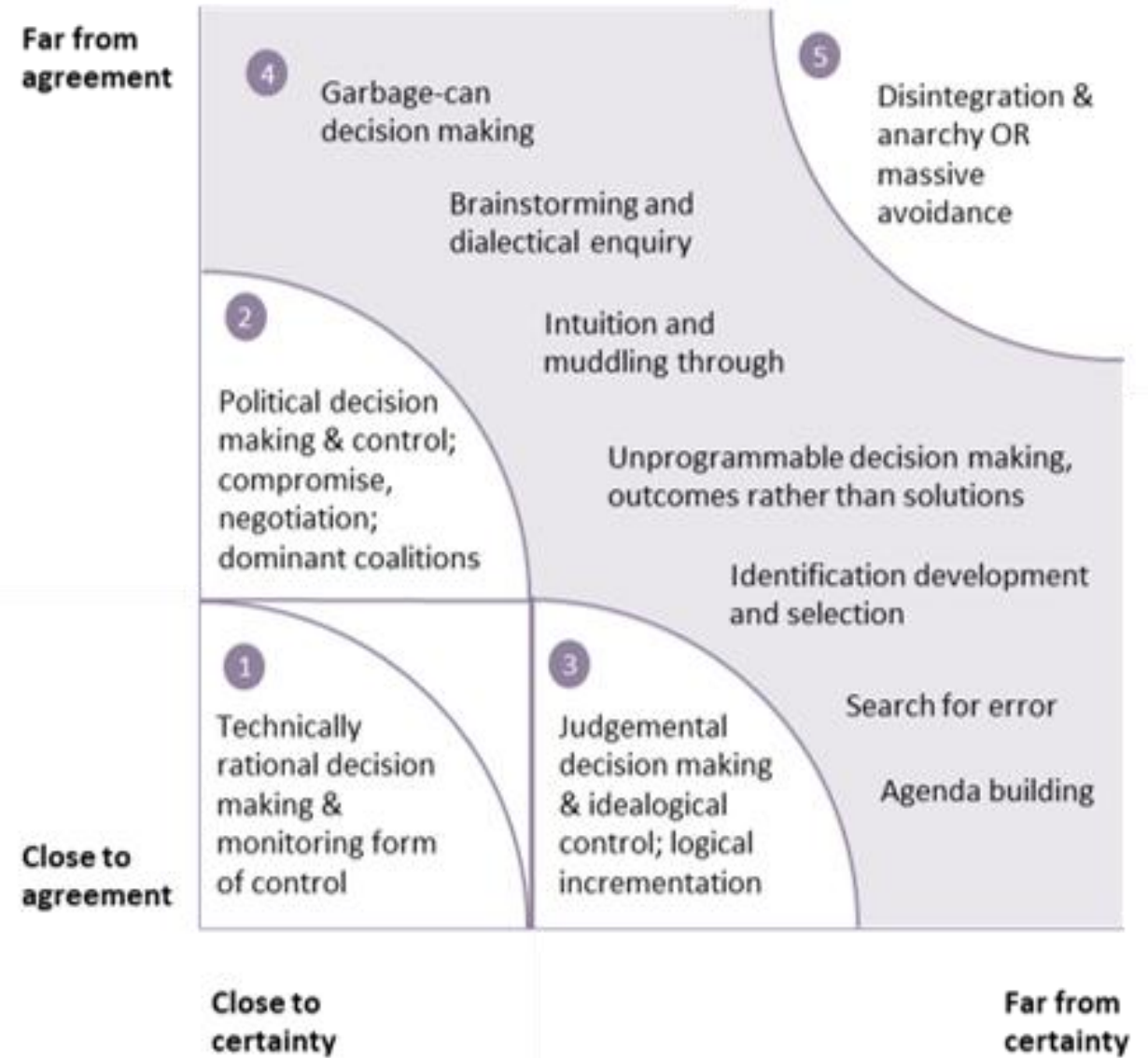


Complexity Lounge

A thick, orange, wavy horizontal line that spans the width of the title text below it.

September 2025

The Stacey diagram



Complex models

Complex adaptive systems

- Agents the same, behaviour the same

Evolutionary complex adaptive systems

- Agents different, behaviour different



5 characteristics of interest of evolutionary CAS



Non-linearity

The future is unknown

The model is in constant motion. Qualitative changes over time.



