More than a buzzword? Mapping interpretations of the 'polycrisis'

Louis Delannoy[1,2,3,*], Jean-Charles Leveugle[1,4],

Sofia Maniatakou[2], Peter Søgaard Jørgensen[1,2,5]

[1] Global Economic Dynamics and the Biosphere, Royal Swedish Academy of Science, Stockholm, Sweden

[2] Stockholm Resilience Centre, Stockholm University, Stockholm, Sweden

[3] Swedish Centre for Impacts of Climate Extremes (climes), Uppsala University, Uppsala, Sweden

[4] CentraleSupélec, 3 Rue Joliot Curie, Gif-sur-Yvette, France

[5] Anthropocene Laboratory, Royal Swedish Academy of Sciences, Stockholm, Sweden

*Corresponding authors: Louis Delannoy (louis.delannoy@su.se)

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Abstract (159 words)
The concept of ‘polycrisis’ leapt from Davos into everyday policy talk, yet its meaning remains fluid and sometimes contradictory. To take stock, we asked fifty experts to sort key related statements, and carried out a Q-methodology analysis to reveal four distinct framings. All experts agree that polycrisis spills across sectors and borders and reject the view that polycrisis is a mere buzzword. They diverge, however, on how much faith to place in current knowledge systems and on polycrisis’ drivers. Connecting these insights with Edgar Morin’s crisis theory (*crisiology*) suggests that polycrisis is best understood as a metamorphic hinge where breakdown and transformation unfold together. We argue that advancing this agenda requires drawing on sustainability science: tracing feedbacks and power, embracing plural knowledges, and situating crises in relational, historical, and reflexive perspectives. Rather than a passing label, polycrisis emerges as a generative lens for navigating the turbulence of planetary upheaval and, as such, a compass for steering pathways of transformation.

Keywords
Polycrisis, Edgar Morin, Q-methodology, Sustainability, Transformation, Systemic risk

Main text (6870 words, including figures, tables, and captions)

Introduction

Human-induced alteration of the Earth biosphere has led to a new sense of interacting and reinforcing crises—so-called "polycrises" (Henig & Knight, 2023; Lawrence et al., 2024a; Holder et al., 2024; Delannoy et al., 2025a). While this framing gains traction across academic, policy, and media arenas as a way to describe the escalating entanglement of global challenges—climate change, pandemics, geopolitical tensions, etc.—the term remains inconsistently used and with little overview of the multiple uses (Mark et al., 2025; Liu & Renn, 2025; Parnell et al., 2025; Rakowski et al., 2025). Additionally, the notion of polycrisis is frequently reduced to a static label or rhetorical device, repackaging existing perspectives in both empirical studies and theory, rather than offering deeper insights into policymaking (Zaki, 2025). This situation reflects a critical conceptual gap, especially as 'polycrisis' begins to influence high-level strategic foresight and governance agendas such as the Sendai disaster risk reduction framework (Gogerty et al., 2025).

The Anthropocene, as proposed by Earth system scientists, denotes a time in which human activity has become a dominant force shaping planetary processes (Folke et al., 2021). Within this paradigm, the frequency and intensity of crises are understood not as anomalies but as evolutionary features of societies, recently conceptualised as Anthropocene traps (Søgaard Jørgensen et al. 2023; 2025; Nyström et al., 2025). The modern meaning of the word crisis (from Ancient Greek *krisis*) has accordingly evolved from an acute, time-bounded event when path-changing decisions can be made, to a condition of volatility without clear spatial, temporal, or sectoral boundaries (Revault d'Allones, 2016; Barrios, 2017). This linguistic and conceptual shift was recognized early by French complexity philosopher Edgar Morin and journalist Anne-Brigitte Kern, who introduced the term *polycrise* in their 1993 book *Terre-Patrie*. For Morin and Kern (1993), a polycrisis is not merely the sum of distinct crises—environmental, economic, social, technological—but an emergent configuration characterized by growing uncertainty, regulatory breakdowns, and the amplification of feedback loops that may be either destructive or transformative. They emphasized that these crises cannot be understood or addressed in isolation, as each one interacts with and exacerbates others, forming a complex systemic entanglement. The result is a world in which linear, sector-specific solutions are increasingly ineffective.

The term was later translated to *polycrisis* in the English version of the book (*Homeland Earth)*, as the "*complex intersolidarity of problems, antagonisms, crises, uncontrollable processes, and the general crisis of the planet*" (1999: 74). This tweaked framing emphasized that the key threat is not any single crisis, but rather the unstable mesh of interactions between ecological degradation, economic turbulence, social fragmentation, and political dysfunction. Despite this early insight, the concept remained largely peripheral for over a decade. It was revived by South African sociologist and sustainable transformation theorist Mark Swilling, who combined it with the long-wave theory to discuss the mutually amplifying effects of climate change, inequality, and financial volatility in the wake of the 2008 global financial crisis. For Swilling (2013), polycrisis is not a collection of isolated failures but a structural dynamic condition: a "*particular moment in a much wider and deeper set of historical trajectories that have not only occurred before but can be expected to unfold in future in more or less predictable way*" (2013; 98). This way of relating the concept to concrete crises was also pursued, surprisingly enough, by the then-European Commission President Jean-Claude Juncker to characterize EU's concurrent governance challenges—including economic stagnation, the migration crisis, and Brexit—as entangled in ways that threatened institutional cohesion (Juncker, 2018).

Polycrisis' uptake started growing in the early 2020s, catalyzed by the rapid sequence and interdependence of large-scale disruptions: the COVID-19 pandemic exposed systemic vulnerabilities in health, logistics, and governance; Russia's invasion of Ukraine reshaped global energy and food systems; and worsening climate extremes disrupted ecological and socio-economic stability. These events laid bare the inadequacy of treating crises as isolated shocks and intensified financiers and policymakers' interest in frameworks that could account for systemic interactions (Summers & Ahmed, 2022; Wolf, 2022). In this regard, Columbia University economic historian Adam Tooze

played a pivotal role in reintroducing polycrisis into the global lexicon. In Shutdown (2021) and subsequent commentaries (Tooze, 2022a; 2022b), he framed the term as capturing the shift from a world of individual shocks to one of interacting failures. Tooze's formulation resonated with widespread post-pandemic disorientation, but it also marked a conceptual turn. While drawing from Morin's complexity thinking, Tooze's engagement with polycrisis tends toward phenomenological mapping rather than causal explanation, documenting shock interactions without fully theorizing their systemic origins. This shift has sparked both interest and critique. On one hand, Tooze's popularization helped bring attention to the limitations of single-crisis frameworks. On the other hand, critics have noted that his framing risks drifting toward a conservative fatalism: by portraying complexity as irreducible, the analytical space for structural critique may be narrowed. As Godin (2023) argues, polycrisis in this formulation may obscure underlying systemic logics—especially those rooted in global capitalism. The concept thus becomes not a theory of crisis, but a collage of crises. It is precisely this ambivalence, between interpretive utility and conceptual vagueness, that accompanied polycrisis as it became a buzzword at the 2023 World Economic Forum (WEF) meeting in Davos (Serhan, 2023) before being featured prominently in the Global Risks Report (WEF, 2023)—a major assessment not without its own biases (Delannoy et al., 2025b).

In parallel, the Cascade Institute (CI) proposed the concept of 'global polycrisis', describing it as "*the causal entanglement of crises in multiple global systems in ways that significantly degrade humanity's prospects*" (Lawrence et al., 2022; 2). This formulation marks an important step toward conceptual clarity, distinguishing polycrisis from loosely related notions such as 'systemic risk', 'catastrophic risk', and 'existential risk' (Schweizer, & Juhola, 2024; Arnscheidt et al., 2025). However, it is not without tension. Mark et al. (2025) argue that the CI framework treats crisis primarily as an outcome rather than as a phase of escalating risk and contested decision-making, limiting its anticipatory value and marginalizing the role of agency. More fundamentally, Albert (2025) critiques the CI definition for underplaying structural power. As the term gains traction across academia, media, and governance, these arguments matter: unlike the Anthropocene, which emerged from scientific inquiry before informing policy, polycrisis has entered academic debate from the policy sphere, making it harder to apprehend with analytical precision. This reversed trajectory increases the risk of polycrisis becoming a vague metaphor—too diffuse to explain, and therefore too weak to guide meaningful responses.

Materials and methods

Here we investigate how 'polycrisis' is understood across a group of 50 researchers having engaged with the concept, using Q-methodology. First introduced by Stephenson (1935a, 1935b) and subsequently refined by Brown (1980, 1993), Q-methodology is a mixed-methods approach used to identify archetypal framings of a focal issue (Ramlo, 2015). Selected participants (the "P-set") are invited to rank a curated set of statements (the "Q-set") along a scale of agreement, producing a quantitative distribution that can be qualitatively interpreted (Zabala & Pascual, 2016; Zabala et al., 2018) or integrated with other approaches (Ciftcioglu, 2020).

Thanks to its flexibility, statistical tractability, and interpretive depth, Q-methodology is increasingly adopted within social-ecological systems research. Recent applications include elucidating how scientific communities interpret emergent concepts such as science-based targets (Quahe et al., 2023), tracing place-based understandings of contested terms (Torralba et al., 2023; Blandon et al., 2024), and mapping local framings of complex socio-environmental issues (Maniatakou et al., 2020; Psiuk & Enqvist, 2024; Kageyama et al., 2025). Beyond these examples, advances in sustainability science further demonstrate its versatility in engaging with contested values and diverse knowledges, for instance, by eliciting stakeholder perspectives on ecosystem management (Ciftcioglu, 2020; Upadhaya et al., 2024), surfacing heterogeneous expectations within transdisciplinary collaborations (Radinger-Peer et al., 2022), and clarifying the attributes required for effective knowledge brokering at the science–policy interface (Karcher et al., 2024).

Q-methodology is particularly well suited to research questions that elicit multiple, complex, and socially contested interpretations (D'Amato et al., 2019), such as 'polycrisis'. Following the methodological steps by Watts and Stenner's guidelines for Q-methodology (2012), we (i) compiled a

list of 33 literature-based statements to be included in the ranking; (ii) invited 166 researchers with experience with the 'polycrisis' concept; fifty-two accepted and two withdrew, leaving fifty final participants (30 % response rate); (iii) invited participants to rank the statements and conducted semi-structured interviews; and (iv) analyzed the ranking of the statements to explore how this sample of researchers conceptualizes 'polycrisis'.

