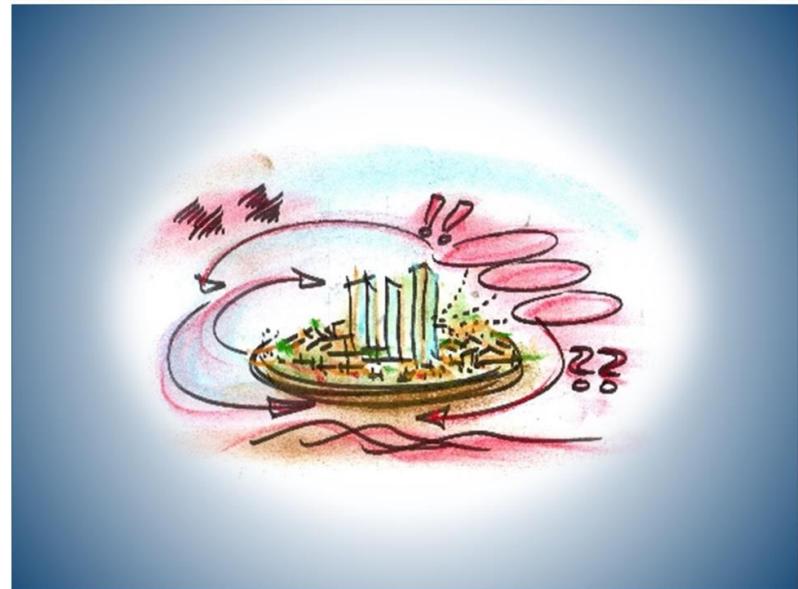


Eco-War 3.0

MAPPING THE NEW WORLD DISORDER



Collaboratorium
(Laboratory for Urban Collective Intelligence)

Project Working Paper

V0.1
discussion draft

Sept 2022



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Eco-War 3.0

MAPPING THE 'NEW WORLD DISORDER' & THE DEEPER COGNITIVE COMPLEXITY OF EXISTENTIAL RISK

A Collaboratorium working paper

JR v1.1a

26-09-22

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If a world war is even a remote possibility... as both cause and effect of catastrophic climate change... how do they connect?? Fossil fuels already are the flashpoint for geo-political expropriation and confrontation. And when a half billion people are climate refugees, and a third of world food systems are failing, what then? We need ways to think ahead for a viable future with all on board...

This is a global existential test of the Foresight 3.0 approach – at the frontiers of systems thinking on human / climate interactions. Should we leave such questions to the military analysts or politicians? Can we feed our big data into a ‘world model’ of tipping points and catastrophes? Is the gap between natural science and human insight too great to bridge?

Overall can we even begin to understand what is going on? If not, then what next – or if not now, then when?

Eco-war 3.0 is a pilot project, aiming to push at the frontiers of knowledge and action, for this existential challenge.

- Participants are invited to contribute ideas in an interactive process, over 3-4 monthly sessions;
- We use the 'synergistic' methods to explore the interactions between highly vulnerable and inter-connected climate / human systems; and then to design pathways for resilience;
- Direct outputs: a joint paper in the upcoming *Foresight 3.0* special issue in the [Foresight Journal](#); also a *Collaboratorium* white paper.
- Further results: a community of interest, who can develop and apply such methods & tools, for wherever they are useful...

(Foresight 3.0 is defined as the methods and tools of Foresight, based on a 'collective anticipatory intelligence': both within the foresight process, and around the external community of users and stakeholders.)

1. PROJECT OUTLINE

This project is based on interactive dialogue through a 3-4 month program. We explore the nature of the challenge, and possible responses, with the next generation **Foresight 3.0** approach. There are four monthly stages:-

- a) **Scope & system mapping**: (relational thinking): framing & mapping of the systems / challenges;
- b) **Scenario mapping**: (divergent thinking): scenarios to explore the potentiality of a Eco-war 3.0;
- c) **Synergy mapping**: (emergent thinking): exploring possible responses via new synergies & opportunities;
- d) **Strategy mapping**: (convergent thinking): first steps on the design of pathways and forward plans.

