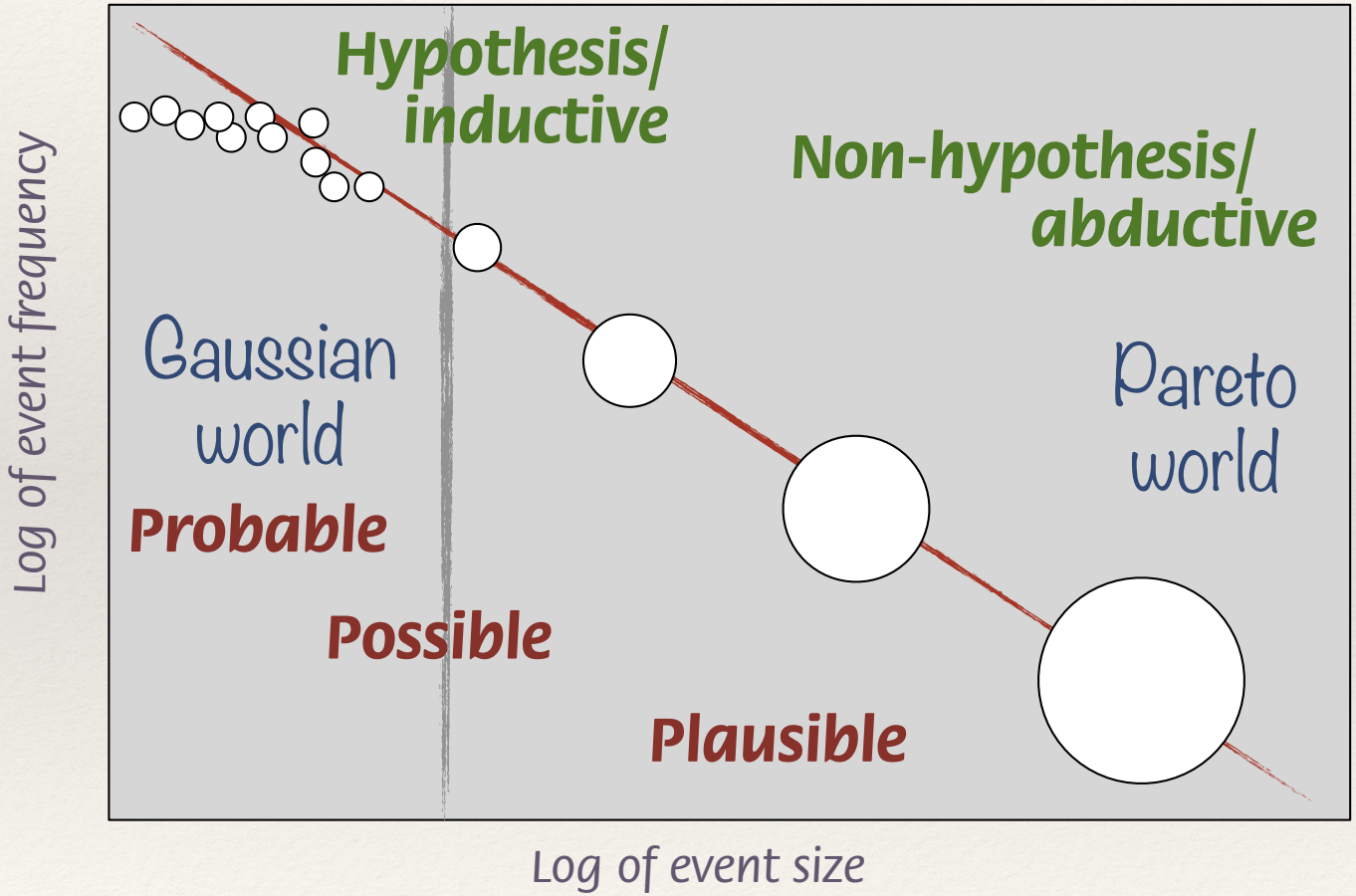
Research & monitoring

From anticipation ...



