

Maria Spindler

THE IMPERFECT BEAUTY OF COLLECTIVE SENSE-MAKING¹

On the interconnection of leadership cultures, economy, power and ethics, and what we can learn from group dynamics for our future awareness with AI

How can we enhance our awareness on a large-scale and long-term to take responsibility in light of AI and collectively shape our cultures towards eco-systemic future-ing? First off, who is 'we'? The answer is simple: everyone who cares, everyone who feels, everyone who wants to be part of the next, better organisations, leadership cultures, society – and last but not first, this planet. That is because there is nothing less at stake than our species and achievements such as democracy, peace, our critical thinking, our arts, intuition and our passion for life itself, in all its different forms.

This article is about understanding collectives as our sense-making ‚machines‘. Why do we need to become aware of common sense right now? Why can't we simply hand over our responsibility to AI tools? How can we foster the search for integrative consciousness? Why do we need ethics that transcend the limits of linear economies and old-style power dynamics. What are the requirements for an inclusive sense-making process to evolve into a collective process?

1. WHY? AI has the capacity to drive us insane and into victimhood

These days, we are being flooded by never ending streams of data. This gives AI the potential capacity to drive us insane, considering how easily we can be overwhelmed and confused by information overload. Data is indeed ubiquitous. We keep feeding algorithms with data about anything and everything. With the advent of wearables (from smart watches to bionic face and brain implants) we enable tools to gather a growing multiplicity of data about us – about our desires or habits that we are often not even aware of ourselves.

How so? For example, gadgets keep measuring our vitals (body and eye movements, brain waves, neuronal connections, etc.). This way, we enable the next (bio-)technological 'everything-at-once revolution'.² It is time to face facts: our humanness with all its implied weaknesses (whatever we like to call them) becomes an exploitable commodity that profits a linear economy. It exercises more power-over our unconscious power-under dynamics or inner conflicts, our desires and other aspects of our personal makeup. As a result, we are becoming more accessible for the benefit of others, but risk failing with respect to aspects of our long-term quality of life, including humanity and biodiversity. Why is that? Because a large number of corporations operate in quantity economy patterns: want they want MORE to keep their investors happy, be(come) market leaders, harvesting more – and more efficiently usable – data to send us more customised ads in order to incentivise us to purchase more, for example.

¹ Published 11/2024 by Swarm Ethics in: *Op-ed in HybridAugmentedIntelligence collection*
https://swarmethics.com/wp-content/uploads/2024/11/THE-IMPERFECT-BEAUTY-OF-COLLECTIVE-SENSE-MAKING_Spindler.pdf

² Cf. Webb 2024.

WE ARE IN DANGER OF GETTING ENTRENCHED EVER MORE DEEPLY IN POWER-OVER/POWER-UNDER VICTIM-DYNAMICS AND POWER-OVER/POWER-AGAINST WAR-DYNAMICS

Why is that? The reason is that our economy operates chiefly on the principles of a linear culture, leveraging expanding, exploiting, hierarchical old-style power dynamics. Enter AI systems. They can serve as drivers for an economy that accelerates and elicits addictions. This creates a vicious circle:

- When we make AI our god and master, we surrender (power-under) our individual and collective power to corporations and dictatorships.
- When we as humans put ourselves and AI above life and nature (power-over), we exploit nature and ourselves.

Could we trust AI systems (in the context of an envisioned GAI) to make independent, ethical choices for us? Doing so might at first seem an easy, conflict- and responsibility-free way out. However, there are several things to consider here: GAI is not independent, it cannot reason or generate meaning³ creatively, it is unable to identify its own illogical responses, and it lacks the ability to make essential connections in terms of context and long-term impact. In fact, AI depends on human intelligence when it comes to making sense and taking responsible, contextualised and meaningful decisions. So, what can we do to improve this situation? We can acknowledge that we have the capacity and the responsibility to raise awareness. Awareness shapes our perception of ourselves, our relationships and the context/world around us. Awareness can become our co-created collective future skill, our shared power-for the 21st century⁴. The question is, what happens when collective awareness meets power and economy in the age of AI?