Discourse identification and Q-set

We began with a scoping review of scholarly and grey literature on 'polycrisis' and associated concepts. Drawing on that review and on discussions during the Polycrisis in the Anthropocene workshop (Potsdam, 27–28 May 2024, L.D. and P.S.J. attended), we mapped seven analytic dimensions—definition, drivers, cross-scale dynamics, impacts, responses, use and understanding—on a mind-map. For each dimension we drafted multiple candidate statements and linked every to at least one published source to ensure conceptual breadth (see Table S1). Two pilot interviews and the ethics review then helped us refine the list from forty to thirty-three statements. Because several participants were francophone, we translated all items into French and back-translated them with a bilingual pilot respondent (see Supplementary Material). Two authors of the study (L.D and J.-C.L.) are also native French speakers.

Participants selection

We targeted three intersecting constituencies: researchers who had attended a dedicated polycrisis meeting (for instance, the Potsdam workshop or the 2022 Archipel conference), authors of peer-reviewed articles that engage significantly the concept (e.g., not only mentioning 'polycrisis' in the introduction, but developing and sometimes reframing the concept), and members of the Polycrisis Community Map (https://polycrisis.org/community-map/). We invited 166 people to an hour-long interview, aimed to be balanced for gender and disciplinary background; fifty-two accepted and two withdrew, leaving fifty completed Q-sorts (30 % response rate). Still, and because polycrisis is still mostly used in Global North countries, participants were mostly from related areas (see Limitations).

Q-sort and interviews conduct

We conducted all Q-sorts and interviews on Zoom, in two stages: between 23/05/2025 to 30/07/2025 (done by J.C.L. and L.D.) and between 01/09/2025 to 14/10/2025 (done by L.D.). After obtaining oral consent we asked participants to share their screen, open a bespoke web interface (https://polycrisis-q-sort.netlify.app) and rank the thirty-three statements on a quasi-normal grid from –4 (“most disagree”) to +4 (“most agree”), see Fig. S1. We let them free to rank in the order they preferred, e.g., not forcing from “most agree” to “most disagree”. Participants could request clarifications at any time. When they finished sorting, we conducted an open-ended discussion of their choices. We recorded the sessions and stored rank files on an encrypted server.

Factor analysis and interpretation

We analysed the fifty Q-sorts in KenQ Analysis Desktop Edition (KADE) v1.3.1 (Banasick, 2019). We first generated a 50 × 50 correlation matrix and explored both centroid and principal-component solutions. Because a dominant first factor was present, we selected principal-component analysis (PCA) and applied varimax rotation. We thoroughly explored the 2-, 3-, 4- and 5- factor solutions, and decided on the 4-factor solution based on the following criteria. First, all factors had eigenvalues >1 (known as the ‘Kaiser-Guttman criterion’). Second, the product of the two highest loadings of each (rotated) factor were higher than the standard error multiplied by 2 (satisfying the ‘Humphrey’s rule’. The rule is 2 x Standard error (SE), SE= $1/\sqrt{N}$, where N=33, resulting in 0.174). Third, the cumulative variance of the 4-factor solution explained 50% of the total variance, which is above the 35-40% threshold suggested by Watts and Stenner (2012). Fourth, the 4-factor solution has at least 2 participants loading significantly on each of the factors (with factor loadings of +/− 0.45 or above being), implying factor stability (Significance at the $p < 0.01$ level is considered a factor loading exceeding the value +/− 0.45 (based on the formula $2.58/\sqrt{N}$, where N=33, i.e. the number of statements). However, the most important criterion to decide on the 4-factor solution was its interpretability; it made theoretical sense as it was the most meaningful solution (Brown 1980, Watts and Stenner 2012). It provided clearer and more distinct viewpoints compared to the other solutions,

whereas the 5-factor solution blurred thematic distinctions and the <4 factor solutions were overly simplistic.

We emphasise that, in Q-methodology, the statistical cues that signal factor "strength" in conventional R-method studies play a supporting rather than a decisive role. Because the participant pool is purposive and not random, the variance each factor captures, the size of its eigenvalue and other indices serve only as heuristics. Consequently, a statistically large factor is not automatically the most substantively important, and the viewpoints distilled here cannot be extrapolated beyond the population we sampled. Meaningfulness and interpretability—judged in relation to theory, context and qualitative evidence—carry equal analytical weight (Brown, 1978; Watts and Stenner, 2012; Q-method Listserv archive). To deepen that interpretive work, we drew on the post-sort interviews: we transcribed every conversation verbatim, coded each transcript thematically and used those insights to nuance and corroborate the narrative readings of the four factors.

Ethics review

Interview methodology and statements were approved by the Stockholm Resilience Centre's research ethics sub-committee, prior to data collection (decision 07-05-2025). Data collection adhered strictly to the EU General Data Protection Regulation (GDPR) to ensure participant privacy. No personal identifiers (such as IP [Internet Protocol] addresses, e-mail addresses, or names) were collected. Only data essential to the research objectives were gathered, in line with GDPR's data minimization principle. Informed consent was obtained in writing from all study participants (n = 50), with the consent form clearly outlining the study's purpose, the voluntary nature of participation, data usage protocols, anonymity guarantees, and the right to withdraw at any time. All data were securely stored in compliance with GDPR guidelines and accessible only to authors of this study.

Results

One of the main results of this study is that 'polycrisis' is both a plural yet coherent concept. Plural because four factors emerge from our Q-methodology, with no one monopolising the debate in terms of associated participants (Table 1). Coherent because factor correlations range between 0.35 and 0.56, signalling partial overlap without collapsing into a single orthodoxy (Table S3). The factors resolve into four internally coherent narratives that we label (F1) Analytical tractability, (F2) Networked shocks, (F3) Global governance, and (F4) Conceptual stringency. Together they span a spectrum from structural accounts of crisis entanglement to more governance-focused or critical standpoints (Table 1). Despite contrasts, all narratives agree that polycrisis unfolds on multiple temporal scales (S13, all $z \approx +1.3$) and reject the view that it strikes the Global North more severely than the South (S18, all $z \leq -1.8$), indicating shared scepticism over simple boundaries (Table 2).

Table 1 | Summary of each factor's perspective. Some Q-sorts (P2, P3, P16, P35, P37, P44, P48, P50) loaded on none or more than one factor and were therefore not assigned. Numbers in parentheses refer to Q-statements; only the most distinguishing items are discussed.

Factor	**Perspective**	**Associated Q-sorts**	**% variance explained**
F1 - Analytical tractability	Maintains that current knowledge and methods are sufficient to understand polycrisis (S31, S32, S33), and especially its drivers (S5) and dynamics (S17). Sees capitalism as an underlying phenomenon, and to a lesser extent, colonialism (S9, S10). Resulting dynamics are long-lasting (S15) and consist of tightly-coupled cross-scale linkages (S13, S16). Responses should be coordinated (S25).	P1, P6, P7, P14, P15, P17, P19, P22, P29, P30, P32, P41 (total = 12)	28 %
F2 - Networked shocks	Frames the phenomenon as multiple (S2) cascades of unforeseen shocks (S8) racing through densely linked	P5, P10, P24, P26, P27, P28,	9 %

	global systems across space and sectors (S6, S14, S16). Rejects the idea that Western colonialism (S9) or hyper specialization of knowledge (S11) are main polycrisis drivers. Calls for buffers and cross-level coordination to curb reinforcing feedbacks (S22, S25) while down-weighting local fixes (S24).	P33, P38, P40, P43, P46 (total = 11)	
F3 - Global governance	Treats polycrisis primarily as a collective-action failure: because no individual actor can grasp its full complexity (S33), stronger intergovernmental institutions (S26) and integrated response regimes (S25) are indispensable. Emphasizes that crises are not clearly linked (S16), and is not particularly concerned with deducing their drivers (S7, S9).	P4, P11, P13, P18, P21, P23, P31, P42, P45 (total = 9)	7 %
F4 - Conceptual stringency	Sees conceptual vagueness as counterproductive (S29). Interprets polycrisis as the after-life of empire: capitalist accumulation (S10) embedded in a Western colonial order (S9) produces spatial reverberations (S14). Cooperation will become regional as a result (S19). New knowledge (S30) is required to avoid fueling self-reinforcing responses (S22).	P8, P9, P12, P20, P25, P34, P36, P39, P47, P49 (total = 10)	6 %

Table 2 | Q-set of 33 statements used in the study, categorised into dimensions of 'polycrisis' and ranked from -4 to +4. The greener the colour, the higher the ranking of the statement and the higher the strength of agreement the factor has with the statement. Statements with the four greatest disagreement between factors (highest standard deviation) are marked in orange, and those with the four greatest agreement between the factors (lowest standard variation) are marked in blue. Figures with an asterisk indicate that the statement was a distinguishing statement for that factor at $p<0.01$.

ID	Dimension	Statements	F1	F2	F3	F4
1	Definition	We are not in ‘the' polycrisis as much as a polycrisis.	-2	1*	-2	-3
2	Definition	The world is facing multiple polycrises.	-1	1*	-2	-2
3	Definition	The list of crises that make up the current polycrisis is clear.	0*	-2	-3	-4
4	Definition	The polycrisis concept captures the complexity of the world.	2	-1	2	-2
5	Drivers	It is possible to identify the main drivers of the polycrisis.	2*	0	0	-1
6	Drivers	The polycrisis is the product of human interconnectivity.	0	3*	0	-2
7	Drivers	A phenomenon underlying the polycrisis is an accumulation of wears and tears.	1	2	-2*	1
8	Drivers	A phenomenon underlying the polycrisis is the apparition of shocks.	0	4*	-1	0
9	Drivers	The polycrisis is rooted in a geopolitical order constructed by Western colonialism.	2	-3*	-1*	3
10	Drivers	A phenomenon underlying the polycrisis is capitalism.	4	-1	-2	3
11	Drivers	Hyperspecialisation of knowledge is a driving force behind the polycrisis.	-2	-3	1	1
12	Cross-scale dynamics	It is possible to identify the dynamics of a polycrisis.	1	2	1	0