... to triggering anticipatory awareness

Derived from material created by Max Boisot
Academy of Management Montreal 2010

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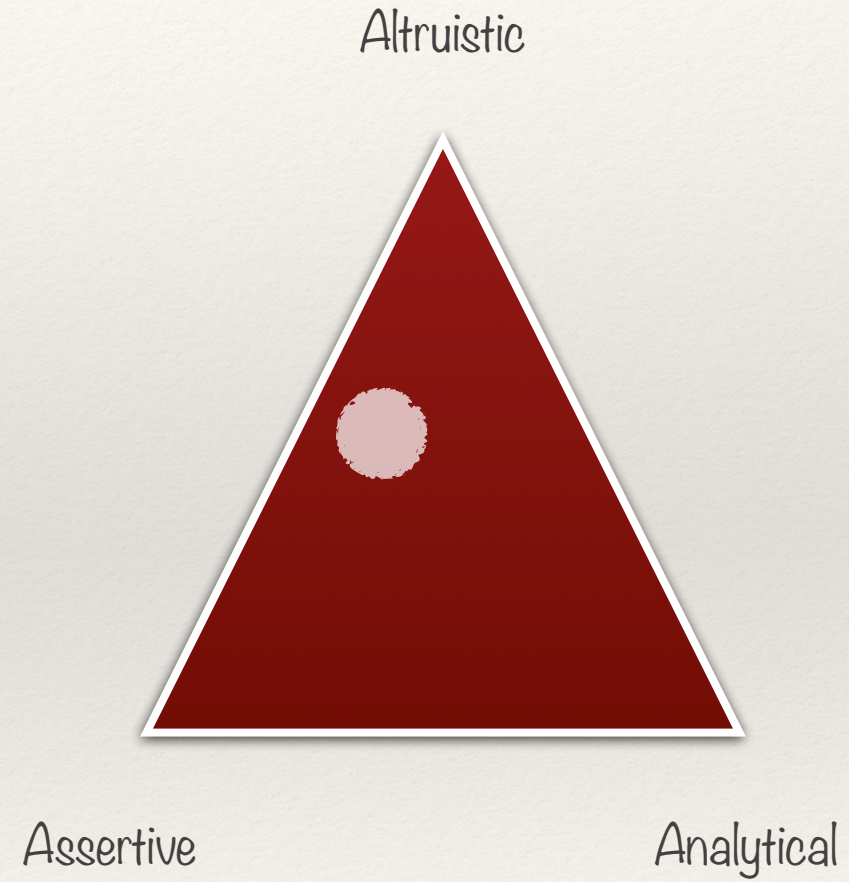
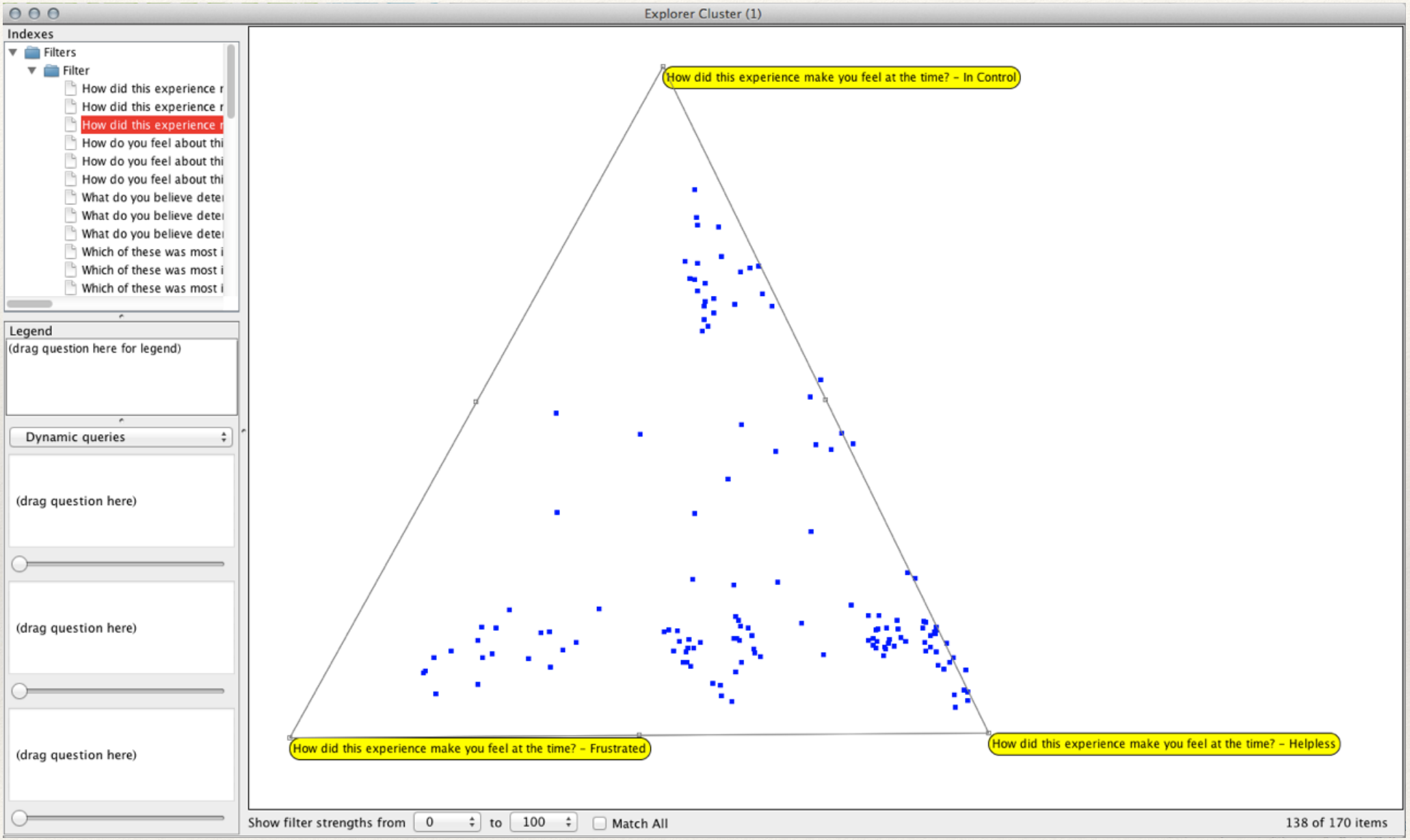
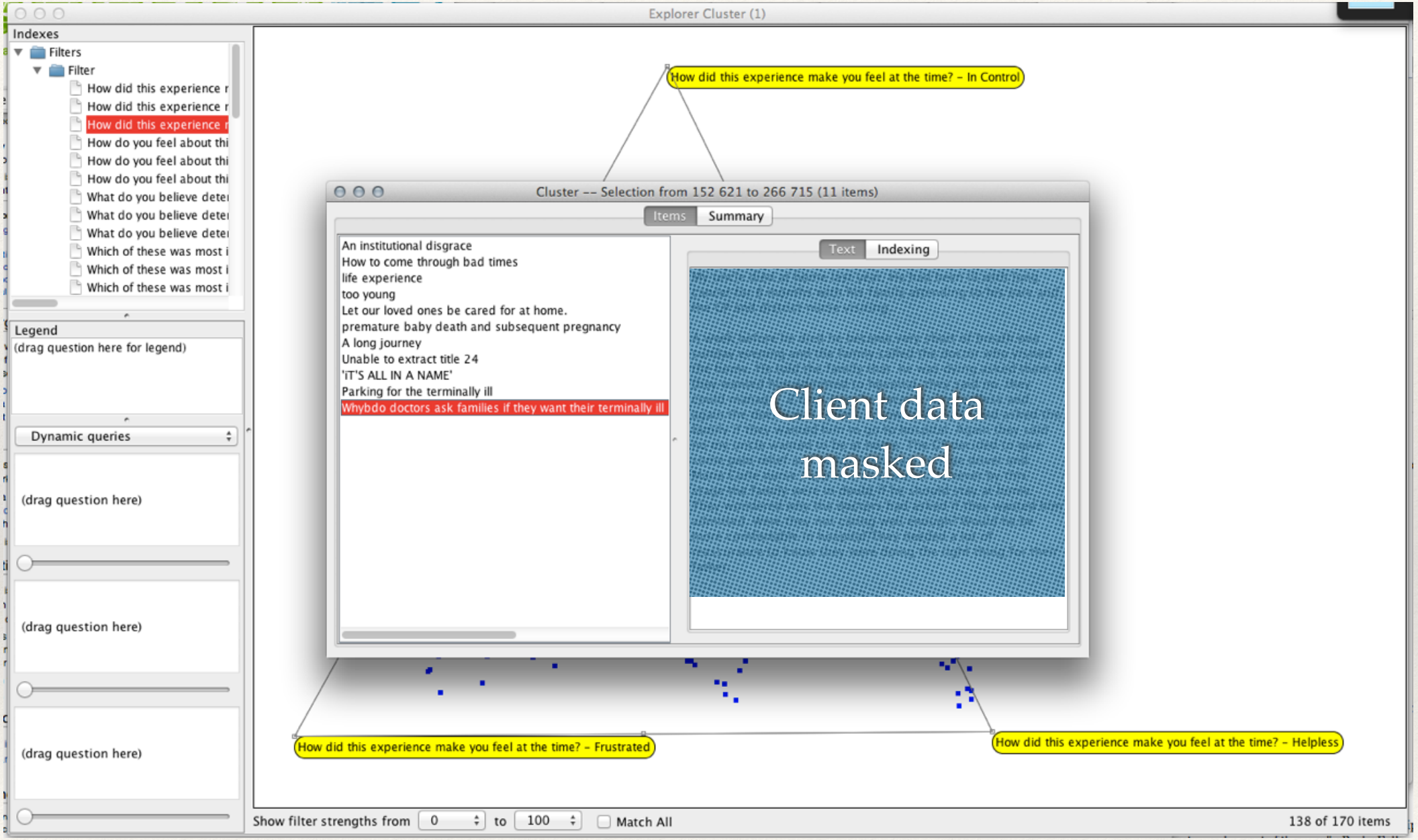
Human metadata