2. WHAT? Awareness of cultural layers of collective (un)consciousness

Collectively, we have generated multiple layers of cultural consciousness. What are cultures? They are behaviours and strategies that we have developed over time by overcoming problems through cooperation. They are made of patterns based on shared basic premises like values, norms that manifest themselves⁵. Over time, collective generated cultural patterns tend to develop different perceptions: 'lenses', 'blind spots' and 'clouds' that filter and form dynamics of communication, power and leadership. Those filters shape the form of our leadership and organisations, and how we (consciously or unconsciously) form our world. Depending on the ambient culture and its 'clouds' (overlaid filters of perception) we perceive and act differently with respect to our economy, our urges and desires, including, for example, the reasons why we invented ideas like AI, and whether or not we decide to use AI tools or choose to obey.

Through our lenses and filters cultures develop around habits (things we are used to) that may overlay, filter and cover a collective consciousness – like clouds covering the clear sky, so to speak. The types of cultures listed below show this to be the case as we remove the (unconscious) overlays by growing

³ Cf. Torisson 2021.

⁴ Cf. Spindler 2024.

⁵ Cf. Schein 2010.

awareness collectively. In the process of becoming aware we free ourselves and open up new windows to the next level of clarity of conscious (leadership) cultures.

We all know that penny-dropping moment when we realise something previously unnoticed. Suddenly everything is clear to us and we see through our condition. Becoming aware of one's own contribution to the dynamic is like opening a closed door. This is the moment when we become aware of something we have never thought about or seen or felt or wanted before. An act of uncovering a blind spot. Now awareness has set in and an unconscious collective dynamic can come to light – light shines on a dynamic that was in the dark (unrecognised) before. Collective awareness is an uncovering of previously subconscious dynamics. Our eyes are open now, and the light of realisation is shining in. We are blind to the fact that we are being overpowered and manipulated as long as we are dependent, needy and addicted. In that case, we are constrained by an unconscious and mutually manipulative stimulus-response pattern. Often awareness creeps in once we realise that something feels wrong. Emotions, therefore, play an important role in this regard. I suggest the following four basic qualities to characterise the main collective (leadership) cultures of (un)consciousness:⁶