This is a 'think-and-do tank', a structured process: 20 participants are invited to work in small groups to explore in detail each of these stages.

We use the online 'experimental space' Lab whiteboard. In each session, each group generates a set of system linkages: develops the outputs from the next group: compares the result: then designs the next stage. Role play / gaming is a good way to open up creative thinking – e.g. we ask participants 'how would you make money out of this climate disaster?'

Overall we aim at a systemic mapping of existential vulnerabilities: and an exploration of potential pathways towards resilience.

The practical result will be a collaborative paper for the *Foresight 3.0* special issue, co-authored by active participants: along with a summary 'white paper' for the Lab, and a scheme for further development / funding.

Synergistic approach

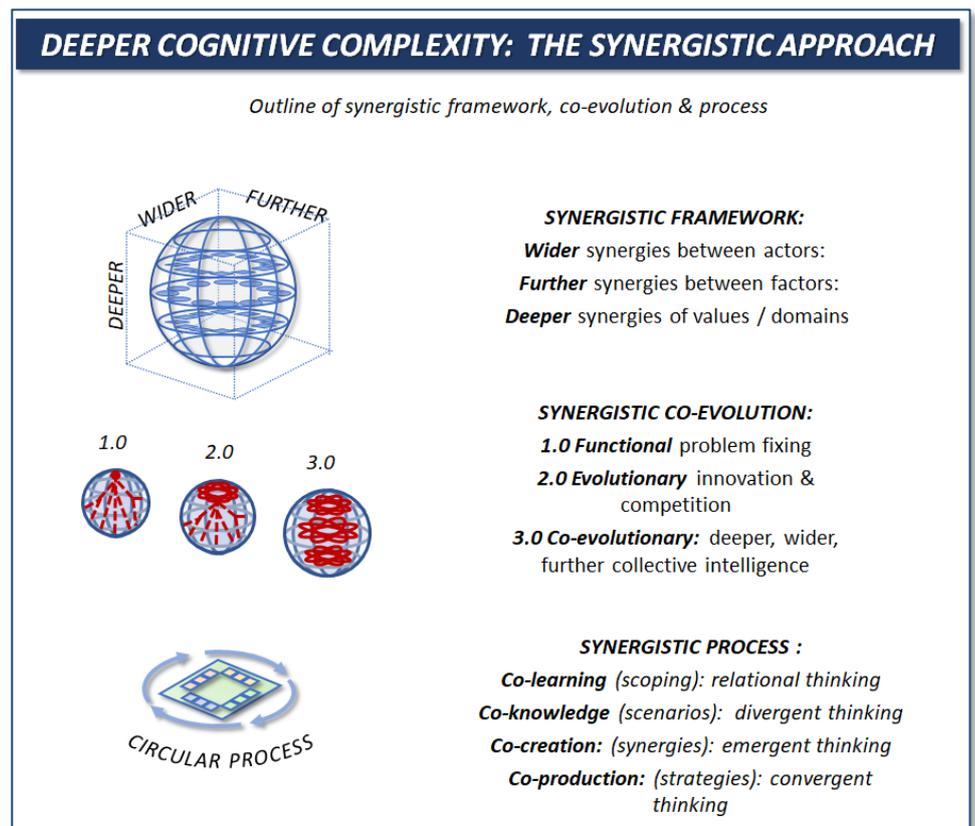
Firstly, here is an overview of the synergistic approach

We can use the **synergistic framework** for mapping cognitive complex systems:

- **Wider** synergies between actors:
- **Further** synergies between factors:
- **Deeper** synergies of layers / domains

We use the **synergistic co-evolution model** for mapping / design of transformation pathways:

- **1.0 Functional** problem fixing
- **2.0 Evolutionary** innovation & competition
- **3.0 Co-evolutionary** collaborative- collective intelligence



We use the **synergistic process toolkit** for structuring the exploration: (this is also the structure for this pilot project):

- **Co-learning** (scoping): relational thinking
- **Co-knowledge** (scenarios): divergent thinking
- **Co-creation:** (synergies): emergent thinking
- **Co-production:** (strategies): convergent thinking