Emergence

Novelty which arises in the interplay of intentions



No locus of control

There is no 'centre' to the model: no controlling agent or group of agents which dictates the activity of all the other agents.



Reflexive

Self-organisation

Diverse agents interact locally with other agents placing 'constraints' on each other. They are said to be 'self-organising'.



Paradox

Forming and being formed

The population of agents demonstrates a paradoxical quality of forming and being formed.

Predictable unpredictability

A crude comparison of orthodoxy vs complexity-informed management

| Characteristic of CAS | Orthodox management | Insights by analogy From complexity |
|---------------------------------------|--|--|
| 1 No equilibrium state | Stability- change process- stability. Idealised future. | Never at rest – history as ‘one damned thing after another’. Qualitative changes over time. Acting in the present while interpreting the past in anticipation of the future. |
| 2 Emergence | Unity through alignment; leaders and managers can predict and control. | Predictable-unpredictability; paying attention to difference and diversity, politics and power in the interplay of intentions. |
| 3 No locus of control | Centrality of leaders and leadership | Authority and power as group improvisation. |
| 4 Reflexive self-organisation | A focus on the ‘big picture’, ‘direction’ and ‘strategy’, policy decisions of the top table. | A focus on local interaction and the general patterns it produces both at the same time. |
| 5 paradox of forming and being formed | Separation of thinking from action, means from ends, task from process. | Inseparability of success and failure, improvement and regression, I and we. Linking means and ends, process and task. |

Edgar Morin - Restricted and general complexity.

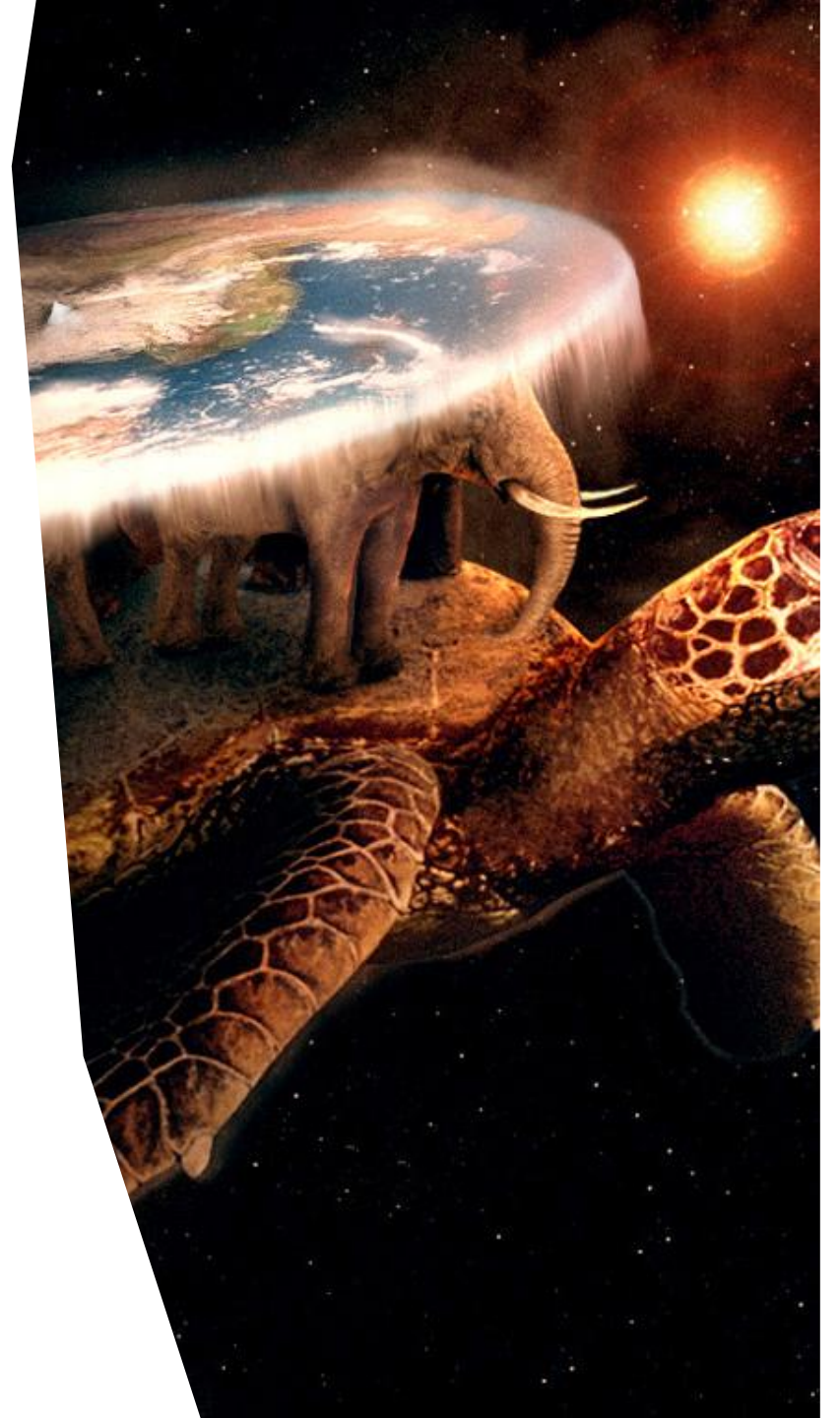
‘Restricted complexity made...possible important advances in formalization, in the possibilities of modelling...But still remains within the epistemology of classical science....