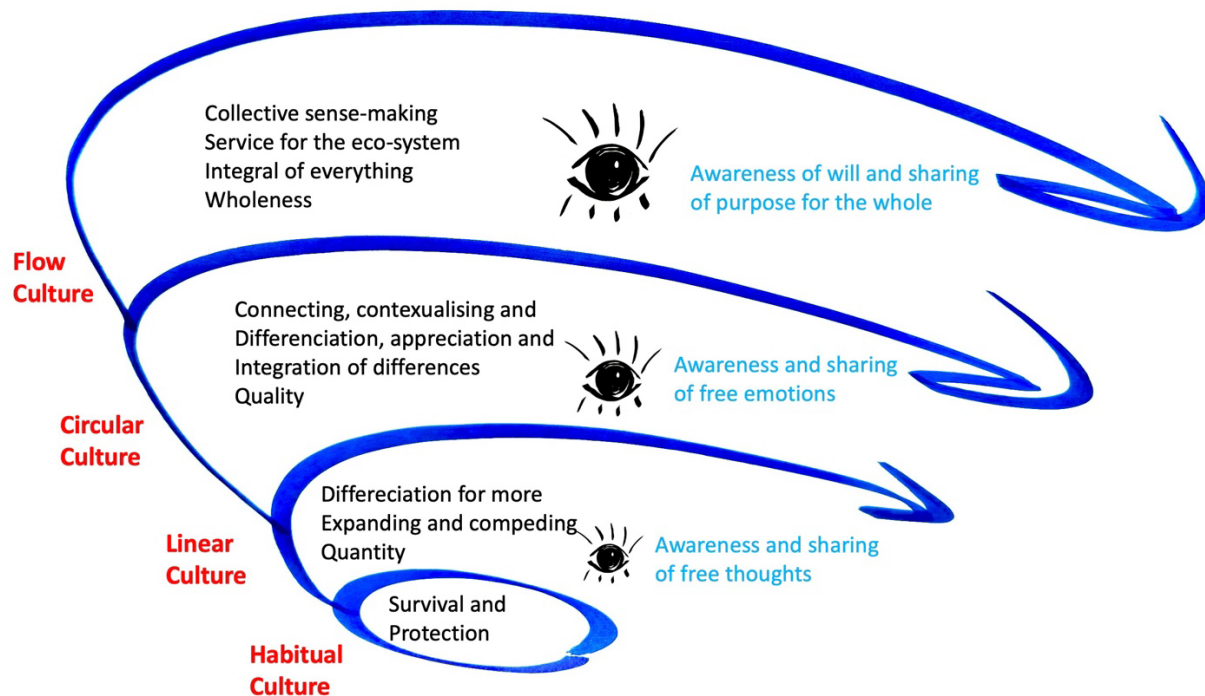


Fig. 1: Four layers of collective (un)consciousness by Maria Spindler

⁶ There is a long tradition of developing theories about the development of human consciousness. I am drawing on the following works: Piaget [1932]1962, Loevinger 1976, Kohlberg 1981, Gilligan 1982, Gebser 1986, Cook-Greiter 2000, Graves 2005, Rooke/Torbert 2005, Scharmer 2009, Laloux 2014, Herdman-Baker/Wallis 2016, Spira 2017, and Hill/Katz 2021, Scharmer/Pomery 2024.



The habitual culture is perceived as having grown naturally. Cooperation is often expressed in unquestioned, handed-down rituals, values, norms, artifacts, structures, laws, and rules. Adopting these serves to ensure belonging and survival. This way, the past inscribes itself into the future. Orders are perceived as unchangeable and dependent on authority. The resulting patterns of cooperation and organisation can be described as 'paternalistic'. 'Power-over/power-under' corresponds to this state of culture. Fear for one's survival, powerlessness, obedience, superiority/subordination, coercive and manipulative relationships, as well as symbiotic harmonisation and related dependencies and addictions, are perceived as normal in this state of consciousness. Feeling safe is linked to seeking protection by others.

ECONOMY IS SURVIVAL AND AI BECOMES OUR MASTER

A **linear culture** follows factual and rational patterns. This conventional type of culture relies heavily on provable facts and arguments. We are aware of our cognitive choices as 'free thinkers'. The 'subject-focussed' communication we strive for is based on principles of right and wrong, guilt and innocence, blame, law and order, reward and punishment. In a linear culture we desire a world view that seems just and reasonable for all. Rules, religion, government and organisation are affirmed as a result. In this frame of mind, knowledge (AI tools) can exert power, with formality being held in high regard. The ego is envisioned as ruling and conquering the world. The human being is perceived as the measure of all things that is always at the forefront and dedicated to the belief that one's own perception reflects the given, truthful, scientifically proven world. The hierarchical structure of cooperation and organisation provides the structure for factual differentiation according to predetermined patterns (such as technical languages, disciplines, departments, divisions, ethnicities, gender etc.). This culture of consciousness goes hand in hand with the need for quantitative expansion, more success, etc.; competition and (business) warfare become drivers that feed the constant striving for more. Service, subject and discipline are all differentiated accordingly, thus more of the same is being rolled out in mechanical fashion. Feeling safe is associated with expansion.

ECONOMY IS LINEAR AND AI BECOMES A TOOL FOR MORE TO CONCUR AND EXPAND

A '**circular culture**' is multidimensional and multidisciplinary. It reaches beyond bare facts and extends into the metaphysical dimensions of feeling, intuition and the unpredictable. Access to feelings becomes possible when we know that we are not determined by our feelings but can have various different feelings and are free to choose among them. We perceive ourselves and are aware of different interests and intentions of different people (as well as organisations and interests beyond the level of the individual), because we are aware of different contexts and can feel empathy for others in certain situations. We recognise the context in relation to the agent. This way, 'power-with-others' becomes possible as a shared mode of power and a precondition for co-creation. We co-create with authority and at the same time independently of it. 'Mistakes' are seen as opportunities to learn and grow; justification and blame, on the other hand, are seen as counterproductive. Feedback is processed emotionally and contextually and can be transformed into a new beginning. The time reference is directed towards the future: through collaboration, the future can be shaped by integrating different interests co-creatively. Innovation and



agreements can be jointly evaluated and optimised. Teams, projects and networks are organised forms for collaboration. Feeling safe in this context is associated with connection and collaboration.