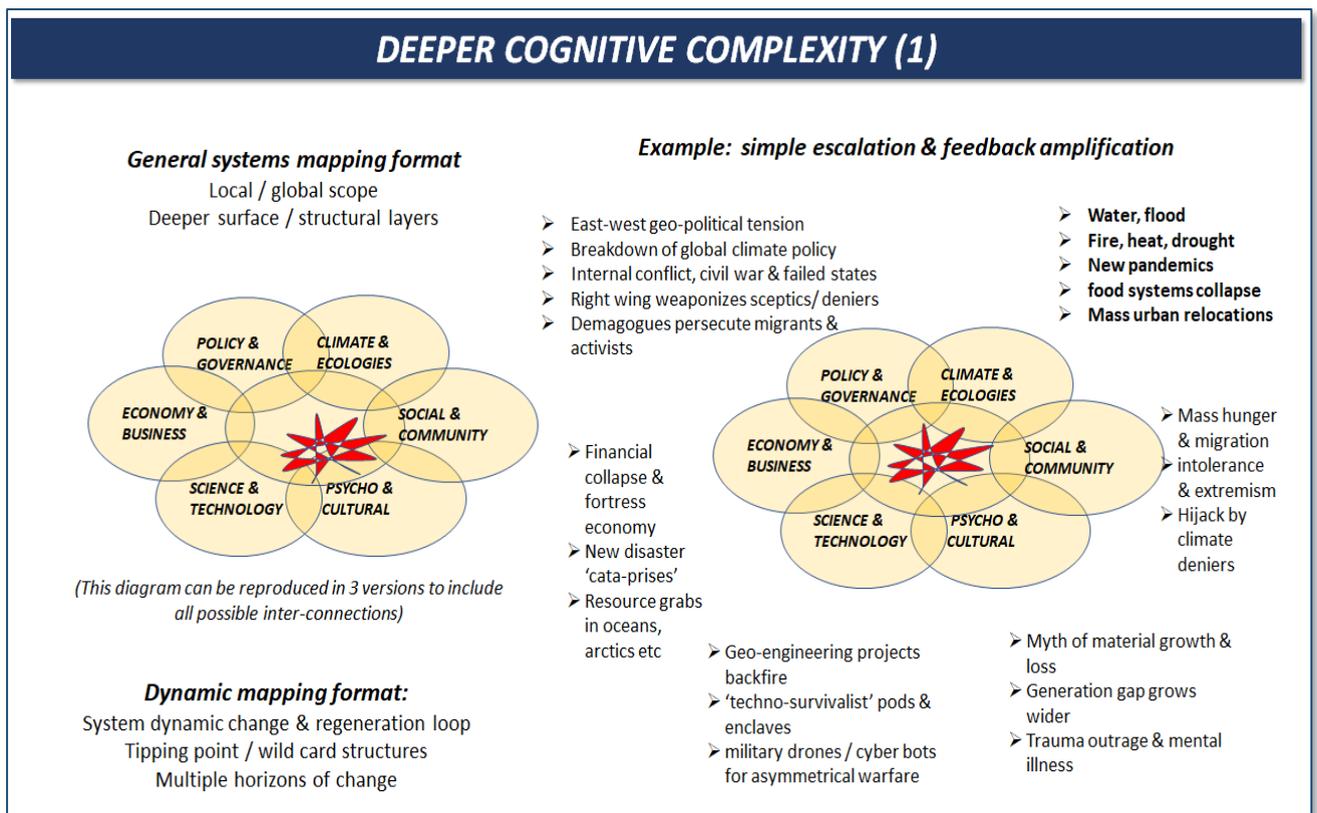
Each of these is in the form of a template on the online whiteboard 'experimental space'.

Stage 1: scoping:

This framework is then put into practice in the four stage process, to explore the interaction of climate systems with human systems (Figure 2).

On the left we see an outline domain mapping (climate / social / economic etc), where many factors could interact with many:

The example on the right shows some direct **feedback amplification** from systems thinking: each of the sub-systems shows likely syndromes or points of vulnerability, which may then interact with others, with reinforcing feedback loops.

