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Exploring Poly-Perspectivism: Using Multiple Perspectives for a More Comprehensive Understanding of Reality

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Abstract
This paper explores the concept of poly-perspectivism, the idea that no single perspective can fully encapsulate reality and that a more comprehensive understanding emerges from engaging with multiple viewpoints. Drawing on Critical Realist philosophy, it argues that all perspectives are necessarily simplified models of reality, none of which can be regarded as wholly true, yet all of which possess varying degrees of utility. The paper examines the difficulties individuals and organisations face in shifting perspectives, owing to enculturation and cognitive constraints, thereby underscoring the need for constructive engagement across disciplines, cultures, and institutions.
To address these challenges, the paper explores strategies for overcoming cognitive blind spots and fostering productive discourse between differing viewpoints. It proposes a structured framework for evaluating perspectives, grounded in the principles of empirical grounding, logical consistency, coherence, parsimony, practical utility, scope, reflexivity, ethical soundness, and cultural/historical context. This framework serves as a tool for assessing the validity, applicability, and limitations of different perspectives, ensuring that diverse viewpoints can be critically examined and employed effectively.
As organisations increasingly collaborate across disciplinary and institutional boundaries, poly-perspectivism offers a systematic approach to fostering effective interdisciplinary and cross-sector engagement. Different organisations, whether scientific, governmental, corporate, or community-based, often operate within distinct epistemological frameworks, shaped by their histories, values, and operational priorities. These differences can lead to miscommunication, fragmentation, and conflict, but they also present opportunities for innovative problem-solving through complementary insights.
This paper introduces the concept of productive coordination, which in this context is defined as "merging perspectives where appropriate or, where not, employing them separately as utility dictates." Rather than forcing perspectives into a single framework, productive coordination enables organisations to navigate epistemological diversity strategically.
Several practical applications of poly-perspectivism in collaborative environments are discussed:

1. Facilitating interdisciplinary research and decision-making. By employing meta-frameworks such as systems thinking, dialectical synthesis, and pragmatic pluralism, organisations can achieve productive coordination, ensuring that differing perspectives are used effectively rather than competitively.

2. Enhancing policy and strategy development. Using structured criteria for evaluating perspectives, decision-makers can avoid ideological entrenchment, ensuring that multiple stakeholder viewpoints contribute to more effective and ethically sound policy outcomes.

3. Supporting conflict resolution and consensus building. Applying dialogical approaches such as Socratic questioning, the Steelman technique, and Paul Graham's Hierarchy of Disagreement can help organisations move beyond adversarial debate toward mutual understanding and shared solutions.

4. Strengthening adaptive learning in complex systems. By recognising emergent and vanishing properties in social, ecological, and technological systems, organisations can adopt more flexible, context-sensitive strategies that account for both stability and change.

Ultimately, this paper positions poly-perspectivism not as a theoretical abstraction but as a practical methodology for navigating the complexities of systemic collaboration. In line with the ISSS conference theme of "Advancing Together", it provides a conceptual and operational foundation for leveraging diverse perspectives constructively, ensuring that collaboration between organisations is not hindered by epistemological differences but strengthened by them through productive coordination.

Keywords
Poly-perspectivism, critical realism, cross-disciplinary collaboration, productive co-ordination.

1 | Introduction

Understanding reality is inherently challenging because human cognition relies on simplified models to navigate complexity. The universe is infinitely complex, whereas human mental capacity is finite. As a result, individuals and organisations adopt perspectives that highlight certain aspects of reality while omitting others.

This paper argues that, due to cognitive limitations and the difficulty of simultaneously holding multiple competing viewpoints, no single individual can fully embody multiple perspectives at once. However, by engaging with diverse perspectives across individuals and disciplines, a more robust understanding of reality can be developed. Achieving this requires systematic methods for evaluating perspectives and constructive engagement with differing viewpoints.

