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Climate Change Program

In 2019, in response to a growing sense of paralysis caused by the enormity of the problem of climate change, we launched an open-source study looking at small actions that might make a difference. Out of that study, the Cynefin Centre is now encouraging an entire research program to grow. The Climate Change Program will explore the human response to climate change from the point of view of anthro-complexity¹.



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Changes in temperature, sea levels, or weather patterns are easily measured through computational complexity. However the massive chain of real and potential impacts that are embedded in the implications of climate change goes far beyond simple numbers. Social relations are deeply entangled in this current situation, meaning that the ways in which humans make sense of and respond to the crisis is inextricably involved in any effort to combat it: it is not just about finding a way to reduce emissions, but about dealing with an entire web of connections that involve questions about people's jobs and ways of living.

¹ For more details it is worth referring to Snowden, 2005. [Multi-ontology sense making: a new simplicity in decision making](#). In *Informatics in primary care*, Vol. 13, pp. 45-54

By positioning climate change as an intractable problem, paradoxically, we can begin looking at it from a more empowered place. We can no longer look for the one great answer: instead, we must probe for multiple attempts to shift the system, starting from our place and our capacity to act in it.

Part of this is understanding that the human response is as much psychological as it is philosophical.

Exploring and understanding this web of anxiety, doubt, action, economic consequences, negotiation, conviction, and political response is what anthro-complexity is all about. By looking at the human side as embedded in the struggle, rather than outside of the natural world as mere “custodians”, we can approach not just the complexity of climate change, but we can also introduce our own human compassion, appreciation, and even moral stance when it comes to the struggles, conflicts and paradoxes we all face when confronted with the future of our planet.

This program includes different research streams that organisations or individuals can join, either by using ready-made and well-researched processes and instruments, or collaborating on new frameworks as new situations, themes, and ideas begin to emerge.

Collaboration is key, and the sharing of program design, results, and space for reflection and analysis is a central intention of the program. As part of this we will also be sending out occasional open source “pulses” using our proprietary tool SenseMaker®. All program members will be invited to join and share in the results. These pulses will seek to source a diversity of reactions, opinions, and interpretation to a range of prompts or scenarios presented to the participants.



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A brief introduction to SenseMaker®

SenseMaker helps us practice key tenets of managing in complexity: talking to multiple diverse people in real time and sharing their insights directly with decision-makers. The central idea is collecting micro-narratives – the unstructured, everyday



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anecdotes we share with our friends in the pub, where we share vital information and knowledge about our contexts – at a scale, and combining them with a framework based on core concepts, themes, research questions, or central ideas that allow the participants to tell us exactly what those narratives mean to them. From this we are able to rapidly collect quantitative patterns that start with everyday conversation, and use this to monitor developments and plot contextually-informed insight to action.

These stories are the fundamental patterning device through which we understand and make sense of the world around us.

This unique combination of different types of data gives us the combination of scale and speed, while maintaining depth and context through the narrative and the layer of meaning added by the participant: both quantity and quality. Dave Snowden calls this rich data².

On the analysis side, SenseMaker gives us a visual output of response patterns that reflect the meaning people chose to give to their stories in a way that is immediately usable without requiring specialist knowledge to interpret.. Central to SenseMaker as a tool and methodology is the idea of epistemic justice³, whereby people both tell and interpret their own stories. Our role is to learn how to get in the way as little as possible, collect, listen, and amplify the signals that are already there in people's stories and in the patterns of their interpretation. The following descriptions in the context of the research streams are going to give some idea of why this matters when we are talking about climate change.

Moving beyond entrained patterns of seeing, knowing and doing allows us to uncover innovative ideas or ways of making change in this context, which otherwise might go unnoticed.

² <https://cognitive-edge.com/blog/big-thick-and-rich/>

³ For a layman's description, see again footnote 2. A key work here is Miranda Fricker's *Epistemic Injustice: Power and the Ethics of Knowing*.

Research Streams

These research streams were identified through a critical and interdisciplinary review of the literature on climate change, involving fields from climate science to geography and from psychology to complexity. They represent key themes in the area, but they are not the whole story. They are intended to be open to accommodating different approaches and points of view, and they are abstract enough for us to be able to bring down to practice in different ways. They are intended for a range of non-commercial audiences, such as not-for-profit organisations of different sizes, grassroots organisations, research institutes, university departments, and local, regional, or national government.

1. A citizen-based approach to climate change and sustainability



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When it comes to reducing our impact on climate change now or adapting to an unavoidable degree of change, it makes sense to progress in a complexity-compatible way. This means that we can not look to the security of predictions to

guide us, or plan every aspect of our action and response. We can instead look to interventions that do not rely of a very high level of confidence in prediction. In fact, looking for reducing uncertainty before taking action can be actively risky both by causing dangerous delay and by increasing the feeling of paralysis. Instead, we can look towards managing uncertainty and sharing the resources, information, heuristics, and the stories around them with those who need them. This kind of work will progress faster through the identification and the strengthening of existing networks rather than the creation of completely new ones.

