

Editorial

Editorial for the Inaugural Issue of Collective Intelligence Perspectives

Sven-Volker Rehm

Founding Intentions: A Platform for Transdisciplinary Exchange

I am pleased to introduce *Collective Intelligence Perspectives (CIP)*, a new open-access journal dedicated to exploring the systemic, ethical, and epistemological dimensions of collective intelligence. Initiated by the *GWS Society for Managerial and Social Cybernetics* (in German: *Gesellschaft für Wirtschafts- und Sozialkybernetik*), *CIP* seeks to provide a publication platform that extends academic discourse across disciplines, professions, and media formats.

The motivation to found *CIP* arises from a gap in today's publishing landscape. While conventional scholarly journals offer rigorous venues for empirical and theoretical work, they often provide little room for contributions that fall outside established disciplinary conversations or standard genres. Interdisciplinary thought, speculative inquiry, and practice-reflective dialogue may therefore remain unpublished not for lack of insight, but for lack of fit. *CIP* addresses this gap by inviting contributions that are rigorous in their reasoning, relevant to practice, and open in form. We welcome essays, critical dialogues, interviews, visual and audio media, and other formats that enable forms of inquiry and exchange not easily accommodated elsewhere.

The journal proceeds from a systemic understanding of *Collective Intelligence (CI)*. We do not define CI simply by observing behavior that appears intelligent at the level of a group. Rather, we understand it as an emergent systemic capacity constituted through particular informational processes and structural relations among interacting entities and their environments. Observable intelligent behavior may be an expression of CI, but explaining CI requires attention to the mechanisms and configurations through which such behavior becomes possible. This orientation calls for approaches inspired by systems thinking, with particular attention to feedback, structure, hierarchy, communication, and adaptation. *CIP* therefore invites conceptual and empirical engagement with how individual and collective forms of intelligence emerge, interact, and change.

Our editorial process reflects these commitments. Depending on format and content, submissions undergo double-blind peer review or dialogical peer response. We explicitly welcome critical counterpositions and constructive disagreement, based on the premise that knowledge about complex societal problems develops through plural and reflexive engagement. This model echoes the broader mission of the *GWS Society* to advance systems thinking through interdisciplinary exchange and engagement with practice.

Above all, *Collective Intelligence Perspectives* is intended as a forum for participation. We welcome researchers, practitioners, and students to contribute to this evolving discourse. Whether by developing a new concept, advancing a conjecture, or reflecting critically on practice, contributors are invited to use *CIP* as a forum for ideas that merit discussion.

Understanding Collective Intelligence: From Natural Systems to Social Ethics

As understood by this journal, Collective Intelligence refers to more than the observation of seemingly “intelligent” or coordinated group behavior. We approach it first as a natural and systemic phenomenon, observable in living systems and arising through the interplay of informational processes and structural configurations. Drawing on systems science, biology, and cybernetics, we hold that CI needs to be understood in terms of the mechanisms through which individual units—be they organisms, agents, or functions—communicate, differentiate, self-organize, and evolve within and with their collectives. This perspective calls for formal, e.g., mathematical, as well as other systemic methods of observation and modeling. CI should therefore not be mistaken for a surface effect of coordination alone. Its emergence rests on configurations of feedback, distributed information processing, information flows, and dynamic relations between parts and wholes. Examining the interplay of these structures and processes allows CI to be analyzed beyond its observable behavioral effects.

Since the early days of general systems theory, scholars have sought to formalize how collective configurations emerge and persist.¹ Notions such as hierarchy theory, coordination theory, and structural adaptation were developed to describe and model the complex interplay between individual behavior and systemic order.² These frameworks provide ways of examining how distributed activity can give rise to coherent, higher-order organization—a process central to many forms of collective intelligence.

Such perspectives draw attention to the fundamentally multi-level character of collective intelligence and to the vertical dynamics through which coordination scales across collective systems. In social systems, for instance, individual sensemaking generates transient but increasingly stable structures of shared language, expectations, and meaning. Over time, and through recursive interaction, these structures consolidate into macro-level social representations—collective beliefs or norms that influence the behavior of individuals.³ Contemporary research describes this recursive influence of emergent macro-level structures on their constituent parts in terms of *downward causation*.⁴

From this perspective, hierarchy appears as a dynamic and evolving feature of collective adaptation. It both arises from and supports collective intelligence by enabling coordination across levels and by stabilizing forms of collective organization. At the same time, it provides a conceptual lens for examining contemporary social challenges and the conditions under which systemic change may become possible.