...Actually, one avoids the fundamental problem of complexity which is epistemological, cognitive, paradigmatic. To some extent, one recognizes complexity, but by decomplexifying it. In this way, the breach is opened, then one tries to clog it: the paradigm of classical science remains, only fissured.

Morin (2007) Restricted complexity, general complexity. In: Gershenson, C., Aerts, G. and Edmonds, B. (eds) *Worldviews, Science and Us*, Singapore: World Scientific: 5-29.



Complexity
– it's turtles
all the way
down



The four original pillars of complex responsive processes

Insights from the complexity sciences.

Process sociology of Norbert Elias.

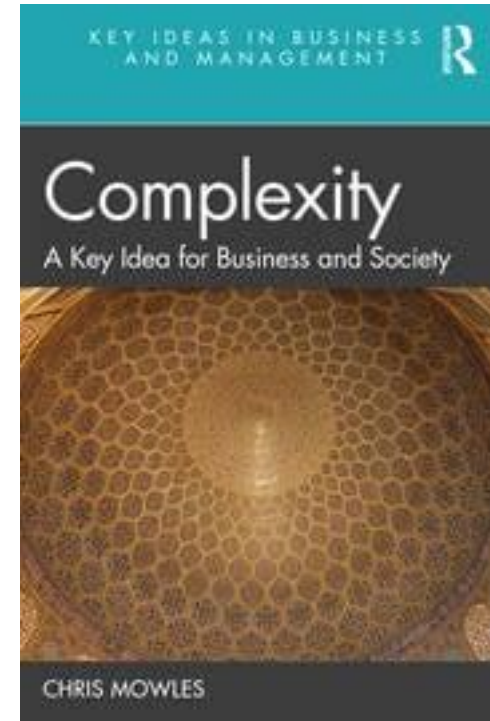
Pragmatic philosophy.

Group analytic psychotherapy.

(The last three are more or less informed by:
Aristotle, Hegel, Darwin, Freud).

Complex responsive processes.

- Argues by analogy from a detailed understanding understanding of the evolution of complexity models.
- Addresses key sociological and philosophical questions:
 - Structure/agency
 - Theory of action
 - Theory of mind
 - Theory of communication
 - Theory of time
 - Theory of ethics
 - Theory of authority



Some problems with complexity thinking

- It's critique of contemporary management is overly critical.
- It offers no practical tools and techniques for what to do about the problems we face in organisations, or society more generally.
- It focuses on micro-processes which say nothing about the bigger questions in organisations, such as strategy, purpose, vision etc etc. It offers tentative, revisable analyses which are tied to particular practice and are therefore decorative.
- It is quietist. Where does it then leave us politically, normatively and ethically?

There is nothing inevitable about 'progress'.

The civilization of which I speak is never completed and always endangered. It is endangered because the safeguarding of more civilised standards of behaviour and feeling in society depends upon specific conditions. One of these is the exercise of relatively stable self-discipline of the individual person. This, in turn, is linked to specific social structures.