Different perspectives offer unique insights, but they also create blind spots. Cognitive biases, enculturation, and disciplinary frameworks shape how individuals and organisations perceive reality, making it difficult to step outside familiar paradigms. If differing perspectives are not constructively engaged with, they can lead to ideological entrenchment, miscommunication, or epistemological fragmentation.

A core challenge in poly-perspectivism is finding a way to work with multiple perspectives without falling into either:

- Epistemic Relativism – treating all perspectives as equally valid, making meaningful engagement difficult.
- Epistemic reductionism – collapsing diverse perspectives into a single dominant framework, losing their distinct contributions.

To address this challenge, this paper introduces the concept of productive coordination, defined as: "Merging perspectives where appropriate or, where not, employing them separately as utility dictates."

Rather than attempting to force perspectives into a single unified framework, productive coordination acknowledges that some perspectives can be merged, while others must remain distinct but complementary. This approach enables disciplines, organisations, and individuals to engage with epistemological diversity strategically, leveraging multiple perspectives without forcing artificial synthesis.

In an era of rapid technological and societal change, organisations, disciplines, and policymakers must navigate complex, multi-dimensional issues such as climate change, AI ethics, and global governance, challenges that require engagement with diverse, and sometimes conflicting, perspectives. Poly-perspectivism provides a structured approach to managing epistemological diversity, fostering productive coordination rather than competition between differing viewpoints.

To develop a structured approach to poly-perspectivism, this paper will:

- Examine cognitive and cultural barriers to adopting multiple perspectives.
- Propose a framework for evaluating perspectives, based on criteria such as empirical grounding, logical consistency, coherence, and practical utility.
- Explore how productive coordination can be applied in interdisciplinary research, policy development, and systemic collaboration.
- Highlight practical dialogical strategies for engaging with differing viewpoints productively.

By framing poly-perspectivism as a structured, social, and pragmatic process, this paper provides tools for navigating systemic collaboration, ensuring that differing perspectives are engaged with constructively rather than competitively.
(A glossary of terms used in this paper and practical tools can be downloaded from the author's website at https://rational-understanding.com/my-books/#polyperspectivism)

2 | Cognitive Limitations

The idea that no individual can fully perceive reality is present in multiple religious and philosophical traditions. One of the most well-known examples comes from Jainism, an ancient Indian religion. Jain philosophy includes the concept of Anekāntavāda, meaning "many-sidedness" or "non-one-sidedness." This doctrine holds that reality is inherently complex and cannot be fully comprehended from a single perspective. Instead, different viewpoints reveal distinct aspects of the truth.
Anekāntavāda is often illustrated through the parable of the blind men and the elephant, in which several blind men each touch a different part of an elephant and arrive at conflicting conclusions about its nature. One, feeling the trunk, describes it as snake-like; another, touching the leg, compares it to a tree (Soni, 2007). The lesson is that while each perspective contains a partial truth, no one fully encapsulates reality in its entirety.
From a scientific perspective, the universe is probably infinite, whereas the human mind is not. For instance, while the human brain contains an estimated 100 trillion synapses (10^{14}) (Max-Planck-Gesellschaft, n.d.), the Earth itself holds approximately 10^{50} atoms (Cohen & Taylor, 1987). To contextualise this disparity, a single grain of sand contains 100,000 times more atoms than all the synapses in the human brain. Clearly, our cognitive capacity is minuscule in comparison to the sheer complexity of reality, necessitating a reliance on highly simplified mental models to make sense of the world.