ECONOMY IS CIRCULAR AND DIFFERENT INTELLIGENCES (HI AND AI) INTERPLAY USEFUL

A **'flow culture'** weaves all parts of the whole into a collective fabric integrating all differences. The result is an integral flow of events as an eco-system. The focus is on effects and the impact of specific actions. The planet, biodiversity, humanity: AI, etc. ... everything is interwoven. We may ask ourselves, what does the whole need? In a holistic flow culture, we can let things happen, empower ourselves and make ourselves useful individually as well as collectively. What could my contribution (purpose) be like? Our actions become purposeful in their respective context. "Free will", "free desire" means free from addiction and able to consciously direct one's own intention according to what makes sense for oneself and the overarching whole and vice versa.

This is collective sense-making with others. The search for meaning is a human need that enables us to confidently interconnect with others, with systems, the world, the planet, and AI. All other levels of consciousness (habit, linear, circular) can be integrated into this holistic wholeness where development becomes integral infinite and transformative renewal as a result. The process-oriented type of organisation serves as an end for the bigger eco-system. Like a transformative swarm. The associated power mode imperative 'collective power-for-the-eco-system' opens up possibilities and potentials in the shared here and now, allowing it to become. We often use expressions like "team spirit", "good vibes" or "everything is falling into place" to describe this type of culture. This is how a true collectiveness feels like. Feeling safe is being one with everything.

ECONOMY AND AI PROMOTE ALL WAYS OF LIFE ON A LARGE-SCALE AND LONG-TERM BASIS

Concluding the different levels of (sub)conscious cultures, it is important to point out that the collective imperfect beauty begins when we become aware of our emotions. Only then we can navigate ourselves in uncertainty in a stable (self-protected) way because we can be emotionally stable. This happens when we consciously feel our sensations (eg. fear, aggression) and transform it to excitement. Circular and fluid consciousness means that I know that I cannot control the outer world, but I can control the inner world as an individual and social system. This gives us the freedom to connect and co-create the future rather than being afraid of the future. It allows us to empower ourselves individually and collectively to become aware of what we are doing and the impact we are having. The more uncertainty we can hold,

- the more collective (un)consciousness is allowed to emerge,
- the more we enable ourselves to see the interplay within the ecosystem,
- the less separated we feel as humans and systems from the whole (eco-system),
- the more we become aware of our actions, their impact and the complexity,
- the more we can increase the qualitative growth and the radius of our action and power,
- the more we can act co-creatively and become aware of how we want and can shape it.



Overall, we can say, this is meant to be a joint journey. There are no longer THE AI-experts or THE government to trust blindly, to pass the power on to and to fade into victimhood or fly into fits of blind rage. We cannot leave AI for good as long as we maintain a linear culture and economy. Doing so regardless would increase the power-over/power-under and power-over/power against dynamics and increase the culture and push our buttons of fear and war. Our economy when faced with AI requires cross-disciplinary teams and cooperation based on power-with and power-for. The future of and with AI is a collaborative endeavour because AI tools and their data evolve with every use, we make of them. As AI cannot generate meaning, it is unable to observe itself, its actions and impacts and it is unable to feel emotions (empathy with different forms of life, it is unable to consider the context and long-term impact. It remains dependent on human collectives for felt sense, the ability to feel our inner motions and to navigate our emotions. Then we as individuals become able to find purpose within us and with others and produce shared contextualised and meaningful impacts that supports a flow as eco-system. The digital age needs our active and collaborative involvement if we want to use it for the development of a humanly society and healthy planet. As it is not capable of autonomous ethics and creativity (seed AI), we must provide it with human input (programming, training, data, feedback, decision-making etc.).