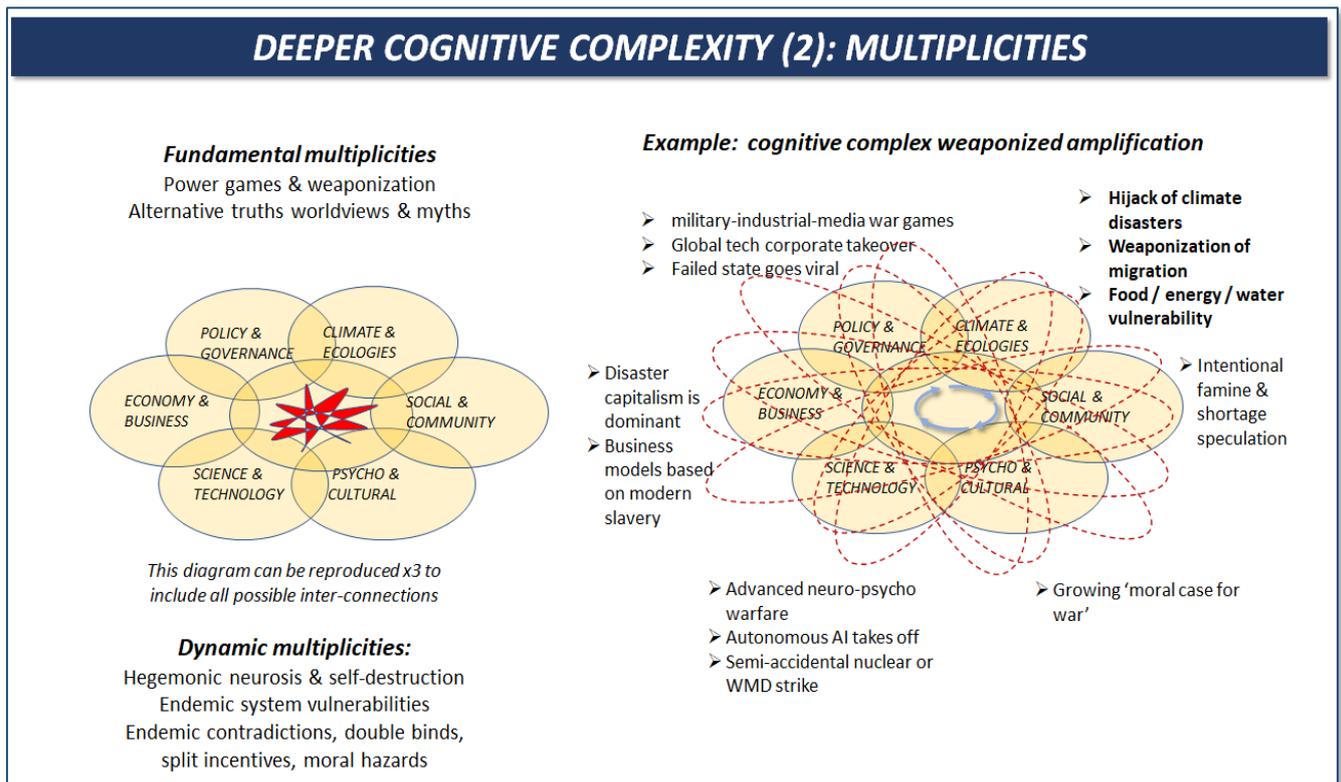


Meanwhile – ongoing exploration of the ‘deeper’ dimensions....

- deeper layers of conflict: political (energy wars), personal (trauma, outrage), and cognitive (contested truths);
- deeper layers of history & socio-mythology (geo-political domination, colonial genocide, extractive ideologies & theologies);
- ‘deeper threat multipliers’ which arise from unpredictable interactions of all these
- (e.g. the invasion of Ukraine has global implications for energy, climate, food, resources, economic & political stability) - and - *“It’s high time the free world realised that it is not fighting a mad dictator but an autonomous and self-regenerating aggressive power system”*. (Shishkin 2022)

This then points to a more evolved systems mapping of 'multiplicities' (Figure 3): here the 'big bad world' effects are dominant, with a range of cognitive system effects. For example -

- Climate induced famine is weaponized for profit & refugees are demonized for political gain
- Global climate cooperation is a bargaining chip in geo-political east-west competition
- Extreme denial & hijack becomes a rallying point for extreme political movements ... etc.