- Micro-narratives are the basis of human sense-making
- Signifiers have necessary ambiguity, forcing cognitive load to gain deeper insight
- Distributed ethnography, scalable at very low cost through human sensor networks



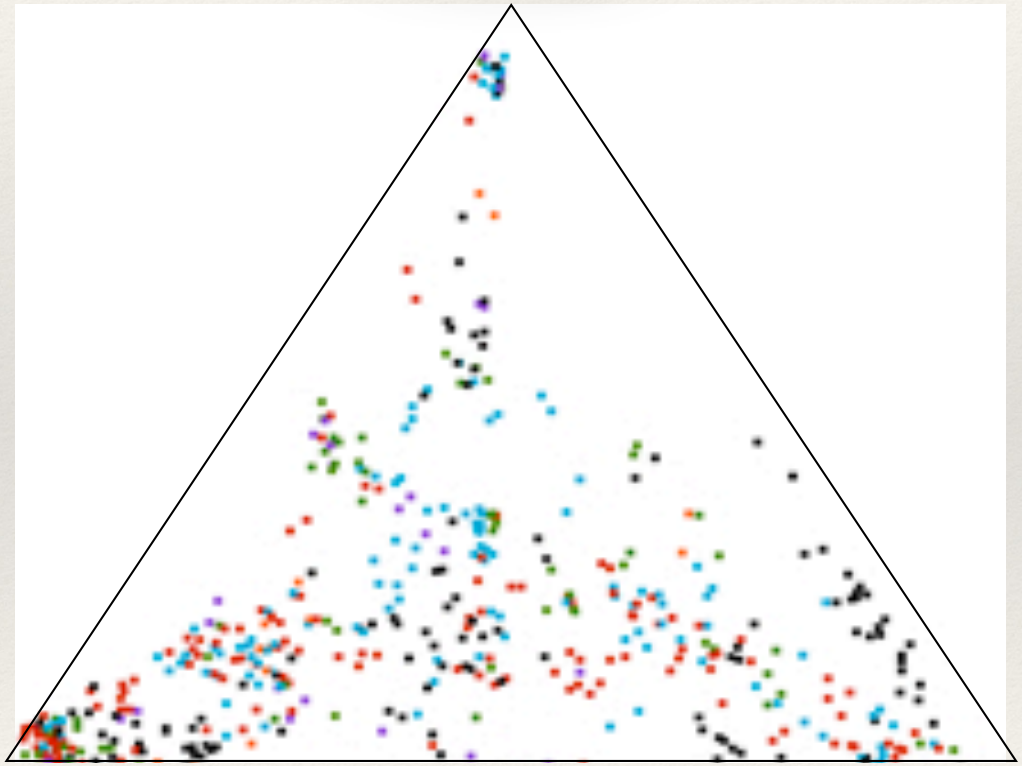