3. HOW? Co-creating conscious cultures in group dynamics trainings group

How can we raise our collective consciousness? How can we shed light (awareness) on social unconsciousness? Let's take a look at social sciences and the most intensive setting for collective consciousness-raising I have ever experienced: the group dynamics training group (GD-TG). The social science perspective leads to the assumption that GD-TG learning and knowledge are socially constructed. The participants collectively construct their group as system and group process while concurrently co-constructing their own experience and knowledge about the same. Individuals construct their learning through active experience, discovery, and critical reflection. This implies⁷ that individuals make sense of the world by forming common understandings. As a result, GD-TG trainers need to be purposeful about supporting the participants as they become aware of and make sense of their group as a socially constructed grass-root, self-organised system. While the TG examines and studies itself, the object of self-study and learning of the group itself in the “here and now” is the essence of a GD-TG. In this “here and now” members share their concepts, ideas, concerns, assumptions, and feelings to create within themselves their social collective. In collectives, people are no longer separate, being classified into boxes and prejudice-labelled drawers, but they are able to connect and strengthen their own selves and strengthen the collaboration through self-referential communication with others. Their perceptions and statements make sense to the system and to others. Individual growth becomes interwoven with the growth of the system and vice versa. The perceptions, actions and voice of each individual become visible. The individual becomes the mouthpiece of the system, as his or her perceptions relate to what has become and can become reality in this group as a system. Each group as a unique living and complex social system. The group (members) as a learning-system shapes its own conditions and possibilities through self-

⁷ Cf. Weick 1995.



enlightenment (bringing to light). This way, the group progresses to a stage of awareness and conscious life and lives in its self-created embodied conditions as collective in order to thrive in it purposefully. GD-TGs in their most intense version involve a 5 to 6 days setting with 7 to 11 participants. The following principles of GD-TGs are essential to collective sense-making:

GD-TG Principle: Qualitative integral learning

Horizontal learning is seen as quantitative, vertical integral learning as qualitative.⁸ Learning as quantitative is learning more of the same (expansion). However, learning with a focus on quality is learning as differentiation and integration (integral). Therefore, qualitative learning has to embrace differences without judging. The perception of differences instead of one given truth is the bases of qualitative learning and thriving. Paradoxes, dilemmas, contradictions, conflicts are in the focus in terms of different approaches (experiences, expertise, disciplines, research results, data, etc). These are embedded it into a larger scale and context of meaning and open a next complexity (opportunities). Consequently, the process enables the integration of differences into a next-level qualitative perspective of the whole ecosystem and its relatedness without losing complexity (no parts are lost). Quantity can be integrated in quality and thus transformed into the perspective of being part (one interest, one side) of the whole eco-systemic flow (see above circular and flow-culture).

GD-TG Principle: Processing purposeful social individual and collective life

The process orientation of group-dynamics trainings-groups lets us generate experience purpose: Mary Parker Follett⁹ describes the weaving of the individuals and the collective as an essential life process: „In this true process there takes place neither absorption nor compromise ..., shows us the evolving individual.“ The individual can stay and become a whole being, not compromising and giving itself away to the power of the collective: „In the self with its purpose and its will ... the truth is that the self is always in flux, weaving itself out of its relation.“¹⁰ The GD-TG weaves the individual and the system purpose.

GD-TG Principle: Co-evolution of individual, inter-personal and group as collective

In a way, the process is a co-evolving dance involving moves of intra-individual, inter-individual and system dynamics¹¹:

1. An intra-individual, dynamic, purposeful life comprised self-empowerment, voicing of own thoughts, feelings, will, intuitions, inner connection, and own meaning.
2. An inter-individual dynamic comprised of communication and conflict dynamics, loyalty, different interests, connections, and mutual relationships, interaction, and collaboration.
3. A systemic dynamic comprised of the complexity of our collective, our decision-making mechanisms, collective culture.

⁸ Cf. Rooke/Torbert 2006.