3 | The Foundations of Poly-perspectivism

Poly-perspectivism aligns with Critical Realist philosophy, which posits that reality exists independently of human perception, yet our understanding of it is always mediated by cognitive and cultural factors (Bhaskar, 1975). Because no single model captures all aspects of reality, multiple perspectives are necessary to develop a more comprehensive understanding.
However, attempting to hold multiple, conflicting models simultaneously can lead to contradictions and cognitive dissonance, an often uncomfortable psychological experience (Festinger, 1957). To mitigate this discomfort, individuals naturally seek certainty, reinforcing their existing beliefs even when confronted with contradictory information. This tendency is further shaped by enculturation, the lifelong process through which individuals internalise the values, norms, and beliefs of their society (Schwartz et al., 2018). As a result, alternative perspectives may feel foreign or even threatening, making intellectual flexibility more challenging.
This cognitive and cultural rigidity can create blind spots, where entire aspects of reality remain unnoticed or misunderstood. Moreover, because no individual can fully embody multiple perspectives, meaningful discourse and collaboration with others are essential for broadening our understanding.
The central challenge of poly-perspectivism is how to achieve productive coordination, i.e., working with multiple perspectives, without succumbing to epistemic relativism, where all perspectives are treated as equally valid, making meaningful evaluation difficult, or epistemic reductionism, where diverse perspectives are collapsed into a dominant framework, thereby losing their unique insights (Archer, 1995).

4 | The Role of Emergent and Vanishing Properties

While some fundamental models, such as causality, general systems theory, and logic, apply universally, many perspectives are domain-specific and must be evaluated based on their scope and level of complexity. The latter can be thought of as the number of fundamental particles that make up the entities considered.
Different universal models can often be merged into a single perspective, yielding a more comprehensive understanding. However, more domain-specific models, those with limited scope, can only be merged in

this manner when their scope is identical or closely aligned. This limitation arises due to the existence of emergent and vanishing properties.

Properties emerge or vanish because, as the complexity of a system increases, the simplifications needed to remain within cognitive constraints become more pronounced. Emergent properties arise when individual components interact within a complex system, displaying characteristics absent at lower levels (Anderson, 1972). For example, consciousness emerges from neural activity, yet it does not exist within individual neurons. While emergent properties are believed to have a causal basis, the complexity of interactions within the system often renders direct explanation impossible. Conversely, vanishing properties, which also have a causal basis, are characteristics present at simpler levels that disappear as complexity increases (Laughlin & Pines, 2000). A clear example is found in physics: individual quantum particles behave probabilistically, yet at macroscopic scales, classical physics emerges, governed by deterministic laws.

Reality comprises both simple and complex systems, necessitating different models for different contexts. In physics, reductionist approaches are highly effective, yet in complex adaptive systems, such as societies, emergent properties arise that cannot be inferred solely from their individual components (Cilliers, 1998). Similarly, vanishing properties disappear at higher levels of organisation, requiring a shift in perspective. Recognising when a particular model is useful ensures productive coordination, preventing the misapplication of frameworks across different domains. For instance, a strictly biological reductionist view (e.g., *"human behaviour is purely determined by genetics"*) is inadequate for explaining socioeconomic behaviour, which requires perspectives from sociology, psychology, and economics (Wilson, 1998) (Weinberg, 1992).

By understanding emergent and vanishing properties, we can more effectively align perspectives with the appropriate level of complexity, ensuring that our models correspond to the nature of the system being studied.

5 | Merged or Multiple Perspectives?

Perspectives can be merged or used in combination, depending on whether they share the same scope or differing ones.

5.1 | Merging Perspectives with the Same or Similar Scope

Perspectives that share the same or similar scope, including those of universal scope, can often be merged using Hegelian Dialectical Synthesis (Mueller, 1958). Dialectical synthesis is a process of resolving contradictions between perspectives by integrating their insights into a higher-level understanding. This approach brings perspectives into productive dialogue, allowing them to clash and evolve into a higher synthesis. The dialectical process unfolds as follows:

- Thesis – A perspective is presented.
- Antithesis – An opposing perspective emerges.
- Synthesis – A new perspective arises, resolving contradictions and incorporating elements of both.

For example, the debate between free will and determinism may lead to a compatibilist perspective, which incorporates aspects of both positions.

5.2 | Co-existence of Perspectives with Differing Scope

When perspectives have different scopes, multiple approaches acknowledge their necessity and interaction.