These perspectives also have implications for both the study and the cultivation of CI. They lead us to consider the ethical and epistemic responsibility of the individual within collective systems. Drawing on Herbert Simon’s (1969) notion of bounded rationality and deepened through Heinz von Foerster’s (1995) second-order cybernetics, we recognize that agents participate in systems *by continuously (re-) constructing and perturbing them through their own observations and actions*. Feedback emerges through participation as much as through reception. This means that intelligent participation in collective processes requires reflexivity—a willingness to reassess one’s own contributions, beliefs, and behavior in light of systemic effects. From a second-order perspective, knowledge includes the conditions under which observation takes place and the ways in which the observer becomes implicated in what is

¹ E.g., Bertalanffy (1969), p. 27ff., p. 73.

² E.g., Boulding (1956), Pask (1961), Simon (1962, 1969), Mesarović et al. (1970), Miller (1978).

³ An early notion of emergent ordering that helps explain how macro-level coherence arises from embedded, meaningful micro-level interactions can be found in the philosophical work of Martin Heidegger (1927). In his analysis of *Weltlichkeit* (worldhood), hierarchy is not conceived as imposed structure but as a layered unfolding of meaning that emerges through situated engagement with the world.

⁴ E.g., Flack (2012, 2017); Galesic et al. (2023).

observed. For *CIP*, this translates into an ethos of publishing that values recursive critique, systemic contextualization, and reflection on the consequences of the knowledge claims we introduce into discourse.

This recursive and participatory understanding of collective intelligence brings ethical consequences into focus. Within von Foerster's second-order cybernetics, one ethical orientation is to expand the range of possible choices—for oneself and for others—rather than to reduce ethics to adherence to fixed rules. This emphasis on enablement aligns with how *CIP* conceives the role of individuals in collective systems: as participants whose choices affect the possibilities available to the collective.⁵

Rationality itself, as Herbert Simon (1982) taught, is always bounded—by the structure of the environment and by the informational and cognitive limitations of the actor. Yet these constraints do not preclude individuals from contributing to collective intelligence through situated judgment, reflection, and responsiveness to feedback. In this light, collective intelligence emerges through situated adaptability within complex contexts rather than through ideals of 'perfect' rationality or the mere accumulation of "big data."

Relating individual cognition to systemic complexity also requires a different epistemological perspective. Gregory Bateson reminded us that many of the world's most persistent problems arise from a mismatch between the way nature operates and the way humans think.⁶ Studying CI therefore calls for an epistemological stance attentive to relations, patterns, and interdependencies rather than isolated parts. Additional data or improved coordination alone are insufficient. For this reason, *Collective Intelligence Perspectives* values contributions that examine how knowledge and understanding arise within, and through participation in, collective systems.

This epistemological orientation also informs our editorial design: *CIP* welcomes essays, dialogues, and hybrid formats as legitimate forms of situated, systemic, and reflexive inquiry.

On the Primacy of Dialogue: Why *CIP* Gives Particular Space to Essays and Exchange

Modern scholarly publishing often treats empirical research as the cornerstone of scientific knowledge. Empirical work remains indispensable; yet it represents only one among several legitimate pathways to insight. *Collective Intelligence Perspectives* therefore gives particular space to older, yet enduring, forms of intellectual inquiry: the well-argued essay, structured dialogue, and reflection that may precede empirical investigation itself.

This editorial choice is not accidental. It is rooted in a philosophy of knowledge that sees scientific understanding as emerging from argument, critique, and communicative engagement. Already in the 13th century, Thomas Aquinas—building on Aristotle and responding to the intellectual debates of his time—exemplified an understanding of science grounded in disciplined reasoning and the structured exchange of arguments.⁷

⁵ Heinz von Foerster articulates these two notions, the ethical imperative of "[trying] to act as to increase the number of choices," and his relational definition of reality—"reality = community"—which captures how communicative relations become identity-forming (*Identitäts-stiftend*). See von Foerster (2003), p. 227.

⁶ This idea is widely attributed to Gregory Bateson and encapsulates his arguments in "Pathologies of Epistemology" and "The Roots of Ecological Crisis," where he explores the dangers of the mismatch between natural systems and prevailing patterns of human thought. See Bateson (1972), pp. 489, 493, and Bateson (1979), p. 54ff.

⁷ Thomas Aquinas' *De ente et essentia* exemplifies a method of philosophical inquiry grounded in conceptual precision, argumentation, and structured engagement with opposing views. While not "dialogical" in the modern interpersonal sense, his scholastic method is premised on the communicative unfolding of reason. For analysis, see Maurer (1990).