The existence of Citizen Engagement programme in the Cynefin Centre is a direct opportunity to start connecting environmental concerns with the practice of engagement in order to encourage alternative possibilities that go beyond individual attempts towards sustainability, and instead harness individual action to common purpose and use it to inspire further action, interweaving the private and the political arenas. We can also use this aspect of the programme to study the range of acceptable conduits of collective action, or at least for setting up frameworks or scaffolds around which collective action can grow. All that information together can create a powerful, collective depository of knowledge that is tied to existing social network, which we can refer to in order to amplify change. Individual lives are closely connected to socio-material systems and cultural standards. These connections allow changes to propagate: standards are definitely not immune to change, and discovering some of their connections might be pathways towards faster-spreading and more acceptable changes. We can also look at the kinds of connections that drive people to look beyond their immediate interests and identify with distant others.

The self-interpretation of narratives offered by SenseMaker is an ideal venue for exploring specific instances of the relationship of the climate movement with society, such as climate change doubt. By asking people to tell us their own stories and concerns, we can connect climate change with the lived realities and understandings of citizens, talking with them rather than at them. We can also use tools such as MassSense to see how people engage with and interpret different types of narratives and positions and how that affects their own engagements. We already know from existing research that attitudes and ideologies and central and that certain values, such as communitarianism vs individualism are significant predictors for engaging in action to combat climate change, but there is a lot of room in digging down into what communitarianism actually means to people, which clusters are associated with it, and which aspects of value speak to us beyond political orientation or other potential differences.

2. Climate justice



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The combating of climate change is often connected with the idea of climate justice, concerning those who most benefited from the environmental imbalances caused by humanity and those who most suffered, or will suffer from it. How other factors of social vulnerability and resilience interact with climate change is a relevant area of research. Moreover, the side-stepping of the issue of climate justice in the framing of climate change is an approach that can be deliberately mobilised to trivialise the issue and reduce interest in it, effectively preventing solidarity responses between groups that will be less protected from negative effects, for example lower socioeconomic demographics in the western world and the global south. The presentation of the concern with justice as a highbrow academic occupation encourages the sense of inevitability and paralysis, as well as isolation.

“Polluter pays” is central to many types of legislation, for example in the UK, so why is considered divisive or absurd when it comes to the global climate? There is an impression that the response to climate change is divided between those emphasising justice and those looking at action, but set justice aside. What shared starting points or adjacent possibilities can we discover, and what direction should we set? Which understandings of justice do multiple diverse groups share? Could it be easier to start from defining the negative and identifying inadequate solutions that we can agree on? How can tension and confrontation be negotiated, if it is inevitable, and which outliers exist in the area of assuming a greater share of the responsibility for climate change?

3. Accepting loss

We are already losing a lot, and we will lose more. Some of these losses will be tragic and traumatic, as local places invested with millennia of meaning change irrevocably or species die. A lot of the psychological literature around climate change has identified responses that can reach the levels of sub-clinical depression, guilt, and even despair, and a lot of the same literature recommends taking the same approach we would to any mourning process, where ideally grief and loss lead ultimately to the reintegration of the mourner into society and the reinvestment of their energy. In other words, grief and loss in themselves are not paralysing as long as they are recognised for what they are and they become part of a movement and engagement towards something.



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Other losses we might have to choose ourselves. The Acorn Study has shown the beginning of a willingness to accept and even embrace loss, and this is an element that we can continue actively monitoring and investigating, as well as consciously introducing. Many of the paths to action proposed today, especially those that make assumptions based on “rational individuals” promise solutions that will lead to benefit with no loss at all. But what if that is not true? For example, what indications are we seeing, or can we see, that an approach that involves reduced or no economic growth would be acceptable, and what other parts of the system are connected to this acceptance? How much are different kinds of people prepared to give up, for what reasons, and under which circumstances? How can we accept and ease the pain of losing loved practices that have become a part of our way of life, and as well as live with the cognitive dissonance of still practicing them, without resorting to defence mechanisms like denial?

4. Out of ourselves and into the world

Values that connect human beings with one another and promote the formation of community have been shown to be significant in participation in actions supporting and promoting sustainability. Faith groups in particular can be a powerful source of commitment, community, and support. Religious and spiritual beliefs and their



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communities of practice can support people in making difficult choices. Where do our senses of responsibility and duty towards the world we inhabit, but also our sources of repose and restoration lie, when it comes to increased environmental stress and

insecurity? Linking with the networks of the Cynefin Centre “Numinous” program, looking at spirituality and the sense of something bigger than ourselves in the world today, we can work together towards identifying those connections.

Do you want to know more?

- Thirsty for more knowledge? [Write to us](#) and ask for a copy of our more comprehensive whitepaper covering some of the background of this research.
- Would you like to see how SenseMaker collection works for yourself? [Try out our ongoing MassSense](#).
- Are you thinking of getting involved? [Contact us](#).