Complementarity (Quantum Mechanics & Bohr's Principle)

Drawing from Niels Bohr's complementarity principle in physics, where light behaves as both a wave and a particle depending on context (Bohr, 1928), we can apply a similar principle to human knowledge.

Rather than forcing perspectives into a single framework, we recognise that different perspectives may be valid within their respective domains.

For example, the mind-body problem can be approached differently in:

- Medicine (biological model),
- Psychology (cognitive model), and

- Philosophy (phenomenological model).

Each reveals different aspects of reality, rather than contradicting one another.

Meta-Perspectivism (Wilber's Integral Theory)

Philosopher Ken Wilber's Integral Theory (Wilber, 1997) seeks to categorise and integrate perspectives into a higher-level meta-perspective. It distinguishes four primary types of perspectives:

- Subjective perspectives (first-person experience).
- Objective perspectives (scientific, empirical).
- Inter-subjective perspectives (cultural, social).
- Systemic perspectives (economic, ecological).

Rather than ranking perspectives as "right" or "wrong," this approach identifies where they fit within a broader framework.

Pragmatic Pluralism (William James, Peirce, Pragmatism)

Pragmatism, as developed by William James (James, 1907) and Charles Peirce (Peirce, 1878), takes a flexible approach to perspectives. Instead of seeking a single, ultimate merger, pragmatic pluralism asks: *Which perspective is most useful for a given purpose?* Perspectives are treated as tools rather than absolute truths, chosen based on their practical utility rather than rigid theoretical purity.

6 | Where does Poly-perspectivism Reside?

Rather than a single merged perspective, poly-perspectivism requires multiple perspectives within their respective contexts. It is not merely about accumulating different viewpoints but about developing a higher-order way of holding them together.

Some thinkers, such as Ken Wilber, suggest that at higher levels of cognitive development, individuals can simultaneously engage with multiple perspectives, e.g., thinking in paradoxes (Wilber, 1995). For example, individuals deeply involved in meditation or phenomenological inquiry may develop an intuitive grasp of reality that transcends any singular viewpoint.

However, drawing from the Jainist insight that no single individual can fully perceive reality (Matilal, 1981), and the scientific fact that human cognitive capacity is finite, most individuals struggle to embody multiple perspectives at once. Cognitive dissonance, the discomfort of holding conflicting perspectives, is real, and while some individuals develop a tolerance for it, for most, it remains mentally exhausting (Festinger, 1957). This suggests that understanding reality must be an inherently social and dialogical process, rather than an individual effort.

Implications for Poly-Perspectivism

- Diverse voices are essential. Engaging with multiple perspectives prevents entrapment within a single framework.
- Discourse should focus on synthesis, not victory. The aim should be to constructively synthesise insights, rather than simply winning arguments.
- Specialisation is crucial. No individual can be an expert in all domains; therefore, different perspectives contribute meaningfully within their respective contexts (Collins, 1994).

Thus, poly-perspectivism does not reside in a single mind but is instead distributed across individuals, emerging through the exchange and interaction of diverse perspectives within a group or society. Scientific progress, for example, does not occur because one individual perceives the entire truth but because different scientists contribute distinct insights, refining understanding over time (Longino, 2002).

Poly-Perspectivism as a Process

Poly-perspectivism is not a fixed position but an ongoing conversation in which perspectives evolve and interact. For instance, a democratic society does not adhere to one "true" perspective but continuously refines its collective viewpoints through debate and consensus-building.

7 | Overcoming Personal Blind Spots

In an ideal scenario, individuals would be able to hold multiple perspectives that collectively offer a more comprehensive understanding of reality. However, in practice, perspectives are enculturated and shaped by

cognitive biases, making them difficult to transcend. As a result, specific perspectives tend to dominate within societies and disciplines, leading to blind spots, i.e., aspects of reality that remain unnoticed or misrepresented.