This principle guides the editorial orientation of *CIP*. We understand knowledge as developing through critique and dialogue: through essays that develop ideas, exchanges that probe assumptions, and encounters between different intellectual perspectives. Seen in this light, empirical research often follows from prior processes of argumentation, articulated questions, conceptual clarification, and shared framing. Without such prior conceptual work, empirical inquiry can risk becoming an accumulation of observations without sufficient direction.⁸

Likewise, once empirical research has produced new findings, critical exchange remains necessary for interrogating the assumptions embedded in their design, interpretation, and framing. Argument and reflection thus accompany research throughout the process: they help formulate inquiry, shape interpretation, and provide the basis for subsequent critique and revision.⁹

The role of argumentation in the formation and justification of knowledge has been approached from different directions in critical theory and, more recently, in pragmatist and inferentialist philosophy of language. Despite their different philosophical foundations, both perspectives assign a central role to shared practices of reasoning in making claims intelligible and open to justification. Jürgen Habermas and Robert B. Brandom, in different ways, place the giving, challenging, and justification of reasons at the center of discursive rationality¹⁰.

Within such a discursive framework, truth claims can be articulated, challenged, defended, and revised by participants who hold one another accountable for what they assert. Shared understanding develops through communication and the encounter of different perspectives. Gadamer's notion of a '*fusion of horizons*'¹¹ similarly describes understanding as an encounter between historically situated perspectives rather than the recovery of meaning from a neutral standpoint. For collective intelligence, such encounters can become a source of learning by exposing inherited assumptions to unfamiliar perspectives.

Participating in discourse means engaging in a *game of giving and asking for reasons* (Brandom). Knowledge claims are not self-justifying; in Brandom's account, asserting a claim places a participant within a normative practice of commitments and entitlements in which reasons may be demanded, offered, and challenged. Making assumptions and inferential commitments available for scrutiny enlarges the space in which reasons can be exchanged and new understanding can develop. In doing so, we can make elements of tacit knowledge more explicit, invite reflection, and create opportunities for new insights.¹²

⁸ This editorial stance resonates with broader critiques of modern epistemology that emphasize the limits of formalized knowledge, the constructed nature of epistemic authority, and the constitutive role of discourse in knowledge production. These concerns are central to Michel Foucault's analyses of historically contingent epistemic formations in *The Order of Things* (1966) and of the discursive formations and rules governing statements in *The Archaeology of Knowledge* (1969). They are also central to Friedrich Hayek's warning against the illusion of centralized and comprehensive knowledge in complex systems (*Die Annäherung von Wissen*, 1974), and to Jean-François Lyotard's diagnosis of changing modes of knowledge legitimation and the growing importance of performativity (*La condition postmoderne*, 1979). See Foucault (1972, 1994), Hayek (1996), Lyotard (1979).

⁹ Recent work in the philosophy of science has similarly argued that academic inquiry should move beyond the exclusive pursuit of knowledge toward forms of "wisdom-inquiry" concerned with improving humanity's capacity to address problems of living and realizing what is of value in social life (Maxwell, 2013, pp. 596–598). Such perspectives resonate strongly with cybernetic and systems-theoretical approaches to collective adaptation.

¹⁰ Habermas develops a model of communicative rationality in which knowledge claims are not justified solely through empirical validation, but through public, rational discourse. Validity emerges intersubjectively, as participants hold one another accountable in a shared space of reasons. This dialogical process is recursive, allowing claims to be tested, revised, and refined. See: Habermas (1984), pp. 75ff. and 136f. Brandom, by contrast, conceptualizes reasoning as a normative practice structured by *the game of giving and asking for reasons*. Epistemic authority, in his view, depends on the speaker's ability to articulate the inferential commitments underlying a claim, and to respond to the counterclaims of others. See Brandom (1994), p. 67ff.

¹¹ See Gadamer (1975), pp. 305, 367–370.

¹² Michael Polanyi emphasized that much of our knowing is tacit—rooted in practices, intuitions, and interpretive frameworks that cannot be fully articulated but guide inquiry nonetheless. Reflective dialogue helps surface and revise these implicit commitments. See Polanyi (1966), pp. 4–13.