13	Cross-scale dynamics	The polycrisis evolves along different temporal scales.	3	3	3	3
14	Cross-scale dynamics	A polycrisis evolves along different spatial scales.	2	4	1	4
15	Cross-scale dynamics	The polycrisis is here to stay.	3	-2	2	-3
16	Cross-scale dynamics	The crises are clearly connected.	4	3	-3*	2*
17	Cross-scale dynamics	The polycrisis is unpredictable.	-2*	0	0	1
18	Impacts	Polycrisis disturbs more severely the Global North than the Global South.	-4	-4	-4	-4
19	Impacts	Cooperation will become increasingly regional as the polycrisis develops.	-1	-2	-1	1*
20	Impacts	The polycrisis is likely to change how time is thought of.	-1	-2	1*	-2
21	Responses	A polycrisis is also a source of opportunity.	-1*	1	2	2
22	Responses	Certain responses reinforce the polycrisis.	1	2	2	4
23	Responses	Socio-technical barriers hamper the ability to cope with the polycrisis.	0	1	3*	2
24	Responses	Responses must be local.	-2	-3*	-1	0
25	Responses	Responses must be coordinated.	3	2	4*	0*
26	Responses	A strong intergovernmental institution is needed to manage the polycrisis.	1*	-1	3*	-1
27	Use	The concept is a buzzword.	-3	-1	-3	-1
28	Use	The concept is counter productive.	-4	-4	-4	-1*
29	Use	Even ill defined, the concept is useful.	1*	0	-1	-3*
30	Understanding	The integration of indigenous knowledge is a necessary element in understanding the polycrisis.	0	-1	1	2
31	Understanding	The current state of knowledge does not allow us to understand the state of the polycrisis.	-3*	1	0	-1
32	Understanding	Current methods are inadequate in explaining the mechanisms of the polycrisis.	-3*	0	0	0
33	Understanding	Understanding the polycrisis is beyond what is individually possible.	-1*	0	4*	1

Factor 1 - Analytical tractability

The first factor—loading significantly on twelve Q-sorts and exhibiting a composite reliability of 0.98 (Table S4)—advances an interpretation of polycrisis as a phenomenon that can, in principle, be deciphered with the intellectual tools already at hand. Strong disagreement with the claims that either current knowledge or methods are inadequate to make sense of the phenomenon are discounted (S31, z = –1.23; S32, –1.04). This signals confidence in existing scholarship; as P17 insisted: "*we could probably do more with the knowledge that we have. If we had more people looking across knowledge of different systems rather than specializing in just one, we could probably gain a lot.*". Moreover, the concept of 'polycrisis' is largely supported, as testified by the rejection of statements which respectively describe the term as "*counter-productive*" or a "*buzzword*" (S28, –2.10; S29, -0.39). To

support that view, P15 thinks "*[polycrisis] is used in a lot of ways where it's not a buzzword. [...] And I think it's important to study and will hopefully have great effects and great outcomes for people.*".

Because understanding is deemed feasible, respondents also believe the principal drivers can be identified (S5, +0.72) and that the phenomenon is not fundamentally unpredictable (S17, -0.74). Those drivers are located, first and foremost, in global capitalism (S10, +1.77) and to a lesser extent in Western colonialism (S9, +1.05). As pointed out by P1, *"capitalistic logics produced a certain number of elements of the polycrisis, and are currently worsening them. As long as we think in a capitalistic manner, we won't escape the polycrisis."*. The crises that emerge from these structural forces are taken to be long-lasting (S15, +1.05) and tightly coupled across both temporal and spatial scales (S13, +1.23; S16, +1.33). Because the problem is framed as intelligible and system-level, prescriptions stress the need for orchestrated, multilevel action (S25, +1.08) receives clear endorsement, whereas purely local fixes are viewed as insufficient (S24, -0.9). In short, Factor 1 foresees a chronic but knowable polycrisis rooted in capitalist-colonial structures, whose resolution demands integrated analysis and deliberately coordinated responses.

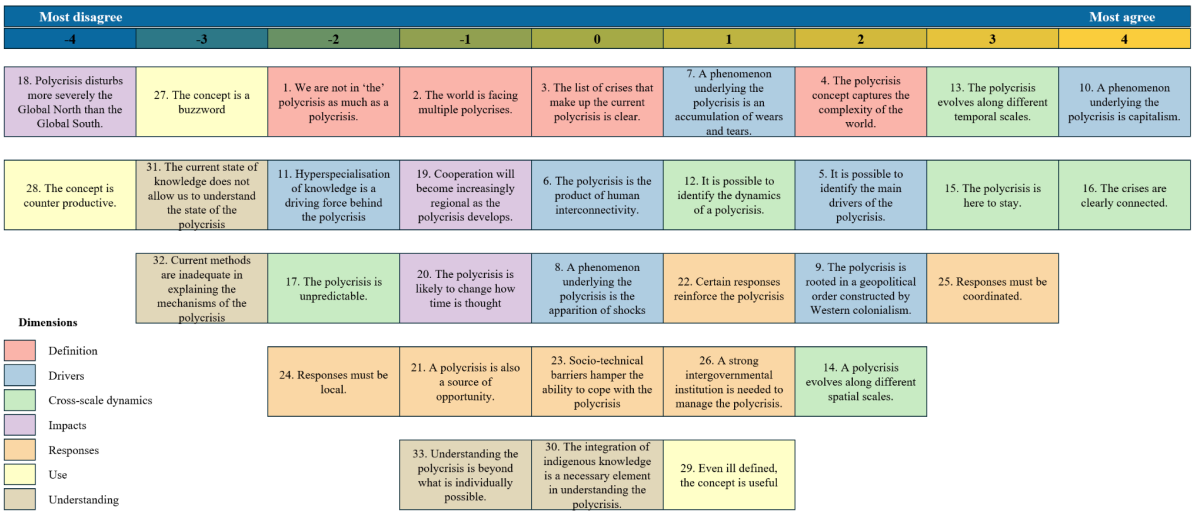

Figure 1 | Archetypical Q-sort of "Analytical tractability" factor. Colors differentiate the dimensions of the concept.

Factor 2 - Networked shocks

The second factor, loading significantly on eleven Q-sorts and displaying a composite reliability of 0.97, frames polycrisis first and foremost as an outcome of dense system coupling that amplifies discrete shocks rather than a manifestation of enduring structural changes (S8, +1.65). Participants reinforce this event-centred ontology by stressing that crises propagate across space (S14, +1.62) and sectors (S16, +1.46). A telling example of this narrative is offered by P28, who explained: "*The way I am thinking about polycrisis is that they typically involve developments which are unexpected, [and] perceived as exogenous in some respects, even if they reveal underlying weaknesses of governance capacities. Shocks are a product of different kinds of interconnectivity and non-mastery of these interconnections. They manifest themselves […] in unanticipated developments which at first appear external, but then trigger emergencies requiring a political response — as in the case of [the 2008 financial crisis], or the refugee flows following the Syrian civil war.*". In the reading of F2, modern interdependence itself, rather than capitalism (S10, –0.51) or colonial legacies (S9, –1.53), provides the combustible substrate on which shocks cascade.

As a response, F2 promotes coordinated, cross-scales action to interrupt feedback that can worsen crises (S22, +1.12; S25, +1.01), while casting a wary eye on parochial solutions (S24, –1.59). Polycrisis is thus treated as a management challenge: shocks cannot be prevented, but their transmission pathways can be governed. This position echoes the overall optimism (or rather, non fatalism) or F2, represented by a higher proportion of responses statements in the upper part of the

ranking. As P27 articulated: "*I do think local response to any outcome of risk is important. However, I think [that] local responses can't stand on their own when facing such high-level, systemic, interconnected risk without also working alongside coordinated responses.*".

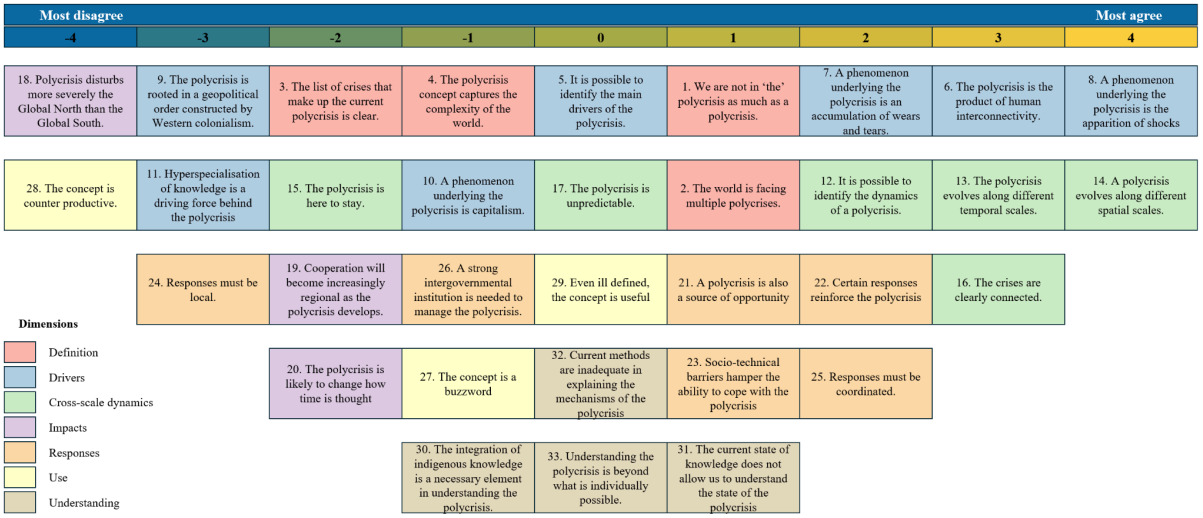

Figure 2 | Archetypical Q-sort of "Networked shocks" factor. Colors differentiate the dimensions of the concept.

Factor 3 - Global governance

The third factor, which attracts loadings from nine participants and shows a composite reliability of 0.97, interprets polycrisis above all as a governance problem raised by runaway complexity. As understanding polycrisis is believed to be beyond what is individually possible (S33, +1.49), Factor 3 unequivocally calls for joint action (S25, +2.06) with a robust inter-governmental institution (S26, +1.34). As P31 put it: "*the understanding of the polycrisis goes beyond what is individually possible [and] I completely agree that we need to work across multiple disciplines to fully grasp it.*" This orientation is further supported by P13, who explained that "a *strong intergovernmental institution is needed, but that could mean many things — from the UN to the G7 or a group of big powers acting together. That might be effective but less inclusive. In any case, coordination is certainly a good response to the complexity of crises.*".

Causally, the profile is remarkably agnostic. Capitalism as a root driver receives only a marginally positive weight (+0.18, S10) and Western colonial legacies are virtually neutral (–0.07, S9). As P21 noted, "*even if capitalism were to stop today, the problems would continue. I'm not saying capitalism is not a cause, but given how the world is structured today, even removing capitalism would not solve the problems.*". What dominates instead is a conviction that present institutions are ill-matched to system density, but still signal confidence that human agency can cope with polycrisis, if suitably organised. This humility, however, does not spill over into dismissal of the concept itself (S27, –1.41; S28, –1.08). Similarly, participants do not place exceptional blame on any single geography; the claim that the Global North is uniquely threatened is down-weighted (–1.27, S18), suggesting that vulnerability is perceived as diffuse once interdependencies tighten. Nor do respondents invest in localism: the statement that "responses must be local" falls near the neutral midpoint (–0.18, S24). In short, the factor reads polycrisis as a global collective-action predicament rather than a morally or spatially localised fault.