⁹ Cf. Follett 1919.

¹⁰ Follett 1919, 576f.

¹¹ Cf. Spindler/Wagenheim 2013.

- An interconnected holistic field dynamic¹² comprised of the awareness of implicating long-term impacts, sense-making from the future of the eco-perspective, the planet, the universe and cosmos, large scale and long-term future-ing. (Ethics)

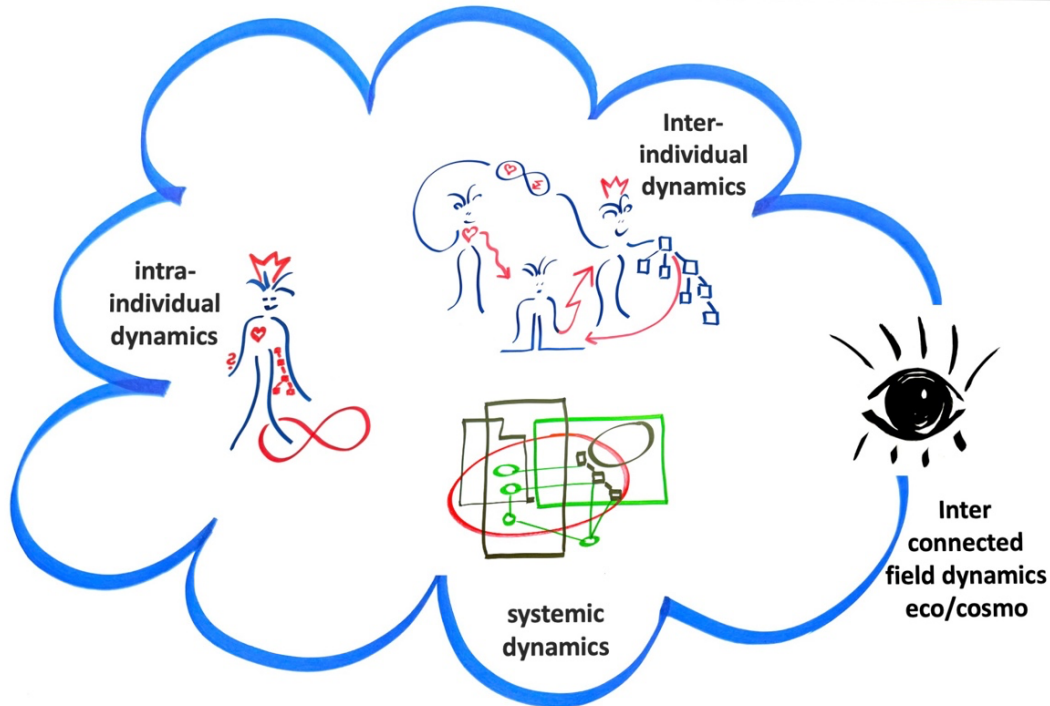


Fig. 2: Co-evolving dance of intra-individual, inter-individual and system dynamics by Maria Spindler

COLLECTIVES ARE AWARE OF THE
INTER-CONNECTED FIELD AND OBSERVE THE
IMPACT OF THEIR ACTIONS ON A META-LEVEL

GD-TG Principle: Action learning cycle

It is through the cycle of action, observation, reflection and planning¹³ that GD-TG members learn jointly and the collective moves forward. This learning process cannot be assumed to happen automatically in a GD TG session. It is often an emotional, conflict-rich and painful truth to become aware of what Impact actions can have on myself, on others and the culture (growth or arrested development) of the system.

GD-TG Principle: Leadership vacuum setting for self-actualisation

An initial emptiness, the vacuum¹⁴, is a space provided by the trainer for experimentation, learning, self-empowerment, self-design and self-management of the collective by co-leadership and joint self-enlightenment. This only works when the trainer doesn't 'know better'—that would mean that he or she is forcing a leadership and learning culture on the group. Questions may be asked, like: What makes sense for us as a group? How do we want to shape our situation? What is under the radar and why? What

¹² Cf. Scharmer/Pomeroy 2024.