A key challenge in overcoming blind spots is that, by definition, they are unrecognised gaps in understanding. Nonetheless, certain strategies can help individuals identify and mitigate these limitations, fostering greater intellectual flexibility and critical awareness. The following techniques help individuals identify and mitigate blind spots. A detailed discussion of these methods is provided in Appendix A.

Engaging with Diverse Perspectives

A crucial method for uncovering blind spots is to actively engage with individuals who hold differing perspectives. Exposure to alternative viewpoints challenges implicit assumptions and broadens cognitive flexibility.

Practicing Reflexivity and Self-Questioning

Blind spots often stem from unexamined assumptions. Developing reflexivity, the ability to critically analyse one's own thought processes, can help mitigate these biases (Finlay, 2002).

Understanding Cognitive Biases

Many blind spots arise from cognitive biases, which subtly distort perception and reinforce pre-existing beliefs. Becoming aware of these biases is essential for minimising their influence (Friedman, 2017).

Encouraging Constructive Criticism and Feedback

Since blind spots are difficult to self-diagnose, external feedback is crucial in identifying gaps in understanding. However, for feedback to be effective, it must be encouraged within an environment that values critical engagement (Brownell, 2012).

Using Thought Experiments and Perspective-Taking

Shifting perspectives through thought experiments can reveal hidden assumptions and alternative ways of thinking (Rawls, 1971).

Embracing Intellectual Humility

A key obstacle to recognising blind spots is intellectual overconfidence. The more certain individuals are in their beliefs, the less open they are to questioning them. Cultivating intellectual humility fosters openness to new information and willingness to revise perspectives (Leary et al., 2017).

8 | Constructive Engagement with Differing Perspectives

Discussions involving multiple perspectives often devolve into unproductive debates centred on determining who is "right" rather than engaging meaningfully with differing viewpoints. Constructive engagement is essential for ensuring that discussions remain substantive, intellectually rigorous, and productive.

The following strategies facilitate effective engagement with differing perspectives:

8.1| Dialogical Approaches

Rather than focusing on who is right, discussions should emphasise what can be learned from each perspective. Employing Socratic questioning helps to uncover underlying assumptions, shifting the dialogue from defensive posturing to critical inquiry (Center for Excellence in Teaching and Learning, n.d.). Key techniques include:

- Perspective-taking exercises. Participants articulate opposing views as accurately as possible before responding.
- Socratic questioning. Asking open-ended questions that challenge implicit assumptions rather than simply defending positions.

8.2| Meta-Frameworks

Instead of engaging in zero-sum debates, meta-frameworks such as Integral Theory (Wilber, 1997), systems thinking (Meadows, 2008), or dialectical reasoning (Basseches, 1984) provide a structure for understanding how different perspectives interconnect rather than attempting to eliminate them.

For example, in political discussions, rather than labelling one ideology as "correct", a meta-framework approach examines how different political models address various societal needs.

8.3| Prioritising Practical Application Over Abstract Theorising

Rather than engaging in endless theoretical disputes, perspectives should be tested in real-world contexts to assess their practical utility (James, 1907). For example, in business strategy, different leadership models can be implemented and refined based on their effectiveness, rather than being debated solely in the abstract.

8.4| Paul Graham's Hierarchy of Disagreement

To facilitate productive engagement with differing perspectives, Paul Graham's Hierarchy of Disagreement offers a framework for distinguishing between strong and weak forms of argumentation (Graham, 2008). Graham's hierarchy ranks forms of disagreement from weakest to strongest as follows:

a. Name-Calling. Insulting the person instead of addressing the argument.
b. Ad Hominem. Attacking the person's character rather than their claims.
c. Responding to Tone. Criticising the delivery rather than the argument itself.
d. Contradiction. Simply stating the opposite without evidence.
e. Counterargument. Offering reasoning and evidence against a claim.
f. Refutation. Identifying errors in the argument.
g. Refuting the Central Point. Directly addressing the core claim and dismantling its foundation.

Examples are given in Appendix C.