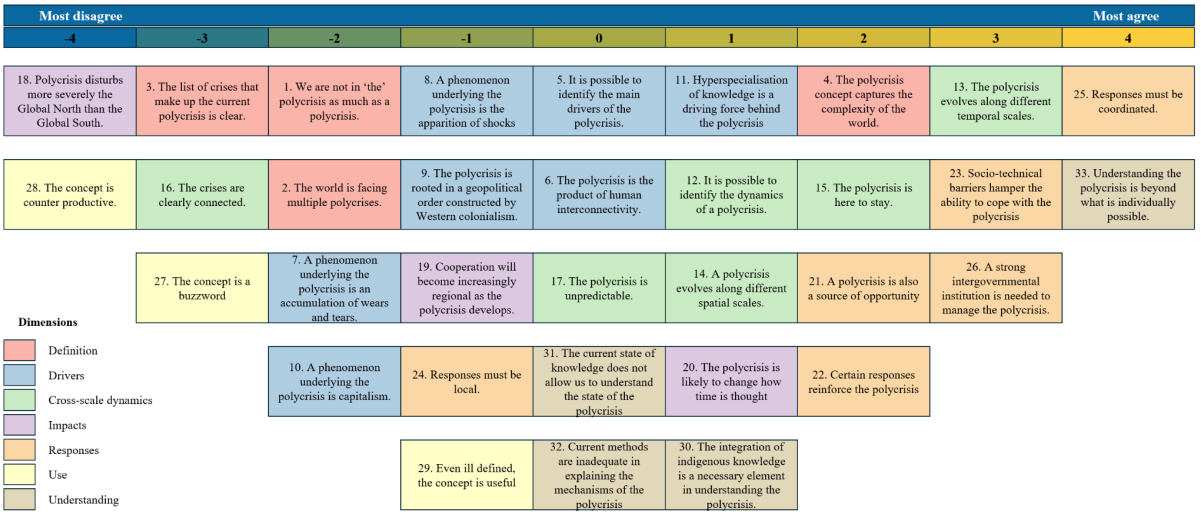

Figure 3 | Archetypical Q-sort of "Global governance" factor. Colors differentiate the dimensions of the concept.

Factor 4 - Conceptual stringency

The fourth factor—onto which ten Q-sorts load significantly (composite reliability = 0.98)—articulates the most critical account in the study. For these respondents, the very idea of polycrisis is on trial before any substantive diagnosis can proceed. They reject attempts to use the term while leaving it ill-defined (S29, –1.3). That scepticism extends to the broader definitional cluster: the claim that "the list of crises that make up the current polycrisis is clear" (S3, -0.98). In short, F4 opens with a demand for tighter conceptual boundaries. Once those boundaries are enforced, polycrisis is interpreted as the after-life of the empire. The twin forces of capitalism (S10, +1.56) and colonialism (S9, +1.37) are treated as the main drivers of polycrisis. As P9 noted, "*capitalism provided the connective tissue of market transactions that perpetuated institutionalised greed and the objectification of the environment*". Cross-scale dynamics emerge from this architecture (S3, –1.65; S14, +1.69), and require interventions that recognize structural powers to be effective (S22, +1.60).

Knowledge, in this framing, is political yet indispensable. Epistemic tools are deemed necessary but, as yet, unfit for full diagnosis as they still miss the integration of Indigenous knowledge, for instance (S30, +1.01). As P39 explained, "*Not only Indigenous [knowledge], but all kinds of knowledge are important — though specifically Indigenous knowledge, for many reasons. There are useful lessons […] in resource management and in the sociopolitics of cooperative mechanisms […]. Many Indigenous communities are particularly exposed to these crises because of economic and sociopolitical systems that have disadvantaged them for centuries, making them more at risk.*" Only through such plural perspectives, participants argued, can the concept of polycrisis be refined and made useful for designing appropriate responses.

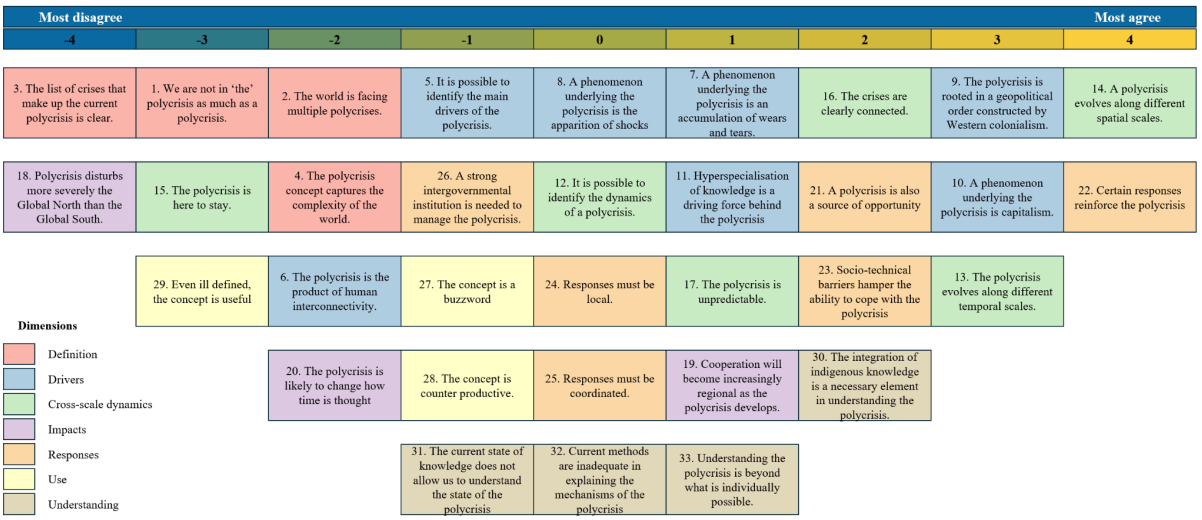

Figure 4 | Archetypical Q-sort of "Conceptual stringency" factor. Colors differentiate the dimensions of the concept.

Discussion

Consensus and disagreement on the 'polycrisis' concept

Consensus emerges in several ways. First, every narrative situates polycrisis as an intrinsically multiscalar phenomenon: statements that it "evolves along different temporal scales" and "across spatial scales" attract high positive z-scores. Second, respondents unequivocally reject the notion that the Global North bears the brunt of turmoil. Third, they converge on the reflexive insight that responses can back-fire, and therefore privilege co-ordinated ones. Finally, although critical voices caution against conceptual vagueness, the view that 'polycrisis' is a mere buzzword is rejected across the board. Taken together, these convergences carve out a shared analytic ground: polycrisis is understood as a globally distributed, scale-spanning condition whose management demands systemic, anticipatory governance rather than isolated fixes (see Figure 5). Intellectually, this emerging consensus secures the term's legitimacy as more than rhetorical flourish; practically, it sketches a minimal programme of integrated risk governance that recognises the unintended consequences of policy and the need for multilevel coordination.

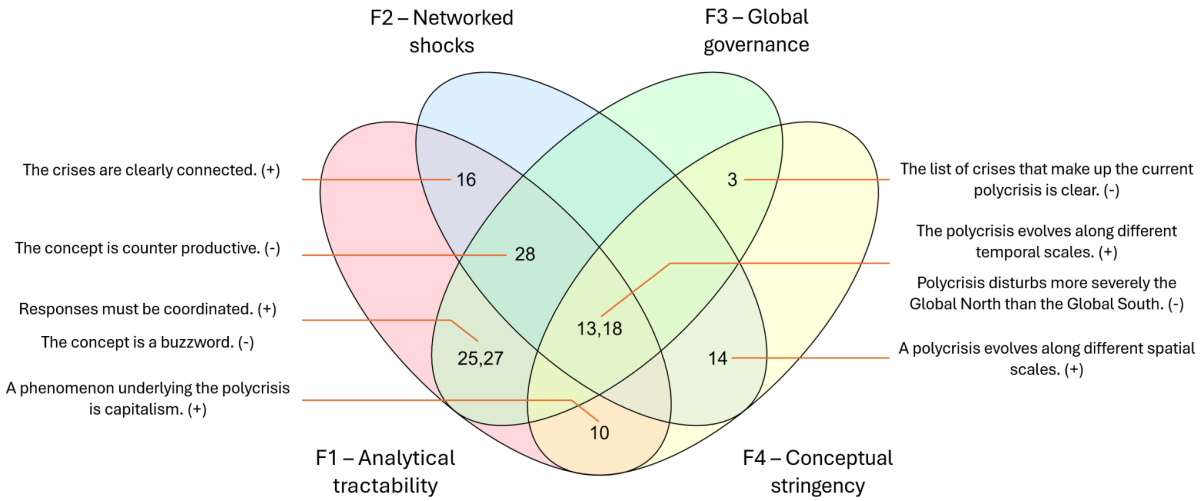

Figure 5 | Intersections of consensus statements between factors. Consensus statements are defined as those where selected factors either strongly agree (≥3) or strongly disagree (≤−3), with a maximum score difference of 1 across those factors. Sign between parentheses indicated positive agreement (+) or negative agreement (-).

Still, fault lines emerge once the conversation turns to causes, coherence and prescription. F1 and F4 for instance treat polycrisis as the long shadow of capitalism and colonial power, reading each shock as an expression of deep-seated structural relations. F2 brackets those histories and instead foregrounds tight system coupling and the way discrete events ricochet through global supply, financial and ecological networks. Between them stands F3, which regards causal debates as secondary and frames the problem primarily as a collective-action failure that demands stronger international coordination rather than new theories of capitalism or complexity. These ontologies shape whether participants see crisis interaction as obvious or contested: structural and shock-centric voices insist the crises are "clearly connected," whereas governance proponents are markedly sceptical (see Figure 6). Definition is another dividing line: only the shock narrative embraces the idea of "multiple polycrises" unfolding in parallel, a formulation others fear will diffuse analytic focus. Disagreements cascade into politics. Governance advocates call for a muscular intergovernmental architecture, something both post-colonial critics and network analysts either mistrust or deem insufficient. Conversely, the post-colonial perspective alone elevates Indigenous knowledge as indispensable to diagnosis—a gesture largely overlooked elsewhere.