¹³ Cf. Lewin 1946.

¹⁴ Cf. Wheelan 1990.



conditions for our individual actions do we create for ourselves with which images, norms and forms? What position do I have in this system and what position do I want to take? What is my contribution to this system and what impact does it have?

GD-TG Principle: Form becomes the topic

The TG does not focus on the usual everyday topics of conversation. Participants' own inter-actions, their experience and design come into focus, in a way that enables the form and content of communication to coincide. This allows the group to create the issues that it wants to examine through joint interaction, in which the members agree on how they create themselves as collective. Questions may be asked along the lines of: What patterns and cultures dominate? What influence does this form of collaboration have on me, on others? How does this entire Gestalt move and inter-relate?

GD-TG Principle: Here and Now culture for the next future to land on

The setting foresees this space (leadership vacuum) for focusing on the here and now. This is why at the beginning of TG trainers tend to ask the question, "What does this have to do with the 'here and now'?" It opens up the possibility of observing one's own selectivity (of what is observed and how) and trains mind&heart&will¹⁵ to connect to, feel and embody the present shared moment. This enables a shared time-space. No victim-clinging to the past, no ego-hero-escaping into a scary future. This is creating the own conditions (culture) here and now and power-for a shared future.

GD Principle: Co-creating and co-scrutinising own collective

The participants join to create their own conditions for learning and growth, their own internal structure, leadership concepts, boundaries, conflict management, learning culture, values, norms, etc.. It is a transformation that goes through all 4 stages of consciousness (habitual, linear, circular, flowing). Questions asked at this stage might include, for example: Which structure, norms, which kind of leadership, which culture did we create and what does this mean for our future? It is a continuous process of producing the own collective, becoming aware of it and scrutinising it and making it better. It is a move from the collective unconscious to collective consciousness.

COLLECTIVES CREATE A DYNAMIC STABILITY BY
TRANSFORMING THEMSELVES CONSCIOUSLY

4. Conclusions and questions

Sense-making for leadership cultures, organisations and economy

The GD-TG approach can show us how to increase awareness for the four our different leadership cultures and their impact. Leadership cultures are our most effective societal transformers, because (as shown in the article) leadership cultures are geared towards the future. Cultural awareness, co-creation and transformation can be experienced in the context of long-term, large-scale leverage, when collective integral sense-making prevents us from separating, becoming insane and neglecting, victimizing ourselves and all forms of life in the digital age. As shown: Cultures go hand in hand with power dynamics, leading

¹⁵ See the chapter 2. WHAT?



to different perceptions of AI, with different impact on how we think and apply economy and how we treat the planet:

- Habitual culture is a dynamic in which we are likely to obey, become victims and punish differences, with AI as our manipulator and master (power-over/under). In this cultural paradigm, the old paternalistic economy is a strong presence.
- Linear culture is characterised by expansion, tending towards exploiting ourselves, others and the planet, using it for (business) wars (power-over/power-against), promoting differentiation, a linear economy and addiction.
- Circular culture serves as a collaborative approach. It enables us to understand AI and use it for support – this is mainly meant by ‘augmented AI’), in the sense of ‘power-with’ to promote the integration of differences.
- Flow culture allows co-evolution along with the planet, inspiring us to use frameworks and riverbeds in order to thrive in a sense-making, holistic way. This has a long-term impact as shared power-for the eco-system, humanity, biodiversity.

Considerations and questions for grass-rooted ethics-in-action in the digital age

Ethics is growing in importance as the essential approach to assess moral concepts, e.g., how AI is used or what the impact of different types and modes of AI could be. I consider GD-TG as practical ethics-in-action. Ethics that is not be out on our behalf or imposed on us. It has to be enabled in a grass-root, self-organised manner: a collective observing itself while observing the field/world, e.g. AI developments and its economy, along with its possible long-term implications.