8.5| Benefits of Using Graham's Hierarchy

Using this hierarchy supports productive coordination by shifting discussions away from personal attacks and toward substantive engagement with ideas. It enhances discussions by:

- Encouraging constructive dialogue avoids low-level disagreements (e.g., insults, tone complaints) and prioritises substantive discussion.
- Identifying strong vs. weak arguments helps participants differentiate between strong reasoning and rhetorical tactics.
- Promoting intellectual rigour encourages participants to aim for higher levels of discourse rather than surface-level contradiction.
- Reducing emotional reactions separates attacks on ideas from attacks on people, fostering a less adversarial environment.

8.6| The Role of Constructive Engagement in Poly-Perspectivism

Within the context of poly-perspectivism, constructive engagement is essential for navigating differing viewpoints productively. By applying the principles outlined above, individuals and groups can:

- Evaluate arguments fairly without prematurely dismissing perspectives.
- Avoid unproductive debates by focusing on logical refutations rather than personal attacks.
- Engage deeply with opposing viewpoints, fostering dialogue rather than conflict.

Ultimately, poly-perspectivism thrives when individuals engage in rigorous, structured, and respectful discussions. By embracing dialogical approaches, meta-frameworks, practical testing, and structured argumentation, participants can move beyond superficial disagreements and work towards more integrated and nuanced understandings of reality.

9 | Evaluating Perspectives: A Structured Framework

Not all perspectives are equally valid. Accepting all viewpoints uncritically risks falling into epistemic relativism, where any belief, no matter how unfounded, is regarded as legitimate. Thus, perspectives must be assessed using objective criteria such as coherence, empirical grounding, and logical consistency, rather than being judged solely on cultural or personal preference. Utility is also a crucial factor, perspectives

should be evaluated based on their capacity to explain phenomena and address problems within specific contexts.

Since perspectives vary in validity and applicability, the following tests are proposed as a means of evaluation. Some of these tests apply universally across all levels of reality, while others are relevant only at higher levels of complexity, particularly in relation to living systems, such as humans, societies, and ecosystems.

9.1 | Universal Tests (Applicable at All Levels of Complexity)

Empirical Grounding – Does the perspective align with observable reality?

Empirical grounding is fundamental to evaluating perspectives, as those lacking empirical support are more likely to be internally inconsistent, incompatible with well-supported perspectives, and of limited practical utility (Popper, 1959). This criterion is a cornerstone of empiricism: a theory or perspective must hold up under real-world conditions. If a theory makes predictions about reality, those predictions should be observable and verifiable. For example, the scientific theory of evolution by natural selection gains validity because it is supported by multiple layers of empirical evidence, including fossil records, genetic data, and direct observations of adaptation. However, some perspectives address non-empirical phenomena, such as values, beliefs, or subjective experiences, e.g., phenomenology or religious perspectives. In such cases, utility may take precedence over strict empirical verification, as their relevance lies in interpretation and meaning rather than direct observation.

Internal Logical Consistency – Is the perspective free from contradictions?

Reality is generally assumed to be logically consistent. That is, no aspect of reality contradicts another. If this is the case, then any perspective that closely aligns with reality should also exhibit logical consistency. A perspective containing contradictions suggests that it is either incomplete, distorted, or attempting to describe multiple, incompatible aspects of reality simultaneously. Internal consistency is a fundamental requirement for any valid perspective (Smith, 2003). A perspective that contradicts itself is logically inconsistent, thereby undermining its own claims. For example, a political ideology that simultaneously advocates for total freedom yet supports authoritarian control over certain groups would be internally inconsistent (Freeden, 1996). However, logical consistency alone does not guarantee that a perspective is true. For instance, fictional worlds can be internally coherent yet entirely detached from reality. Nonetheless, inconsistency is a clear indicator of invalidity, as a self-contradictory perspective cannot reliably correspond to reality.

Coherence – Does the perspective align with other well-supported perspectives?