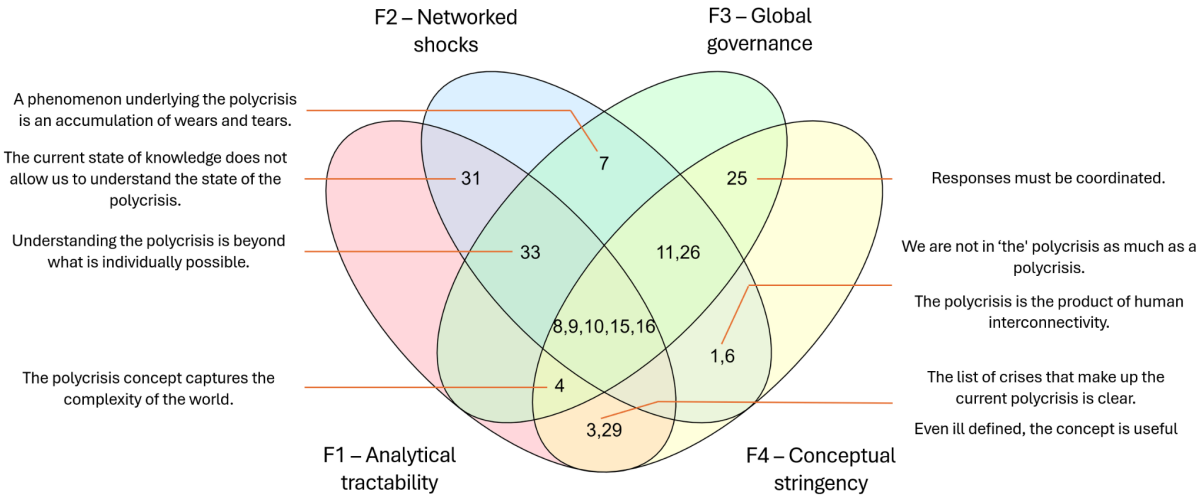

Figure 6 | Intersections of disensus statements between factors. Disensus statements are defined as those in which the absolute difference between one factor's score and at least one other factor's score is ≥ 4, highlighting pronounced areas of disagreement among factors. Note that for readability's sake, not all factors are annotated.

Conceptually, the map is structured along two intersecting axes. One axis contrasts structural readings that foreground capitalism and coloniality (F1, F4) with more event-centred or governance-focused framings (F2, F3). The other axis tracks epistemic confidence: while F1 and F2 express faith in existing analytical tools or in the capacity to develop more suitable ones, F3 highlights cognitive limits and F4 calls for decolonising knowledge practices. In short, consensus and disagreement coexist, underlining the breadth of the concept's use.

Morin's legacy and the structuring of polycrisis research

Morin's pioneering work provides a foundation for interpreting contemporary polycrisis framings. From 1968 onward he described crises as a brief tipping interval in which a system's hidden tensions erupt and its future becomes undecided (Morin 1968, 1976). For him a crisis is first and foremost an ambiguous lack of solution that "*liberates at the same time some forces of death and some forces of regeneration*" (Morin & Pauchant 1993: 16). As such, a crisis is both a danger and a doorway to renewal, the point where breakdown and transformation become possible. Importantly, crises do not necessarily lead to transformation: they reveal blockage and unblockages. Morin therefore calls for a sociology of crises (what he terms as 'crisiology') that traces how breakdowns form, spread, and sometimes turn into new kinds of order. In *Terre-Patrie* he extends the idea to the planetary scale,

arguing that humankind must recognize the interconnected nature of crises, and put forward a proposal of a planetary citizenship (Pena-Vega, 2021; 2022).

Traces of Morin's logic run through the four factor-views, but only part of the picture is there. When participants argue that polycrisis evolves around different temporal and spatial scales, they echo his original definition. Demands for broad, layered coordination pick up his belief that crises need shared and continuous learning, and the push for decolonial critique recalls his warning that knowledge is itself caught in a crisis. Missing, however, are Morin's cautions about how uncertainty clouds the present and how clashing imperatives can both trap and jolt a system. Another piece drifting from his thoughts is the unequal recognition of the role of complexity, whether that expresses in human interconnectivity or the hyper specialization of knowledge.

As the research agenda of the emerging research community is taking shape (Lawrence et al. 2024b), we argue that the field can seize its next phase by embracing a Morinian stance. Crises must be read not only as chains of failure but as both destructive and creative metamorphic hinges where fresh patterns of order begin to germinate, aligning with early social-ecological transformations work (Olsson et al. 2006). That requires thinking on evolutionary feedbacks (Søgaard Jørgensen et al., 2023; Collste et al., 2025) and digging into the structural power relations that set those dynamics in motion (Holder et al., 2024; Albert, 2025; Kaiser et al., 2025). It also means explicitly working with deep uncertainty (Brosig, 2025a; Charbonneau & Giguère, 2025), and distinguishing the processes that drive crises forward (Brosig, 2025b; Delannoy et al., 2025a). Such a programme can show how breakdown prefigures transformation, whether in revolutionary surges (Ainsworth & Hoyer, 2025) or in long-wave socio-metabolic shifts (Swilling, 2013; Giampietro et al., 2025). This endeavor also guards against the fatalism of catastrophism narratives, for instance found in the "permacrisis" concept, that normalise endless emergency and undermine collective agency (Deviatnikova, 2023; Pollock & Bell, 2025).

Societal and policy implications

Our study urges precision in talking about 'polycrisis', whether in high-level negotiations or broader debates. The concept hides different and sometimes conflicting meanings, and this matters because such framings influence how risks and responses are governed. Especially, we find that existing frameworks such as the Sendai agenda (Gogerty et al., 2025; Mechler et al., 2025) or emerging systemic risk assessments (Gambhir et al., 2025; Richardson, 2025) stand to gain from greater conceptual clarity on the use of polycrisis. Otherwise, the concept risks becoming a catch-all slogan, diluting rather than sharpening responses. Precision enables frameworks to distinguish between cascading dynamics, governance failures, and structural injustices, each demanding different kinds of intervention. In practice, this means treating polycrisis as an analytic lens: one that guides systemic risk and foresight exercises to anticipate unintended consequences (Liu & Renn, 2025; Gambhir et al., 2025), embeds equity and justice into planning (Richardson, 2025), and links local empowerment with global coordination, as in the SMART governance model (Okada & Renn, 2025). A concrete lesson for disaster policy is that response measures (pandemic lockdowns, financial bailouts, etc.) must be evaluated not just for short-term relief but also for reinforcing effects that may deepen vulnerabilities over a longer timeframe, and especially elsewhere.

The implications extend more broadly to governance and policymaking. Our findings show that framings of polycrisis shape questions of responsibility, legitimacy, and political choice. Local crisis governance struggles when rigid hierarchies block flexibility (Kuhlmann et al., 2024), while national and supranational arenas highlight the need for adaptive mandates and learning capacities (Zaki et al., 2024; Zaki, 2025). Democratic innovations can create the spaces needed to rebuild trust and collective agency (Scholtz, 2024), and large-scale coalitions are indispensable for tackling structural drivers beyond the reach of single actors (Maniatakou et al., 2025). Equity and moral economy considerations are equally vital: without confronting distributive injustices and integrating diverse knowledges, crisis responses risk reproducing fragilities (Jacobs, 2024; Porak et al., 2024; Schulz et al., 2024). Here Morin's *principe de reliance* is instructive as a call to weave together fragmented institutions, epistemologies, and scales of action. For policymakers, this means building governance architectures

that are reflexive and plural, with mechanisms to connect local experimentation to international coordination. Our findings are necessarily shaped by a predominantly Global North expert sample, but they suggest that polycrisis can be more than a rhetorical device: it can orient governance toward navigating turbulence in ways that are systemic, anticipatory, and just.

Limitations and future development

Several caveats temper the inferences we draw from this study. First, the statement set, although grounded in extensive literature review, peer feedback, and tested across two pilot interviews, necessarily framed the conceptual horizon. For instance, new crises such as AI disruptions or abrupt geopolitical realignments may introduce meanings not captured by our thirty-three items. In addition, the translation of the statements from English to French may have led to differences in reasoning, although particular care has been taken to avoid this possibility.

Second, Q-methodology purposefully trades breadth for depth; by design, it evokes the range of available viewpoints rather than their population frequencies (Brown, 1980; Watts and Stenner, 2012). Our fifty participants constitute an analytically rich but non-random slice of the global conversation on polycrisis. As such, there is a possibility of missing individuals who may bring novel and diverse perceptions, especially since the concept of polycrisis still circulates predominantly in Euro-American and Anglophone networks. This Global North bias may mute interpretations grounded in postcolonial, Indigenous, or other epistemic traditions shaped by alternative experiences. These perspectives could substantially challenge or enrich the factor narratives identified here, by foregrounding histories of extractivism, structural adjustment, or political dependency that affect how crisis is conceptualized and responded to. Future research would benefit from deliberately oversampling Global South scholars and practitioners, thereby expanding the analytical and practical horizons of polycrisis scholarship through more situated and plural knowledge bases.

Third, the ranking of the statements was done through a visual Q method online, which might produce different results than a paper-based survey (Nazariadli et al., 2019). Similarly, participants' answers could have been influenced by the interactions with the interviewers, although we limited this possibility by allowing clarifications requests during the ranking, while opening up discussion after the ranking was achieved.

Fourth, interpretation in Q-methodology rests on abductive reasoning that weaves statistical structure with qualitative nuance. Although we triangulated factor arrays with verbatim interview data, the narrative labels remain researcher constructs. Participatory validation workshops, where respondents scrutinise and refine the emergent storylines, would strengthen interpretive credibility and test the extent to which the four factors travel across disciplinary or cultural boundaries but face legal complications due to GDPR and anonymity constraints.

Finally, our study offers an analytic snapshot; it does not yet specify how competing crisis ontologies shape co-operation or conflict in real policy arenas. Comparative projects that embed Q-findings inside decision simulations, stakeholder dialogues or experimental deliberations could reveal whether and how particular narratives facilitate systemic interventions. In that sense, the map sketched here should be read as a starting grid, not a finished atlas: it identifies the lanes of meaning along which the polycrisis debate is already racing and flags the blind corners where new knowledge, wider participation and methodological hybridity must converge if the concept is to mature. In that regard, future work could include the use of complementary and mixed methods specifically targeted at policymakers having engaged with the term polycrisis, for instance through social network analysis of the development of different scenarios (Seghezzo et al., 2023).

Conclusion

Unlike the Anthropocene, which migrated from seminar rooms to summit halls, polycrisis was first mainstreamed as a policy slogan and only later circled back into scholarship. That reversal has left the word with several, sometimes conflicting, meanings—each capable of steering decisions in markedly different directions. Our Q-study of expert users makes those tensions visible, uncovering four

contrasting readings of what drives polycrisis and how best to respond. Consensus coalesces around the term's cross-scale nature and a shared conviction that polycrisis is more than a buzzword; disagreement centres on how confident we can be in current knowledge systems; on the main crises drivers; and on the emerging dynamics.