Taking this further we can analyse some fundamental multiplicities :

- Power games & weaponization
- Alternative truths, worldviews & myths

And then some dynamic multiplicities:

- Hegemonic neurosis & self-destruction
- Endemic system vulnerabilities
- Endemic contradictions, double binds, split incentives, moral hazards

These can be illustrated, by example -

- **Hegemonic neurosis & self-destruction:** the social-democratic-capitalist system is itself full of contradictions, with barely contained outrage, trauma and conflict:
- **Endemic system vulnerabilities:** the global logistics-financial system is finely tuned and inter-connected, so that one disruption (e.g. pandemic) is amplified around the system

- **Endemic contradictions**, double binds, split incentives, moral hazards: e.g. if fossil energy producers are restrained by policy or markets, the loss of national income easily leads towards economic instability and likelihood of political conflict, which then reduces resilience to climate impacts.
- **Endemic divisions, displacements, deflections**: e.g. flood resilience policy in a typical Asian megacity, includes the clearing of slum dwellings on the edges of the water bodies, and relocation to peripheral areas, which then opens up major development sites with new opportunities for elite profiteering...

Stage 2: Scenario Mapping

(this is focused more on divergent thinking)

Here we follow the ‘what-if’ questions, each one focusing on the group topics so far developed via system mapping and deliberative enquiry:

- What if the climate disruption and system vulnerability is greater than expected, in this topic area?
- What if the human systems disruption and system vulnerability is greater than expected?
- Which larger patterns of inter-connections are plausible and/or probable?
- Which axes of change can help to form generalized scenarios for the climate-conflict interaction?

For example:

- *‘belt road & seawall’ scenario* – Chinese state power is projected and weaponized, in order to both protect and expropriate the developing world megacities;
- *‘Gulf state reparations’* – rich fossil energy producers demand a ‘ransom’ of very large payments, to fund their renewable transition.

Stage 3: Synergy Mapping

(this follows the potential ‘emergent thinking’, via co-design, co-creation etc)

Here we co-design potential responses in each of the topic areas, building on the scenario / systems work so far: again with leading questions:

- How can the key amplifying / reinforcing feedback loops be deflected or otherwise managed?
- How can the most crucial multiplicities be resolved with new synergies – (e.g. power games & weaponization, alternative truths, hegemonic neurosis & self-destruction)

For example:

- where fossil energy producers are facing financial disruption and potential violent conflict arising from that, we look for synergistic ways forward

- where low lying developing countries are facing cyclones / hurricanes, we look for practical pathways for *'transformative disaster risk reduction / resilience'*

Stage 4: Strategy Mapping

(here we are in 'convergent thinking', pointing back towards practical actions):

(This stage may be adjusted in the light of follow-on funding.)

We take the most plausible synergies from above, in selected topic areas, and follow through with an exploration of practical pathways, plans, policies.

For example:

- where fossil energy producers are facing financial / political conflict: the forward pathways could include

2. PROJECT BACKGROUND

Following some decades of climate denial, scepticism, hijack, diversion, inactivism and doomsterism, there is something new on the table. Putin has taught the world something about the full-on *weaponization* of energy, and thereby climate action, and thereby the interconnections of energy / climate / war.

('Weaponization' (cf. 'to adapt for use as a weapon of war') is a new entry to systems thinking. It seems very useful in the scope of cognitive complex systems. We can propose a working definition: 'to exploit and dominate a system as a means to an end, that of power over others in other systems'.

Another innovation is the '3.0' – just as 'economics 3.0' sums up a system based on a *'collective economic intelligence'*, what would **'World War-3.0'** sum up? Some possibilities – (note, terminology can be a problem, as in 'enemy intelligence' etc).