The mission of *CIP* reflects this epistemological stance and the conviction that thinking together can become a basis for knowing together. *CIP* thus invites rigorous and dialogical forms of thinking that contribute to the conditions under which scientific inquiry develops. Such forms are integral to the conditions under which scientific inquiry becomes possible. We therefore seek contributions that frame, interpret, or problematize collective phenomena and recognize reflection alongside empirical observation as a legitimate source of scholarly insight. Our journal welcomes essays, dialogic formats, transcribed conversations, commentaries, and multimedia expressions that engage with the questions: *How do we know what we claim to know in collective contexts? And how can we act on that knowledge?*

The Goal of *CIP*: Building a Discursive Community for Collective Adaptation

Collective Intelligence Perspectives is envisioned as more than a publication outlet. We understand it as a discursive community—a *discourse space* through which knowledge emerges, circulates, and evolves. Our editorial commitment is grounded in the belief that freedom of thought and innovation in inquiry depend in important ways on the conditions under which knowledge can be accessed and exchanged. As Norbert Wiener remarked, truth can only make us free if it is also freely obtainable.¹³ Such openness extends beyond technical accessibility to broader epistemic conditions: opportunities for participation, accessibility of discourse, and room to articulate views that may not yet be mainstream, validated, or fully formed.

We are also guided by an anthropological insight often associated with Margaret Mead (1964): cultural change can emerge through reflective communities engaged in collective learning, not only through established institutions. In this spirit, *CIP* explicitly welcomes localized, situated, and less established viewpoints that may reframe existing debates or introduce distinctions that established conversations overlook. From our perspective, such dialogical openness can strengthen the capacity of collective systems to learn and adapt. Careful articulation of different positions can make their relations, agreements, and disagreements visible and thereby create opportunities for new forms of shared understanding.¹⁴ *CIP* thus seeks to maintain a discourse space in which different perspectives can develop alongside one another without being subjected too quickly to disciplinary uniformity or established gatekeeping. This invitation extends particularly to young researchers, whose emerging perspectives may question assumptions that have become established within disciplinary conversations.

To maintain the adaptive vitality of such a discourse space, we must also resist institutional homogenization and premature closure of debate. In the words of Ludwig von Bertalanffy, if organizational systems suppress individual diversity, they risk destroying the very complexity that sustains them.¹⁵ For collective intelligence in scholarly discourse to develop, there must be room for dissent, ambiguity, and contradiction, together with conditions under which such differences can be examined rather than prematurely resolved. Following Gregory Bateson's notion of information as a '*difference that makes a difference*,' we see value in contributions that introduce distinctions, unexpected connections, or reframings capable of unsettling inherited assumptions. We hope that *CIP* gives emerging scholars room to articulate developing ideas and, through critical exchange, prompt reconsideration of established

¹³ See Wiener (1994), p. 154. He also warned of a degeneration of communication into a form that seeks prestige rather than mutual understanding, describing this as "*communication without the need for communication*"—a phenomenon that undermines the very conditions of meaningful exchange. (See Wiener 1954, p. 134).

¹⁴ In the sense of Wiener's (1954, p. 126f.) claim that academic freedom in writing is required for "*(being) able to absorb the ideas of (other scientists) into an effective plan of thinking.*"

¹⁵ See Bertalanffy (1969), p. 55.

theories, interpretations, and methodological assumptions.¹⁶ In this light, conjecture, critique, and contradiction can become productive sources of theoretical development.

This is why *Collective Intelligence Perspectives* embraces *tolerance for ambiguity* (*Ambiguitätstoleranz*) as an important condition for diversity of thought and as a principle that has characterized the *GWS Society* since its foundation in 1968. Especially in interdisciplinary contexts, inquiry must leave room for open questions, unresolved tensions, and dialogical negotiation. Such tolerance should not be confused with relativism. Rather, it reflects a systemic form of epistemic resilience. Ashby's (1956) *Law of Requisite Variety* suggests that effective regulation requires sufficient internal variety to respond to the variety of disturbances confronting a system. Applied to *CIP*, this provides one rationale for preserving sufficient cognitive and methodological variety within the journal's discourse.

By enabling such encounters, *CIP* aims to facilitate exchange where disciplinary assumptions and vocabularies otherwise impede mutual understanding. Rather than requiring immediate synthesis, we invite authors to identify where paradigms diverge, where mutual understanding becomes difficult, and what may nevertheless be learned through dialogue. In this sense, epistemic gaps and even incommensurability¹⁷—the deeper incompatibility of interpretive frameworks—need not mark the end of exchange; making them explicit may itself create opportunities for learning and collective adaptation.