This plurality is the raw material for a more robust concept. We call on the emerging research community to return to polycrisis's roots in Edgar Morin's work and hold crisis and transformation in the same analytical frame. Using 'polycrisis' casually—without clarity on its lineage or stakes—risks turning it into yet another catch-all cliché. A Morinian revival demands plural, decolonial forms of knowledge that can expose the structural power relations shaping crises, and it requires governance that is reflexive, cross-scalar and dialogical, so that those most exposed become co-designers of the paths out. Only then can polycrisis serve as a rigorous lens for navigating both the perils and the prospects of our intertwined futures.

Lead contact

Requests for further information and resources should be directed to and will be fulfilled by the lead contact, Louis Delannoy (louis.delannoy@su.se).

Materials availability

The anonymized data and code supporting this study are available at: https://github.com/LouisD-KVA/Polycrisis-Q-method.

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Author contributions

L.D.: Conceptualisation, Formal analysis, Investigation, Methodology, Project administration, Supervision, Visualisation, Writing - original draft, Writing - review & editing; **J.C.L.:** Software, Investigation, Methodology, Data curation, Writing - review & editing; **S.M.:** Data curation, Formal analysis, Methodology, Validation, Writing - review & editing; **P.S.J.:** Funding acquisition, Supervision, Validation, Writing - review & editing.

Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of generative AI and AI-assisted technologies

During the preparation of this work, the authors used ChatGPT (o3 version) to improve clarity, coherence, and organization of the text. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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Supplementary Material

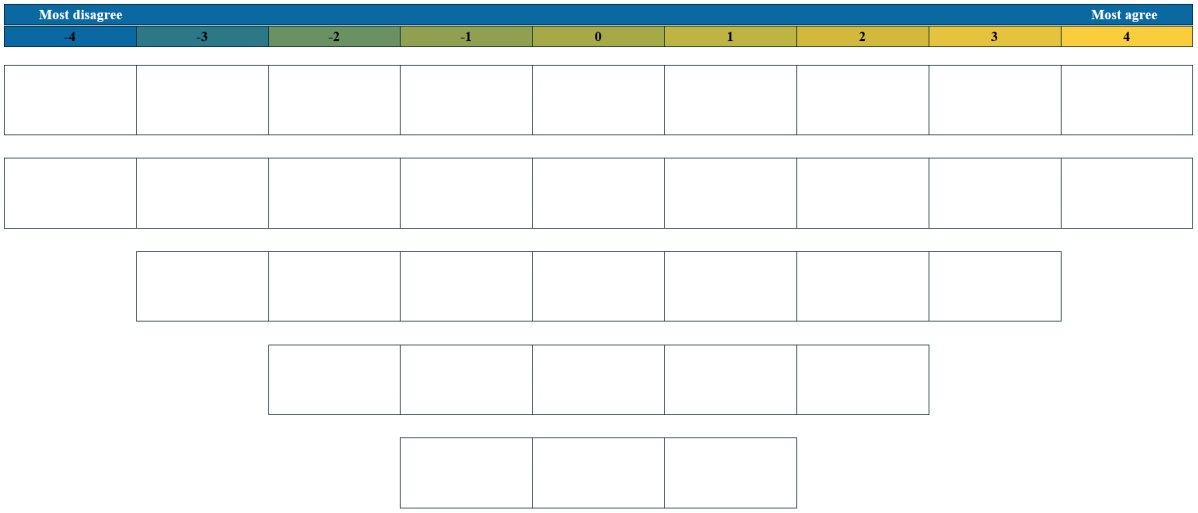

Figure S1 | Q sort grid used in this study.

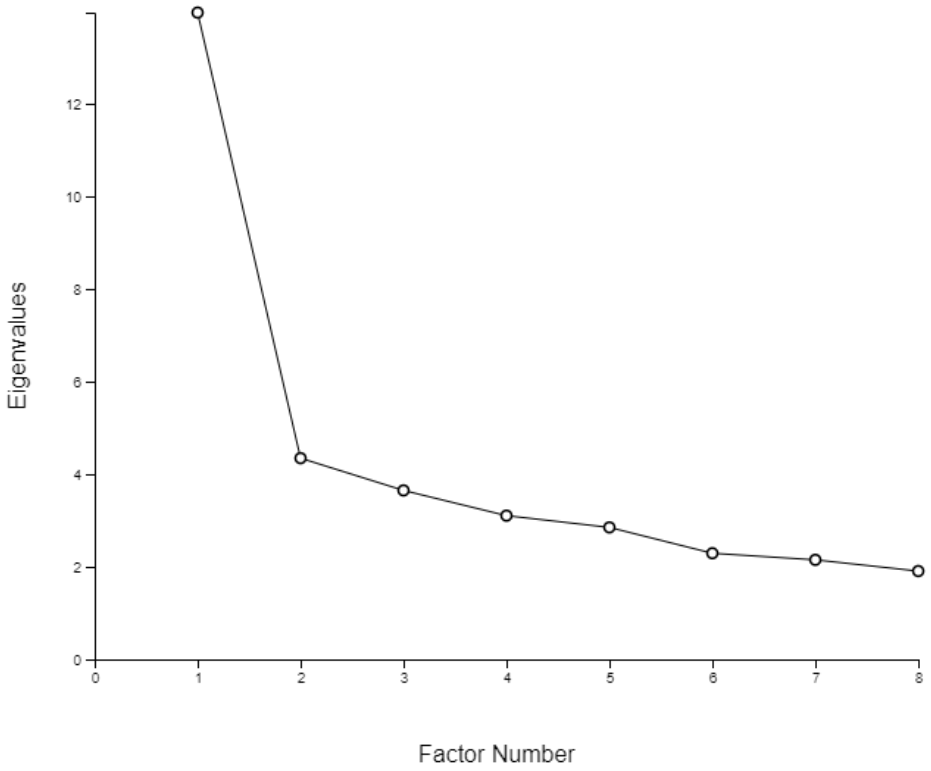

Figure S2 | Scree plot showing Eigenvalues of the different factors numbers.

Table S1 | Statements, translation in French, quotes, and relevant references.

ID	Dimension	Statement (English)	Statement (French)	Quotes	References
1	Definition	We are not in 'the' polycrisis as much as a polycrisis.	Nous ne sommes pas dans « la » polycrise, mais plutôt dans une polycrise.	"We are not in 'the' polycrisis as much as a polycrisis." "Notably, questions remain over [...] how we can distinguish whether any given event is or is not a manifestation of polycrisis, and finally whether our modern reality is the polycrisis or represents a polycrisis (one of many that have plagued populations throughout history)."	Mark et al. (2025) Holder et al. (2024)
2	Definition	The world is facing multiple polycrises.	Le monde est confronté à de multiples polycrises.	"While other authors refer to 'the' polycrisis, as a singular phenomenon, multiple polycrises could conceivably occur simultaneously but separately, each in a different set of systems. Each and every crisis is certainly not connected to each and every other crisis in a significant way, and the polycrisis concept should not be overextended to encompass every problem afflicting humanity. At the same time, the dense interconnectivity between global systems creates numerous pathways for crises to intersect. While multiple global polycrises could occur simultaneously but separately, we speculate that their interconnections will grow over time, and if these crises are not resolved, they will likely amalgamate into a single polycrisis."	Lawrence et al. (2024a)
3	Definition	The list of crises that make up the current polycrisis is clear.	La liste des crises qui composent la polycrise est claire.	"Because crises do vary significantly, and there is no fixed list of crises which make up the polycrisis, an open approach for exploring crisis transmission is important."	Brosig (2025a)
4	Definition	The polycrisis concept captures the complexity of the world.	La polycrise rend compte de la complexité du monde.	"For recognizing linkages between supposedly separate fields the concept of the polycrisis makes an important contribution making us aware of the inherently complex agglomeration of current crises." "Polycrisis might qualify as a theory oversimplifying complexity that effectively filters and organizes facts."	Brosig (2025b) Henig & Knight (2023)
5	Drivers	It is possible to identify the main	Il est possible d'identifier les moteurs	"The operation of many causes simultaneously makes cause and effect relationships difficult to trace and presents decisionmakers with acute policy	Lawrence et al. (2024)

		drivers of the polycrisis.	principaux de la polycrise.	trade-offs” “The aforementioned four drivers of polycrisis (overshoot, inequality, complexity, uniformity and interconnectedness) are the direct result of a development model underpinned by the globalization of capitalism.” “On identifie des chocs, on constate les liens entre eux, mais on renonce à comprendre comment et pourquoi la perturbation devient, à un moment de l’histoire, générale. [...] La notion de polycrise revient finalement à dissimuler une hypothèse centrale : celle que les crises multiples actuelles sont toutes reliées par l’incapacité du système capitaliste à remplir ses fonctions historiques.”	 Walsh (2023) Godin (2023)
6	Drivers	The polycrisis is the product of human interconnectivity.	La polycrise est le produit de l'interconnection humaine.	“Growth in scale and connectivity of human activity likely amplifies and accelerates all four mechanisms’ operation within and among global systems.”	Homer-Dixon et al. (2015
7	Drivers	A phenomenon underlying the polycrisis is an accumulation of wears and tears.	Un phénomène à l'origine de la polycrise est l'accumulation d'usures.	“We here adopt a social-ecological systems (SES) approach to decompose polycrisis dynamics into two interrelated processes: shocks—sudden events with noticeable impacts, and creeping changes—slow processes that have a potential significant impact on society or the biosphere. ” “In this framework, a global crisis arises when one or more fast moving trigger events combine with slow-moving stresses to push a global system out of its established equilibrium and into a volatile and harmful state of disequilibrium”	Delannoy et al. (2025a) Lawrence et al. (2024a)
8	Drivers	A phenomenon underlying the polycrisis is the apparition of shocks.	Un phénomène à l'origine de la polycrise est l'apparition de chocs.	“We here adopt a social-ecological systems (SES) approach to decompose polycrisis dynamics into two interrelated processes: shocks—sudden events with noticeable impacts, and creeping changes—slow processes that have a potential significant impact on society or the biosphere. ” “In this framework, a global crisis arises when one or more fast moving trigger events combine with slow-moving stresses to push a global system out of its established equilibrium and into a volatile and harmful state of disequilibrium”	Delannoy et al. (2025a) Lawrence et al. (2024a)
9	Drivers	The polycrisis is rooted in a geopolitical order	La polycrise est enracinée dans un ordre géopolitique construit	“As a short-hand acronym for this complex, systemic and power-conscious approach to an analysis of the current state of affairs, we introduce here also into wider circulation ‘CPC’– the insistence that capitalist (C), patriarchal (P) and	Kaiser et al. (2025)