- *Collective military intelligence* – cognitive capacity of defence institutions (both hardware & human resources);
- *Collective conflictual intelligence* - cognitive capacity of aggressors to exert power over others, via new socio-technical systems e.g. cyber-tech, financial or psycho-cultural warfare;
- *Collective peace-building intelligence* – in response, the cognitive capacity of all parties to reach peace & reconciliation outcomes.

Global Science Agenda

*“We’re in the midst of a global **poly-crisis**—a bewildering mess of things going wrong..... We propose, therefore, that scientists from around the world immediately collaborate to identify mechanisms operating among these risks.” (Homer-Dixon and Rockstrom 2022).*

In response - we could not agree more... BUT...

- ‘scientists’ mostly work inside their fields & disciplines, in slow moving academic structures;
- the connections between science and policy, enterprise or civic society, are often problematic;
- effective responses to the **poly-crisis** may be very different to the thinking which created it...
- new systems of knowledge, learning, evidence are emerging, beyond the normal ‘science’ frame;

This pilot project is one attempt to respond to this challenge – co-creation of new forms of scientific experimentation and insight, with **deeper** layers of value, **wider** communities of interest, and **further** horizons of change.

A metaphor for this new agenda, is the difference and possible inter-connection between climate science and psychotherapy. This can be framed with the co-evolutionary ‘Mode 1, 2, 3 schema:

- mode I (science 1.0): focused on **tangible** systems with measurable risks & known responses
- mode II (science 2.0): focused on **evolutionary** systems with dynamic complexity, innovation & emergent responses
- mode III (science 3.0): explores **co-evolutionary** systems, of a deeper cognitive complexity, and in response explores a global psychotherapeutic process, which involves **deeper** layers of value, **wider** communities of interest, and **further** horizons of change.

This pilot project aims to demonstrate some of those inter-connections and processes:

- at a local scale, effective responses to climate-induced flood risk involve many inter-connections: hydrology, engineering, social practice, landuse planning, inter-generational finance, political economy, etc.
- at a more global scale, responses to climate-induced flood risk call for the mapping of systemic vulnerability / weaponization, ie. where socio-ecological disaster creates political / economic opportunities: and the responses in the co-evolution of social inclusion and responsibility.

Further notes from the climate-wise program

These are a summary of work in progress arising from the COP26 in 2021, as developed via an onsite interactive workshop, with follow up online sessions in the *Collaboratorium*.

- Climate change, as an existential threat, is likely to exacerbate / entangle with existing conflicts & divisions in STEEP (social, technology, economic, political, cultural) systems (*'big bad world effect'*)
- Climate policy is both a scientific-technical 'single issue', & crucial to the transformation (ad hoc or intentional) of other STEEP systems
- So... climate policy is deeply political, & is also contested or 'de-politicalized'. There are similar effects for social, technology, economic, cultural systems ('socialized / de-socialized', etc)
- So... beyond the boundary of 'climate single issue' policy, there is an extended zone for collective dialogue, learning, co-creation & co-production (by default, with little alternative)
- However such dialogue is challenged by other cross-cutting agendas: firstly the making of money / power etc in other systems. The result is climate policy & action may be 'weaponized, hijacked, diverted or blocked'.
- So in this light - *'collective climatic intelligence'* – is (a) collaboration of actors & factors in the 'single issue' zone – but more importantly (b) – the capacity for such extended dialogue, learning, co-creation & co-production, engaging in transformation with other zones (i.e. *sooner or later we have to talk with Trump / Putin voters in the 'big bad world'*).
- **Climate-wise foresight** – primary purpose to enable & enhance that *'collective climatic intelligence'* (from COP27 development)

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Links:

- Program link: www.manchester.ac.uk/synergistics/foresight-3-0-for-ww3-0/

- Synergistic toolkit - www.manchester.ac.uk/synergistics
- Interactive Collaboratorium - [Laboratory for collective intelligence](#) -
- For the theory of cognitive systems, the cartoon guide to applications, and the bridges between, see the source text - [Deeper-City: Collective-Intelligence-and-the-Pathways-from-Smart-to-Wise](#) -