Culture scan

The most important thing in this example was

Acting intuitively, instantly



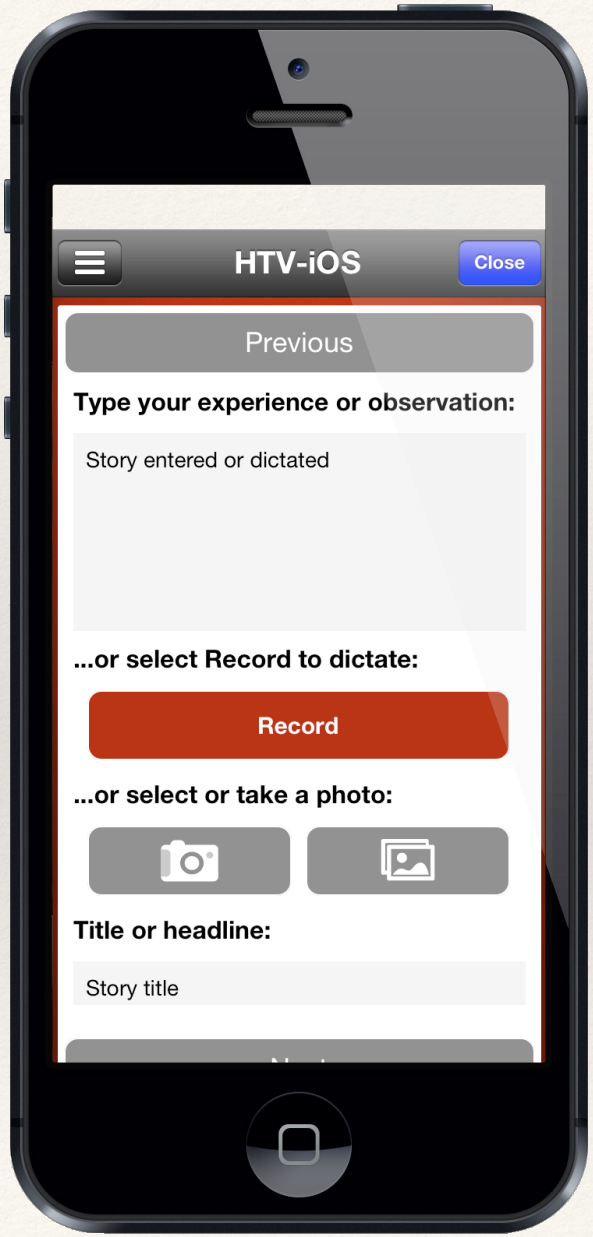
The situation was analysed logically

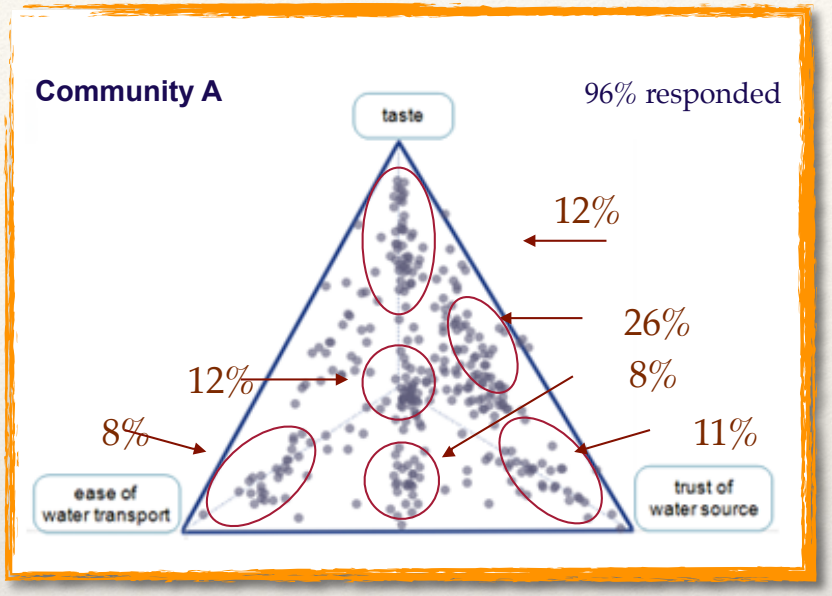
People thought deeply and made decisions based on principles