		constructed by Western colonialism.	par le colonialisme occidental.	colonial exploitation and violence (C) are not only at the basis of these challenges, but that they are also co-dependent, with one feeding into and upholding the others. A focus on one of these key vectors of contemporary social structure alone would fall short of tackling the 'polycrisis' of the present, a situation that can only genuinely be accounted for with a decided focus on the systemic power relations that enable and uphold it."	
10	Drivers	A phenomenon underlying the polycrisis is capitalism.	Un phénomène à l'origine de la polycrise est le capitalisme.	"Capitalism is an underlying force conditioning all facets of the 'overlapping emergencies' or 'polycrisis' at stake."	Işıkara (2022)
11	Drivers	Hyperspecialisation of knowledge is a driving force behind the polycrisis.	L'hyperspécialisation des connaissances est un moteur de la polycrise.	"The ravages of closed and fragmented rationality are manifest in the conception of great technobureaucratic projects that always forget about one or several dimensions of the problem at hand. In fact, closed rationality produces itrationality. It is obviously incapable of facing the challenge of planetary problems."	Morin & Kern (1999)
12	Cross-scale dynamics	It is possible to identify the dynamics of a polycrisis.	Il est possible d'identifier les dynamiques de la polycrise.	"We thus place the polycrisis concept at the center of an urgent new research program. This program can draw on theories and methods in other fields to explain the dynamics of crisis interaction. Complexity science provides theories explaining critical transitions, path dependence), stability landscape, and the underlying sources of complexity. Network science elucidates the structure of connectivity within global systems, including the interactions between networks. And process tracing allows researchers to discern causal mechanisms in situations where controlled-case comparisons are impossible), as when observed crisis interactions are historically unprecedented."	Lawrence et al. (2024)
13	Cross-scale dynamics	The polycrisis evolves along different temporal scales.	La polycrise évolue sur différentes échelles temporelles.	"When the unexpected becomes routine, the condition ischronic and the event loses its eventedness, can we stilltalk of crisis? Moreover, how do different rhythms and temporalities of crisis affect the idea of polycrisis?" "According to Lawrence et al. (2024), this distinction between stresses and triggers recognizes the multiple temporalities, scales, and causes of global crises."	Henig & Knight (2023) Matlovič & Matlovičová (2024)
14	Cross-scale dynamics	A polycrisis evolves along	La polycrise évolue à différentes échelles	"a polycrisis can occur at different scales – local, national, regional, or global – indeed at any scale that hosts interacting systems."	Lawrence et al. (2024)

		different spatial scales.	spatiales.		
15	Cross-scale dynamics	The polycrisis is here to stay.	La polycrise est là pour durer.	“In turn, poorly designed policies can cause wider disruptions across sectors, by curtailing capacities to provide and govern public goods that can help manage systemic risk. While these dynamics are not novel, they can affect the rate and persistence of decarbonization efforts worldwide, through long-lasting changes that can be difficult to reverse. Therefore, limiting the impacts of climate change also requires navigating polycrisis dynamics adroitly. While acknowledging the urgency of low-carbon transitions, the complexity, interconnectedness, and potential nonlinearity and irreversibility of climate policy impacts needs to be understood.”	Seshadri et al. (2025)
16	Cross-scale dynamics	The crises are clearly connected.	L'interconnection des crises est claire.	“The systemic character of the polycrisis comes into play when crisis interconnection is strong. In a polycrisis setting crises are assumed to mainly result from system effects of other crises. A crisis which only has individual causes and its effects are area-specific does not qualify as contributing to a polycrisis; it would rather be an important disruptive but isolated event. For a polycrisis to exist the implicit assumption is that crisis transmission is strong, stable, and frequent. Despite the growing popularity of the term, the conditions of when and how crises are spreading remain under-explored.”	Brosig (2025a)
17	Cross-scale dynamics	The polycrisis is unpredictable.	La polycrise est imprévisible.	"Second, what is striking is the deep uncertainty that surrounds several of them (e.g. new COVID variants, or nuclear escalation). These are tail risks which can no longer be ignored but to which it is hard to attach a real probability. Thirdly, they are all happening at once and several of them reinforce each other."	Tooze (2022a)
18	Impacts	Polycrisis disturbs more severely the Global North than the Global South.	La polycrise perturbe plus sévèrement les pays du nord global que du sud global.	“That the Global South has been the site of proxy-war throughout modern history stands peripheral to this and so the Polycrisis posits war and peace, as an exclusively Western binary, which fails to acknowledge the states of perpetual crisis and war in many developing countries. This is important because wars entail sustaining the process of existing capitalist order as well as reorder. [...] Undoubtedly the current crisis is caused by the transformational role of financial and digital capitalism and the imminence of climate-change led human extinction. However, these are not anomalies to capitalism but part of its design, of which the consequences and spill-overs are unevenly distributed across the World. For example, even with its global permeation, as financial capitalism bereaves the working classes in the developed North, it continues to deepen	Sial (2023)

				extraction in the Global South, both actively and passively. Moreover, the global corporate takeover by big tech is not devoid of the footprint of digital colonialism. The consistency in the commodification of nature leading to the breaking-point of extinction, cannot rationally be separated from the general extractive activities of capital."	
19	Impacts	Cooperation will become increasingly regional as the polycrisis develops.	La coopération va se régionaliser au fur et à mesure de l'évolution de la polycrise.	"While some see this as a threat, others find it to be fertile ground for spreading economic alternatives that transform systemic breakdown into breakthroughs. A shift toward greater regional and local autonomy and sufficiency can potentially improve sustainability and resilience."	Walsh (2023)
20	Impacts	The polycrisis is likely to change how time is thought.	La polycrise risque de modifier la façon de penser le temps.	"In crisis, people may feel like the clock is ticking ("TiC[k]ToC[k]"), or time is running out to avert crisis or deal with its effects. Crisis can be fast, slow, a sudden rupture, a chronic inescapable condition, be axiomatic, an era-defining atmosphere or mood, or an uncanny state of constant anticipation. Centered in anthropology and working across art, history, ethnology, memory studies, and philosophy, this project critically places time at the heart of crisis work, asking what it means to live in times of crisis, how crisis changes over time, and how crisis is perceived in hindsight. Critically, what distinguishes 'crisis time' from 'normal time'? Framing current conditions as 'crisis' or projecting time itself as being 'in crisis' are prevailing sensibilities in much discourse about polycrisis in Europe and beyond."	CHANSE (2025)
21	Responses	A polycrisis is also a source of opportunity.	Une polycrise est aussi une source d'opportunités.	"Si toute crise constitue une opportunité et que nous sommes confrontés à de multiples crises, alors nous traversons une période de « poly-opportunités."	Hoyer (203)
22	Responses	Certain responses reinforce the polycrisis.	Certaines réponses renforcent la polycrise.	"Bien qu'elle n'ait pas été décrite à l'époque comme une polycrise, la crise financière de 2008 illustre la façon dont des « solutions » peuvent se transformer en « problèmes ». Cette crise a provoqué un surinvestissement chinois qui a sauvé l'économie mondiale du désastre, mais a conduit à une surproduction d'acier et de béton, notamment, laquelle a aggravé la crise climatique. En parallèle, cette relance chinoise a provoqué une réaction aux États-Unis, amenant Donald Trump au pouvoir, mais aussi une crise de surproduction dont la Chine n'a pu sortir qu'au prix d'une bulle immobilière qui a éclaté en 2021... Chaque solution a ouvert une nouvelle crise, provoquant une déstabilisation globale."	Godin (2023)

				“Risk in one area might cause an increase in risk in another. For example, efforts to reduce poverty and inequality by fostering economic growth in countries with low levels of industrialization might result in increased carbon emissions thereby contributing to increasing climate change. Managing these trade-offs requires a holistic understanding of these interconnections that can only come with a cross-disciplinary approach.”	UNDP (2022)
23	Responses	Socio-technical barriers hamper the ability to cope with the polycrisis.	Les verrous sociotechniques entravent la capacité à faire face à la polycrise.	“Creeping changes create locked-in trajectories, also referred to as evolutionary “Anthropocene Traps” (Søgaard Jørgensen et al., 2023), which gradually erode resilience, weaken adaptive capacity, and increase hidden vulnerabilities (Miller et al., 2010).”	Delannoy et al. (2025a)
24	Responses	Responses must be local.	Les réponses doivent être locales.	“Here, sustaining resilience hinges on two strategies: reducing shocks such as mitigating climate change by reducing emissions, and enhancing the system’s ability to absorb shocks, emphasising adaptation, such as constructing flood-resistant buildings to prepare for climate change. Social entrepreneurs are central to both strategies. They develop decentralised solutions that target the root causes of problems such as poverty and environmental degradation. Moreover, by cultivating innovative local responses, they enhance the system’s diversity and redundancy, essential for adaptation and resilience to crises. The concept of resilience thus aligns with Greg Dees’ concept of adaptive societies and shows how social entrepreneurship strengthens societal adaptation when facing polycrisis.”	Zeyen et al. (2025)
25	Responses	Responses must be coordinated.	Les réponses doivent être coordonnées.	“One component of an explanation of why the second polycrisis did not trigger a politics trap concerns the role of domestic public opinion and public debate. Insofar as crises are perceived by domestic publics as both fundamentally symmetrical and highly salient or even existential, they may fuel positive rather than negative politicisation, relaxing the constraining dissensus and untying the hands of national governments, thereby enabling coordinated responses across member states and the adoption of innovative policy measures at EU level.”	Nicoli & Zeitlin (2024)
26	Responses	A strong intergovernmental institution is needed to manage	Une institution intergouvernementale forte est nécessaire pour gérer la polycrise.	“However, the functional strength and capacities of local governments do not explain a country’s crisis governance design. Even in those cases where local governments possessed enough capacities and discretion to fulfill crisis-related tasks in the intergovernmental setting, central governments did not always trust	Kuhlmann et al. (2024)

		the polycrisis.		them and refrained from involving local governments in crisis management (UK, Poland, and partly France). In Germany, by contrast, which started with a high degree of decentralization and coordination in the intergovernmental setting, saw an overall centralizing tendency. Thus, the role of local governments in crisis governance does not exclusively depend on their legally defined competencies, but on their actual – often pragmatic, locally tailor-made and differential - interventions in mitigating a crisis." "Energy, food, and water crises; climate disruption; declining fisheries; increasing ocean acidification; emerging diseases; and increasing antibiotic resistance are examples of serious, intertwined global-scale challenges spawned by the accelerating scale of human activity. They are outpacing the development of institutions to deal with them and their many interactive effects. The core of the problem is inducing cooperation in situations where individuals and nations will collectively gain if all cooperate, but each faces the temptation to take a free ride on the cooperation of others. The nation-state achieves cooperation by the exercise of sovereign power within its boundaries. The difficulty to date is that transnational institutions provide, at best, only partial solutions, and implementation of even these solutions can be undermined by internation competition and recalcitrance."	Walker et al. (2009)
27	Use	The concept is a buzzword.	Le concept est un buzzword.	"Yet the term remains underspecified – a buzzword with little substantive content. It is not yet associated with a rigorous field of inquiry that includes a framework of precisely defined core concepts and research heuristics that can sustain disciplined knowledge cumulation."	Lawrence et al. (2024a)
28	Use	The concept is counter productive.	Le concept est contre productif.	"The polycrisis might seem like the most recent wrapping for a catch-all container where complexity goes to die."	Henig & Knight (2023)
29	Use	Even ill defined, the concept is useful.	Même mal défini, le concept est utile.	"On this basis the paper highlights how, despite the assertions of authors such as Davies and Hobson (2023) that polycrises are sui generis and comprise a new kind of crisis phenomenon due to their synergistic nature, an analysis focusing on polycrises rather as bundles or composites of "normal" crises may be more realistic and useful. This suggests that much of the existing literature on emergency and crisis management, remains highly relevant here and should not be ignored in both further developing and applying crisis management thinking in furtherance of the polycrisis concept (Boin et al. 2018; Wolbers et al. 2021)."	Dinan et al. (2024)