If reality is logically structured, then multiple valid perspectives that accurately reflect reality should cohere rather than conflict. Contradictions between perspectives may indicate that at least one is flawed or incomplete, that they describe different levels of abstraction, e.g., classical vs. quantum physics, or that they are specialised for distinct contexts and are not intended to be universal. A perspective that aligns effectively with other well-supported perspectives has greater credibility (Bradley, 1914) (Rescher, 1973) (BonJour, 1985) (Davidson, 1986) (Young, 2018). For instance, a new economic theory that is consistent with both established psychological principles, e.g., behavioural economics, and existing economic evidence is inherently more credible than one that contradicts those principles. However, coherence does not require the forcing of all perspectives into agreement. Instead, it requires the evaluation of interdisciplinary compatibility, ensuring that perspectives are logically reconcilable within their appropriate domains.

Parsimony – Is the explanation unnecessarily complex?

Parsimony, often associated with Occam's Razor, suggests that simpler explanations are generally preferable, as they are less prone to failure (William of Ockham, 1990). A causal explanation links cause (A) to effect (B). However, if an explanation requires multiple causal steps (A → B → C → D → E), the probability of error increases with each additional step, making the explanation less reliable. Additional causal steps also introduce more points of failure, where external factors may interfere with the causal chain. In physics, theories with fewer assumptions are generally preferred. In psychology and sociology, simpler explanatory models are favoured unless additional complexity is necessary to account for all

evidence. While parsimony is a guideline rather than an absolute rule, simpler explanations tend to be more testable, falsifiable, and resilient against causal failure. This principle is encapsulated in Occam's Razor: when two perspectives explain the same phenomenon equally well, the simpler one is generally preferred. A scientific theory requiring fewer ad hoc assumptions is typically considered more credible than one that introduces unnecessary complexity (Sober, 2015) (Baker, 2016).

Practical Utility – Does the perspective work effectively in real-world situations?

The more accurately a perspective reflects reality, the greater its practical utility, as it will lead to correct explanations and predictions, and effective interventions. A perspective with low practical utility may indicate that it is not closely aligned with reality, that it functions only in specific contexts with limited general applicability, or that it overlooks key aspects of reality, making it unreliable in practice. However, even perspectives that lack strong empirical support may still be useful for specific purposes. Pragmatists such as William James and John Dewey argued that perspectives should be judged by their practical outcomes rather than their theoretical purity (James, 1907) (Dewey, 1916). For example, cognitive-behavioural therapy (CBT) aims to modify thought patterns to improve mental well-being. While some of its underlying cognitive assumptions remain debated, its demonstrated effectiveness in practice enhances its credibility (Hofmann et al. 2012) (David et al., 2018).

Scope and Applicability – How broadly can the perspective be applied across contexts?

Some perspectives are domain-specific, while others claim to explain multiple domains. Evaluating a perspective's scope requires assessing how well it holds across different contexts. A perspective that remains valid across multiple domains is generally more robust, whereas one that applies only within a narrow range may have limited generalisability. For example, Newtonian physics is highly effective in everyday situations, yet it breaks down at extremely high velocities or on a subatomic scale, where relativity and quantum mechanics provide more accurate models (Smith, 2014). However, this does not invalidate Newtonian physics; rather, it highlights its limitations in scope.

Reflexivity – Does the perspective recognise its own assumptions and limitations?

Reflexivity, or awareness of one's own assumptions and limitations, is essential at all levels of analysis, as every perspective is constructed within a framework that contains biases and blind spots. A reflexive perspective recognises the constraints of its own methodology and epistemological position, making it more credible than one that claims absolute certainty. For instance, in physics, quantum mechanics required reflexivity when physicists realised that the act of measurement influences observed reality (Kauffman, 2003). In the social sciences, reflexivity is critical for recognising how a researcher's own cultural and historical context shapes their interpretations (Bourdieu & Wacquant, 1992) (Finlay, 2002). A perspective that is self-critical and reflexive, acknowledging its limitations and underlying assumptions, is inherently more robust. For example, Critical Realism explicitly recognises that human understanding of reality is partial and mediated by social and cognitive structures, making it more resilient than perspectives that assert infallibility.