Reconnecting Scholarship and Society

In addition to fostering dialogue across academic paradigms, *Collective Intelligence Perspectives* seeks to strengthen a connection that has become increasingly difficult to sustain: the exchange between scholarly thinking and the broader public sphere. In a publishing environment strongly shaped by metrics, platform logics, and increasingly specialized and inward-facing circuits of citation, *CIP* seeks to cultivate a different kind of visibility—one based less on bibliometric recognition than on conceptual resonance and relevance beyond academia.

This ambition includes supporting new forms of exchange between scholarship and wider publics. We envisage networks that connect scholarly discourse with editors, journalists, independent curators, librarians, bloggers, and reflective practitioners. *CIP* therefore aims to function not only as a publishing venue but also as a meeting point through which ideas can enter wider intellectual conversations. Where scholarly books once circulated through networks of publishers, salons, feuilletons, lectures, and booksellers, today's intellectual landscape requires new infrastructures—capable of earning and sustaining trust—through which scholarly thought can be discovered, discussed, and carried into other contexts.

The aim is not to 'simplify' complexity, but to make complex ideas accessible without sacrificing rigor. Scientific insight can gain wider social relevance when it enters settings in which it can be interpreted, questioned, and related to concerns outside its original disciplinary context. By encouraging formats that allow researchers to develop ideas in the open, speak across professional and disciplinary roles, and invite responses from outside academia, *Collective Intelligence Perspectives* seeks to recover a dimension of intellectual discourse that extends beyond the communication of findings toward reflection, imagination, and the generation of new initiatives.

¹⁶ In the sense of 'rational reconstruction' suggested by Karl Popper (1959), e.g., pp. 8f., 74f., and Popper (1963), p. 291ff.

¹⁷ For a foundational discussion of incommensurability in the philosophy of science, see Kuhn (1962), p. 92ff.

A Thank You and Call for Action

As we launch the inaugural issue of *Collective Intelligence Perspectives*, we do so with gratitude and a clear sense of purpose. This journal is the product of many contributors, collectively fostering new forms of dialogue across disciplines.

I want to express my deep appreciation to my colleagues on the *GWS Executive Board*—Andreas Größler and Falko E. P. Wilms—who have actively co-developed the vision for *CIP* since its early stages in 2021. Their conceptual engagement and perseverance made this journal possible. Together, we formed the founding Editorial Board. Prior to the publication of this inaugural issue, Iris Junglas joined us as *Senior Editor*, and I warmly welcome her on behalf of the entire editorial team. Our thanks also go to the members of the *GWS General Assembly*, who supported the founding of this journal—even though it represents a departure from precedent and a new path for the *GWS Society*. This trust and openness reflect the very kind of adaptive, forward-looking spirit that *Collective Intelligence Perspectives* seeks to cultivate.

We are especially grateful to the initial members of the *Editorial Board*, many of whom joined us at a time when the outcome of this initiative was far from certain. They chose to participate because they believed in the value of experimentation, openness, and a shared intellectual enterprise. We are equally grateful to the senior scholars who have lent their time, experience, and scholarly standing to this initiative. Their engagement brings intellectual breadth and experience to a journal that seeks to operate at the intersection of systems science and diverse disciplines—including philosophy, sociology, information systems, and engineering sciences—while remaining connected to both academic and public discourse.

A special thank you goes to those whose editorial and infrastructural commitment has made the launch of this issue possible. Dr. Yulia Litvinova has taken on the vital role of *Managing Editor*, bringing organizational clarity and sustained commitment to the journal's development. Adrian Brozek, as *Executive Editor*, will contribute to editorial quality assurance and critical review across the journal. We also wish to acknowledge the three *GWS* members—Carola Ritzinger-Roll, Wolfgang Schröder, and Julian Siebert—who have agreed to form the *Editorial Ethics and Integrity Board*. This group will support the editorial process by advising on questions of editorial ethics and integrity, providing an additional element of governance appropriate to the journal's open and experimental character. We also thank the *Open Access Team* at the University of Stuttgart, whose hosting, library, and advisory support began long before the launch of the journal became a reality.

Most importantly, we thank *you*—our readers. It is your interest, critical engagement, and willingness to enter into dialogue that will ultimately shape this journal's success. The work we publish here lives only insofar as it provokes thought, invites participation, and contributes to new conversations.

This inaugural issue introduces thematic directions and emerging conversations that may inspire future submissions. These contributions explore novel research topics, suggest new interdisciplinary connections, and raise conceptual tensions worth exploring further. Several invited essays offer early provocations—sowing seeds for the kinds of contributions this journal aims to host.

We invite you to join us—to read, write, challenge, respond, and imagine the future of collective intelligence. Let us begin not with answers, but with the questions that move us.

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