I am very interested in working together to develop solutions to the following questions:

- How can leadership (teams) in NGOs, corporations and governments (AI EU Act) increase ethics-in-action and embrace their imperfect beauty as collective and responsibility for a next economy that takes an eco-systemic perspective into account?
- How can independent grass-roots ethics collectives impact society? How can integral process-orientation be organised?
- How can we uphold the culture of flow for mature, ethics-focussed collectives embracing habitual and linear cultures, so that it can develop an ‘imperfect beauty’ mode as highly self-referential collective ethics?

Sense-making is a never-ending process of connecting and intertwining the individual with the different cultures of consciousness through collective reasoning against the backdrop of the eco-system (whole/holistically). It is a process of future-ing and taking responsibility for (shared) action considering the implications (ethics). This process is an imperfect beauty, because of the continuous integration of obstacles and differences. Ethics as process-oriented sense-making is never finished, never perfect, that would be perfection power-over norm-set. If it were perfect, it would be static; if this were the case, we would either be in an autocratic power-over/power-under or power-against dynamic and sense-less and self-victimized – or dead. Not engaging into collective sense-making is giving away the ambitions and shaping future-ing with shared power-for. Let's keep choosing awareness for our connections, raising our voices for the collective, sharing our perceptions and integrating the diversity of intelligences.

Literature

- EU (2024): EU AI ACT. *Official Journal (OJ) of the European Union* (12 July 2024)
<https://artificialintelligenceact.eu/the-act/> (download 2024-10_17).
- Follett, M. P. (1919), Community is a Process. (Reproduced from *Philosophical Review*, Vol. XXVIII, 1919, p.576-588, (download 2. Jan 2024).
- Lerchster, R. / Spindler, M. (Eds.) (2023), *Gruppen:Dynamik. Die Gestaltung dynamischer Prozesse für Leadership, Beratung, Teams und Organisationen im 21. Jahrhundert*. Carl-Auer Verlag, Heidelberg.
- Lewin, K. (1946) Action Research and minority problems. *Journal of Social Issues* 2: 34-46.
- Lewin, K. (1947) Frontiers in group dynamics: Concept, method and reality in social science, social equilibria and social change. *Human Relations* 1: p 5-41.
- Scharmer, O. / Pomeroy, E. (2024) Fourth Person: The Knowing of the Field. *JASC Journal of awareness-based systems change, Volume 4, Issue 1* p.19-48.
- Schein, E.H. (2010), *Organizational Culture and Leadership*. (4th Edition) Jossey-Bass, San Francisco.
- Spindler, M. (2024) *the Beauty of Power. How to understand and transform power dynamics for eco-systemic future-ing*. Queens Worlds Essentials, Vienna.
- Spindler, M. & Wagenheim, G. (2013) "The difference in focus: How to create "group-as-system" level learning in t-groups". In: ÖGGO (2013) *Here and Now*. Verlagshaus Hernals, Vienna p. 21-32.
- Thorisson, K. R. (2021), The 'Explanation Hypothesis' in General Self-Supervised Learning. *Proceedings of Machine Learning Research* (159) p.5-27.
- Webb, A. (2024), 2024 Tech Trend Report. <https://futuretodayinstitute.com/trends/>
- Wheelan, S. (1990): *Facilitating training groups: a guide to leadership and verbal intervention skills* (1st published). Westport. Praeger Publishers.
- Weick K (1995) *Sensemaking in Organizations*. Sage Publications, New Park, London, New Delhi.



Dr. Maria Spindler is an international organizational consultant in the profit sector and for NGOs. Deep transformation for high performance teams and organizations, co-creation for the future, organized power relationships, leadership culture, and organizational learning are her passions. She teaches at universities on power for organization and leadership, cultural transformation, strategy development and implementation. She is a group dynamics trainer for the Herstein Management Institute, and teaching trainer for the ÖGGO (Austrian Society for Group Dynamics & Organizational Consulting). Her book publications focus on power #beautyofpower, organizational change, leadership dynamics, group-dynamics, and societal transformation in the digital age. As a keynote speaker she touches hearts, minds, and collectives at corporate events. Maria works and lives in Vienna (Austria) and Amsterdam (Netherlands). www.maria-spindler.at office@maria-spindler.at