Norbert Elias -*The Germans* (1997)
p173



Orientations towards the future

The future is dark, which on the whole, is the very best thing the future can be.

Virginia Woolf journals January 18, 1915



Against utopianism and visions

A future which could be adequately captured in the language of the present would be too complicit in the status quo, and would scarcely count as a future at all.

Terry Eagleton

Hope Without Optimism (2015)

The future

What (pragmatists) hope is not that the future will conform to a plan, will fulfil an imminent teleology, but rather the future will astonish and exhilarate...what they share is their principled and deliberate fuzziness.

Richard Rorty, *Philosophy and Social Hope*, 1999: 24.

Key themes
towards a
complexity-
informed practice
of hope – (hint: it's
about
relationships)

1. Action to reestablish relationships of solidarity, negotiating what is unique and what we have in common.
2. Time – contemplating in the present sparks of hope in the past in order to orient relationships towards the future.
3. Thinking, sense-making and critique – who are we, what do we think we are doing and who are we becoming.

1 reestablishing relationships of solidarity

- Becoming visible to each other in public in our uniqueness and plurality.
- Enlarging out point of view by exposing ourselves to the opinions of others
- Negotiating how to go on together in our differences.
- A contingent and provisional undertaking

2 The importance of understanding our history of relating as a resource for the present

- ‘The events of the past have indeterminate meaning, and they acquire value only through present action.’ Todorov: 145
- There are potentialities of the past which have not been realized, given that the present could have been other than it is (Walter Benjamin in Miyazaki).
- However, the past may or may not serve us well – we may have inadequate conceptual schemes for understanding the crises we are facing.
- The future is indeterminate and unknowable.

3 Thinking, sense-making and critique – (who are we, what do we think we are doing and who are we becoming?)

Thinking as such does society little good, much less than the thirst for knowledge, which uses thinking as an instrument for other purposes. It does not create values; it will not find out, once and for all, what the 'good' is, it does not confirm but rather dissolves accepted rules of conduct.

Hannah Arendt, Thinking and Moral Considerations, in *Responsibility and Judgement* 2003: 188.

Dewey on experience

Upon the whole, the forces that have influenced me have come from persons and from situations more than from books—not that I have not learned a great deal from philosophical writings, but that what I have learned from them has been technical in comparison with what I have been forced to thinking upon and about because of some experience in which I found myself entangled.


Later Works of John Dewey, volume 5 (Carbondale, IL: SIU). Cited as *LW 5*. *LW 5*, 155.

Sense-making our interrelatedness

We can find ourselves in (our actions) only if we better understand ourselves as part of a social context that equally makes possible, shapes, determines and limits our self-conceptions. A life of one's own, then is something that emerges not in abstracting from but in appropriating a shared life.

Rahel Jaeggi, *Alienation*, 2016: 218

Critique



The possibility of finding the limitations of one's own position as a way of puncturing the 'heroic we-identity' and accepting the provisionality and partiality of 'truth'.

Being able to entertain the standpoint of others.

Moment of hope

In these moments of rupture, people find themselves members of a “we” that did not until then exist, at least not as an entity with agency and identity and potency; new possibilities suddenly emerge, or that old dream of a just society reemerges and—at least for a little while—shines.

Rebecca Solnit, *Hope In The Dark: Untold Histories, Wild Possibilities* (2015)

The fragility of goodness

Looking back and reflecting on the rescue of the Bulgarian Jews, one comes to realize that no one individual or single factor could have brought this about...the community were opposed to the anti-Semitic measures, but a community is powerless without leaders, without those individuals within its midst who exercise public responsibility – in this case the metropolitans, the deputies, the politicians, who were ready to accept the risk their actions entailed. All of this was necessary for good to triumph, in a certain place at a certain time, any break in the chain and their efforts might have failed. It seems that, once introduced into public life, evil easily perpetuates itself, whereas good is always difficult, rare and fragile. And yet possible.

Tzvetan Todorov, *The Fragility of Goodness*, (2001)

On the particular and the general

He who would do good to another must do it in Minute Particulars: general Good is the plea of the scoundrel, hypocrite, and flatterer, for Art and Science cannot exist but in minutely organized Particulars.

William Blake, *Jerusalem*, (1801) 55, 11. 60-64