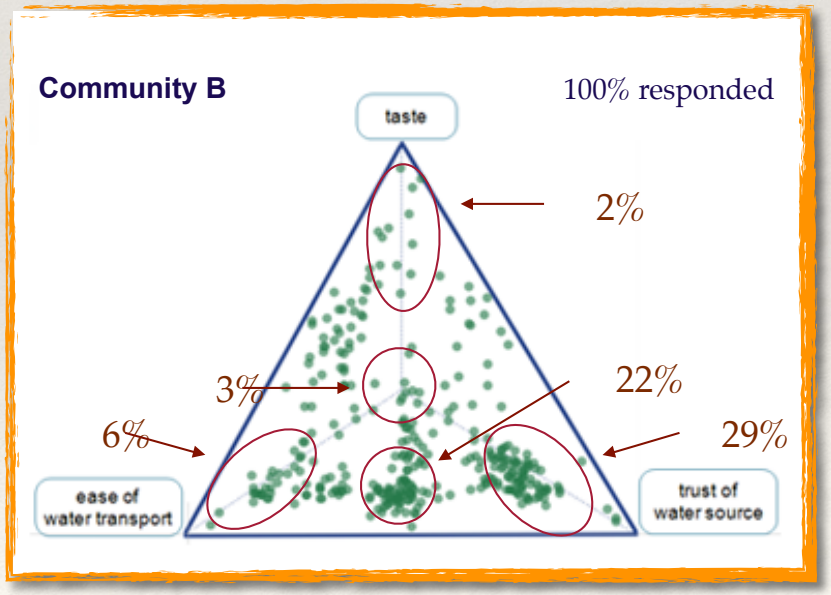
CognitiveEdge

SenseMaker®

healthy together Victoria

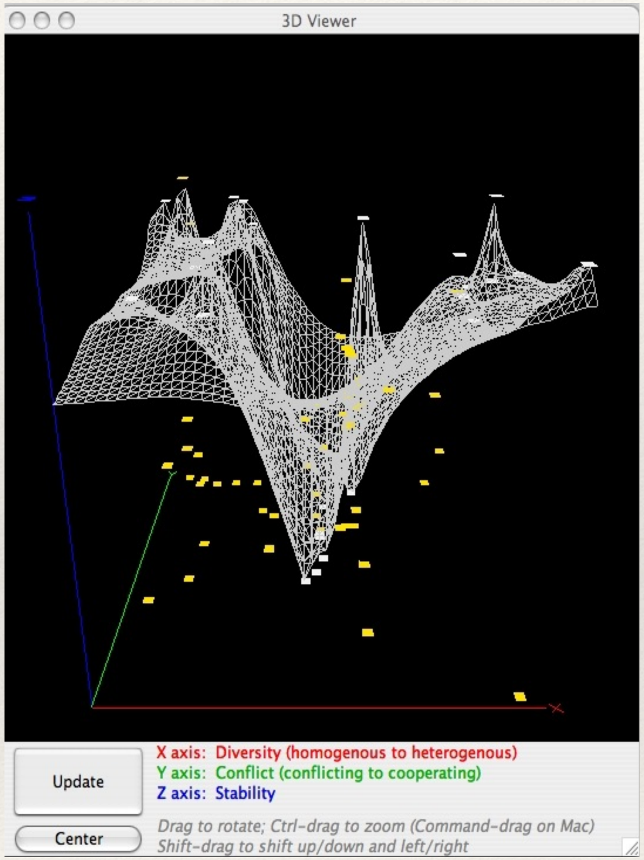


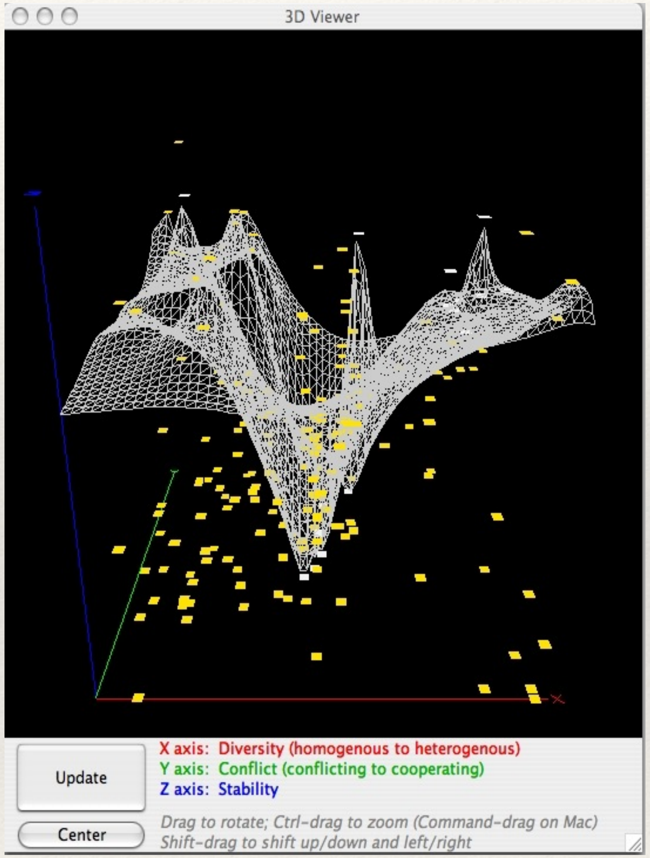


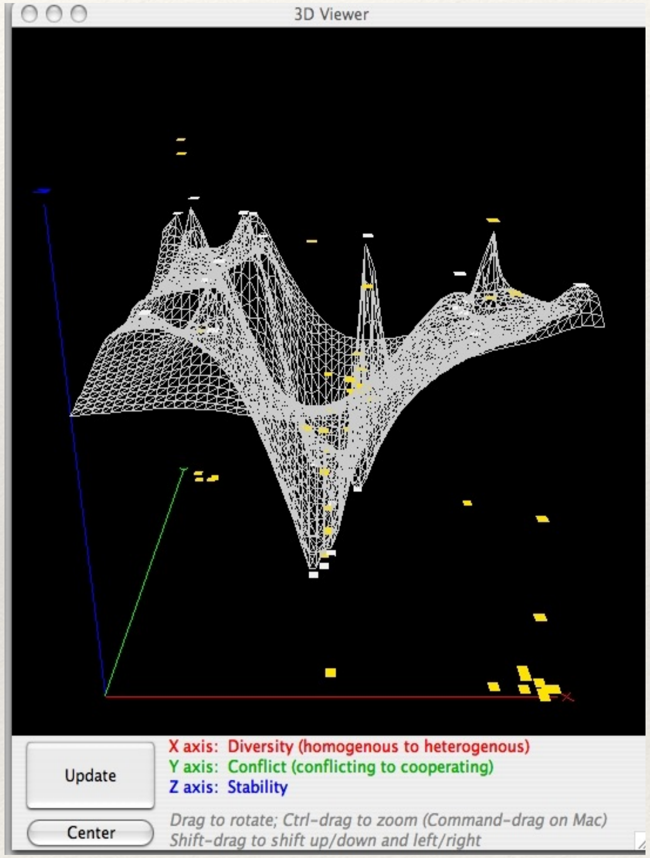


CognitiveEdge

Disintermediaton





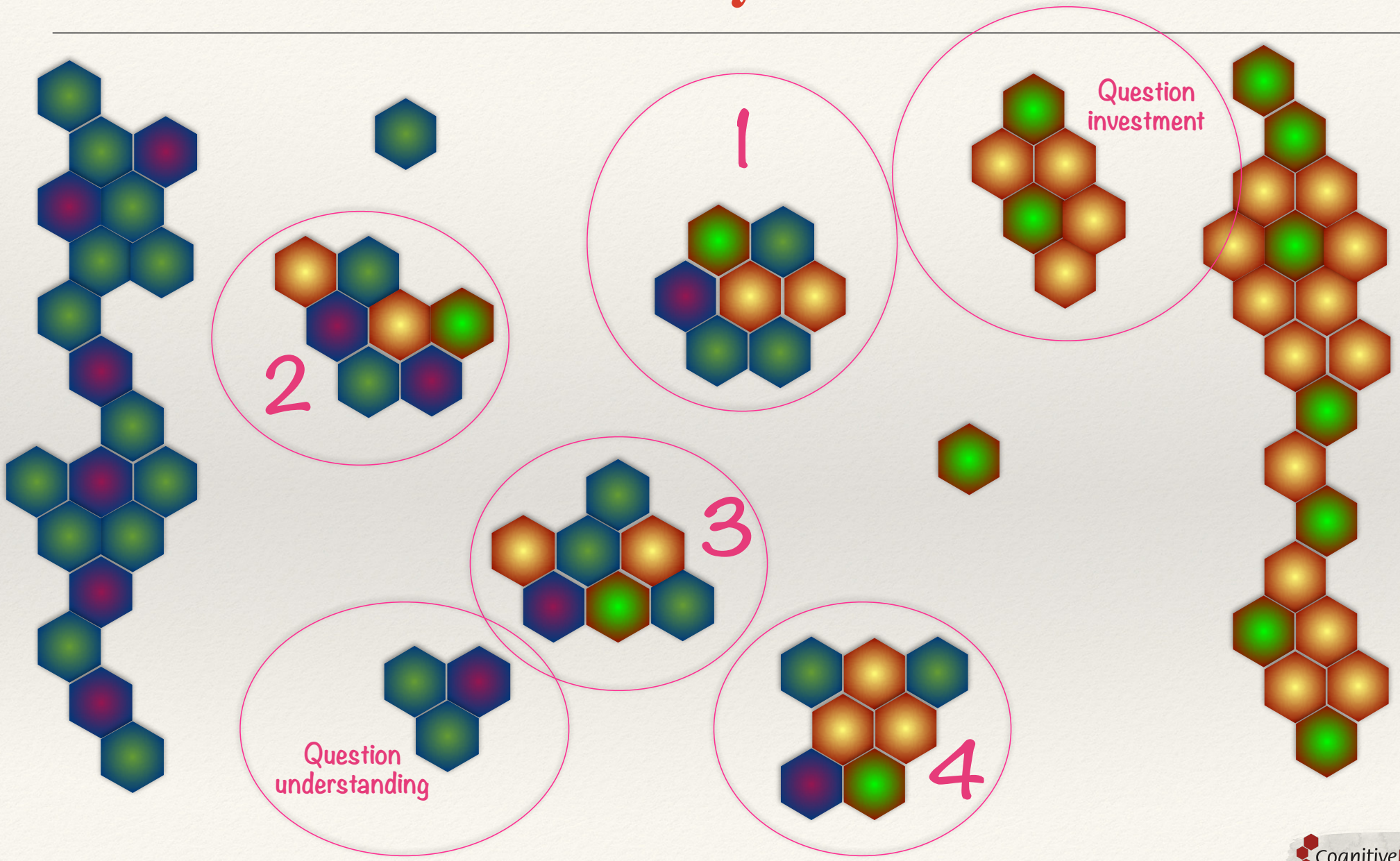


Human sensor networks

- Whole of workforce or population engagement
- Deliberative networks created for ordinary purpose, actives for extraordinary need
- What works in a crisis ….
- Proactive foresight not retrospective coherence
- It is messy, but it's coherent live with it …

Exaptation

Innovation by association



CognitiveEdge

Some foolishness

- Too many boxes with too many arrows, far too little *mess*
- Pendulum swings through a failure to understand context
- Conflating carbon with silicon
- False dichotomies
  - rational/intuitive
  - brain & body
  - deterministic/magical
- managing ***asymmetric*** threat and opportunity ***symmetrically***
- Taking engineering metaphors too far …

The terrible shibboleth

Any observed statistical regularity will tend to collapse once pressure is placed upon it for control purposes

Goodhart's Law

When a measure becomes a target, it ceases to be a good measure

Strathern variation

"Economists and workplace consultants regard it as almost unquestioned dogma that people are motivated by rewards, so they don't feel the need to test this. It has the status more of religious truth than scientific hypothesis."

"The facts are absolutely clear.
There is no question that in virtually all circumstances in which people are doing things in order to get rewards, extrinsic tangible rewards undermine intrinsic motivation"

New Scientist 9th April 2011 pp 40-43