9.2 | Higher-Level Tests (Applicable to Living Systems, Societies, and Culture)

Ethical Soundness – Is the perspective morally defensible?

Ethical soundness is relevant only when a perspective has consequences for sentient beings; it does not apply to purely physical systems. For example, Newton's laws of motion are ethically neutral, whereas genetic engineering (Brokowski & Adli, 2019), AI ethics (Sandel, 2020), and social policies require ethical considerations. A perspective may be logically consistent and empirically grounded yet still be ethically problematic. While ethical soundness is not a measure of truth in the traditional sense, it remains an important criterion for evaluating perspectives that shape human behaviour and policy. For instance, eugenics was once regarded as a scientifically valid perspective but failed on ethical grounds due to its dehumanisation and harm based on pseudoscientific claims (Paul, 1995). This illustrates that perspectives must not only be factually accurate but also morally responsible when applied to society.

Cultural and Historical Context – Is the perspective shaped by a specific cultural or historical framework?

Some perspectives, such as quantum mechanics, may be considered culturally neutral, while others, especially in the social sciences, are deeply influenced by historical and cultural conditions. For example, economic theories like capitalism and socialism emerged in response to specific historical and social contexts (Sayer, 1999). Likewise, traditional ecological knowledge (TEK) held by Indigenous communities provides unique insights into sustainable resource management that are often overlooked by Western scientific frameworks (Kimmerer, 2013). Recognising that perspectives are often context-dependent allows for a more nuanced understanding of their validity and applicability across different settings.

9.3 | Interdependencies

This framework acknowledges that perspectives must be both logically rigorous and pragmatically useful, while also considering ethical and cultural implications in higher-level domains. However, these evaluation criteria do not function independently. They interact in complex ways, sometimes creating tensions or trade-offs. Recognising these relationships ensures a more nuanced and holistic approach to evaluating perspectives (Laudan, 1977).

Here are some key interdependencies:

- Empirical grounding vs. practical utility. A perspective may lack empirical verification but still prove pragmatically useful, e.g., early-stage scientific theories or practical heuristics.
- Internal consistency vs. coherence. A perspective may be internally consistent yet contradict well-established theories in its field, e.g., alternative economic models challenging classical theories.
- Ethical soundness vs. empirical grounding. Some perspectives may be empirically accurate yet ethically problematic, e.g., historical justifications for social hierarchies based on race or gender (Brown, 2020).
- Parsimony vs. scope. A highly parsimonious model may sacrifice explanatory power, while a broad-scope model risks becoming overly complex (Whetten, 1989).
- Cultural context vs. universal applicability. Some perspectives are highly effective within specific cultural settings but do not generalise globally, e.g., traditional healing practices vs. Western medicine.
- Reflexivity vs. internal consistency. A perspective that acknowledges its own limitations may appear weaker than one that asserts certainty, yet reflexivity often leads to greater credibility over time.

These interactions illustrate why perspectives must be evaluated holistically, rather than through isolated criteria. By considering these interdependencies, we can more effectively assess the validity, applicability, and ethical implications of different perspectives.

10 | Conclusion

Poly-perspectivism provides a powerful way to approach reality by recognising the limitations of any single perspective and combining multiple viewpoints. However, not all perspectives are equally valid, and a structured framework is necessary to evaluate their merits. Furthermore, recognising our own blind spots and engaging constructively with differing perspectives is essential for developing a more nuanced understanding of reality. Given that no individual can fully embody multiple perspectives, collaboration and dialogue play a crucial role in achieving a more comprehensive understanding. Due to emergent and vanishing properties, different perspectives are necessary at different levels of complexity to ensure utility and applicability. By applying these principles, we can foster more informed and meaningful discussions across disciplines and cultures.

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