30	Understanding	The integration of indigenous knowledge is a necessary element in understanding the polycrisis.	L'intégration des connaissances autochtones est un élément nécessaire à la compréhension de la polycrise.	“As we have noted elsewhere, there are several things we can learn from Western Eurocentric coloniality. We advocate incorporating Indigenous knowledge systems in conjunction with modernist thinking, as suggested by Quijano (2007) for instance, to help us think through polycrisis (see jules and Salajan 2024). Such a lens is not anti-Western or dismissive of anything Western produced by coloniality. This is because the polycrisis has its roots in Eurocentric capitalism and coloniality, and colonialism cannot be solved by turning to these trappings. We need new ways of thinking to solve the current polycrisis and to avert another one, and this is where decolonial thinking comes into play. It provides a fresh framework to conceptualize and eventually implement solutions to the current crisis. We are not saying that decoloniality is a panacea for polycrisis, but instead, we advance that it can be one of many alternatives that can help us rethink the problematization of polycrisis.”	Jules & Salajan (2025)
31	Understanding	The current state of knowledge does not allow us to understand the state of the polycrisis.	L'état actuel des connaissances ne permet pas de comprendre l'état de la polycrise.	“Research has begun to explore past and present polycrises at multiple scales in productive ways, but researchers need to more clearly identify the systems under investigation, the boundaries of those systems, and the particular crises that make up a polycrisis.”	Lawrence et al. (2025b)
32	Understanding	Current methods are inadequate in explaining the the mechanisms of the polycrisis.	Les méthodes actuelles ne permettent pas d'expliquer les mécanismes de la polycrise.	"To address these challenges, the emerging polycrisis research program should prioritize methodological innovation that uses valid and reliable measures of key variables to identify the actual casual mechanisms linking stresses, triggers, and crises."	Lawrence et al., 2024
33	Understanding	Understanding the polycrisis is beyond what is individually possible.	La compréhension de la polycrise va au-delà de ce qui est possible individuellement.	"That is to say, the complexity, the sheer amount of empirical knowledge anyone needs in order to understand actually what is going on in the world is too vast for one person alone."	Parmar (2023)

Table S2 | Factor matrix with defining sorts highlighted in green.

Participant	Factor 1	Factor 2	Factor 3	Factor 4
P1	0,776	-0,166	0,234	0,075
P2	0,479	-0,091	0,754	-0,052
P3	0,362	-0,289	-0,237	0,067
P4	-0,081	0,107	0,485	0,132
P5	-0,011	0,623	0,016	0,134
P6	0,631	0,440	0,196	-0,254
P7	0,547	0,331	0,351	0,310
P8	0,263	0,064	0,157	0,558
P9	0,187	0,405	0,186	0,570
P10	0,309	0,533	-0,136	0,180
P11	0,367	-0,099	0,478	0,381
P12	0,119	0,432	0,153	0,701
P13	0,168	0,159	0,727	-0,095
P14	0,716	0,221	0,195	0,144
P15	0,721	0,194	0,093	0,358
P16	0,507	0,327	0,046	0,136
P17	0,553	0,011	0,299	0,325
P18	0,198	0,038	0,500	0,233
P19	0,729	-0,046	0,189	-0,033
P20	-0,042	0,182	0,363	0,719
P21	0,035	0,094	0,543	0,250
P22	0,517	0,365	0,358	-0,005
P23	0,334	-0,148	0,504	0,263
P24	0,329	0,503	0,342	-0,067
P25	0,125	0,048	0,227	0,464
P26	-0,026	0,621	0,143	0,081
P27	0,131	0,649	0,327	0,041
P28	0,053	0,647	-0,007	-0,207

P29	0,477	0,128	0,000	0,234
P30	0,653	0,181	0,164	0,367
P31	0,338	0,240	0,529	0,355
P32	0,595	0,204	0,102	-0,104
P33	0,247	0,722	-0,046	0,274
P34	0,403	0,256	-0,103	0,469
P35	0,464	0,149	0,451	0,055
P36	0,111	-0,325	0,183	0,674
P37	0,283	0,100	0,138	0,087
P38	0,334	0,541	0,281	0,366
P39	0,145	-0,394	0,384	0,496
P40	0,350	0,480	0,328	-0,151
P41	0,698	0,011	0,166	0,322
P42	-0,052	0,094	0,661	0,073
P43	0,161	0,640	0,064	0,074
P44	0,552	0,276	-0,198	0,468
P45	0,260	0,288	0,650	-0,032
P46	0,085	0,546	0,197	0,272
P47	-0,040	0,171	-0,343	0,600
P48	0,288	0,156	-0,026	0,243
P49	0,424	-0,043	0,061	0,551
P50	0,521	0,463	-0,111	0,208

Table S3 | Cross-factor correlations.

	Factor 1	**Factor 2**	**Factor 3**	**Factor 4**
Factor 1	1	0,503	0,559	0,474
Factor 2	0,503	1	0,355	0,358
Factor 3	0,559	0,355	1	0,391
Factor 4	0,474	0,358	0,391	1

Table S4 | Factors main characteristics.

	Factor 1	**Factor 2**	**Factor 3**	**Factor 4**
No. of associated participants	12	11	9	10
Composite Reliability	0,98	0,978	0,973	0,976
Standard error of Z-scores	0,141	0,148	0,164	0,155

Table S5 | Z-score for each statement.

ID	Statement	Factor 1	Factor 2	Factor 3	Factor 4	Average	Standard deviation
1	We are not in 'the' polycrisis as much as a polycrisis.	-0,82	0,28	-0,69	-1,28	-0,63	0,66
2	The world is facing multiple polycrises.	-0,27	0,35	-0,77	-1,03	-0,43	0,61
3	The list of crises that make up the current polycrisis is clear.	-0,1	-0,84	-1,32	-1,65	-0,98	0,67
4	The polycrisis concept captures the complexity of the world.	0,94	-0,52	0,93	-0,71	0,16	0,90
5	It is possible to identify the main drivers of the polycrisis.	0,72	-0,15	-0,03	-0,25	0,07	0,44
6	The polycrisis is the product of human interconnectivity.	0,43	1,54	-0,04	-0,6	0,33	0,91
7	A phenomenon underlying the polycrisis is an accumulation of wears and tears.	0,55	0,75	-0,69	0,36	0,24	0,64
8	A phenomenon underlying the polycrisis is the apparition of shocks	-0,04	1,65	-0,21	-0,09	0,33	0,88
9	The polycrisis is rooted in a geopolitical order constructed by Western colonialism.	1,05	-1,53	-0,42	1,37	0,12	1,35
10	A phenomenon underlying the polycrisis is capitalism.	1,77	-0,51	-0,48	1,56	0,59	1,25
11	Hyperspecialisation of knowledge is a driving force behind the polycrisis	-0,78	-0,98	0,17	0,18	-0,35	0,61
12	It is possible to identify the dynamics of a polycrisis.	0,48	0,99	0,01	-0,15	0,33	0,51
13	The polycrisis evolves along different temporal scales.	1,23	1,3	1,37	1,49	1,35	0,11
14	A polycrisis evolves along different spatial scales.	1,04	1,62	0,71	1,69	1,27	0,47
15	The polycrisis is here to stay.	1,05	-0,69	0,84	-1,17	0,01	1,10
16	The crises are clearly connected.	1,33	1,46	-0,95	0,47	0,58	1,11
17	The polycrisis is unpredictable.	-0,74	0,08	-0,05	0,12	-0,15	0,40
18	Polycrisis disturbs more	-2,37	-1,85	-2,15	-2,33	-2,18	0,24

	severely the Global North than the Global South.						
19	Cooperation will become increasingly regional as the polycrisis develops.	-0,38	-0,73	-0,34	0,3	-0,29	0,43
20	The polycrisis is likely to change how time is thought	-0,34	-0,97	0,3	-0,78	-0,45	0,56
21	A polycrisis is also a source of opportunity	-0,32	0,37	0,84	1,33	0,56	0,70
22	Certain responses reinforce the polycrisis	0,71	1,12	0,87	1,6	1,08	0,39
23	Socio-technical barriers hamper the ability to cope with the polycrisis	0,03	0,3	1,1	0,93	0,59	0,51
24	Responses must be local.	-0,9	-1,59	-0,41	-0,16	-0,77	0,63
25	Responses must be coordinated.	1,08	1,01	2,06	-0,12	1,01	0,89
26	A strong intergovernmental institution is needed to manage the polycrisis.	0,5	-0,62	1,34	-0,24	0,25	0,87
27	The concept is a buzzword	-1,39	-0,43	-1,41	-0,2	-0,86	0,63
28	The concept is counter productive.	-2,1	-1,74	-2,24	-0,4	-1,62	0,84
29	Even ill defined, the concept is useful	0,55	-0,02	-0,19	-1,3	-0,24	0,77
30	The integration of indigenous knowledge is a necessary element in understanding the polycrisis.	-0,01	-0,18	0,61	1,01	0,36	0,55
31	The current state of knowledge does not allow us to understand the state of the polycrisis	-1,23	0,34	-0,18	-0,21	-0,32	0,66
32	Current methods are inadequate in explaining the the mechanisms of the polycrisis	-1,04	0,22	-0,06	0,01	-0,22	0,56
33	Understanding the polycrisis is beyond what is individually possible.	-0,59	-0,04	1,49	0,24	0,28	0,88

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