

Critical realism, psychology, and the crisis of replication: A reply to Haig; Derksen & Morawski; and Trafimow

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Robert Archer 
Independent Researcher

Abstract

The commentaries provided by Haig; Derksen and Morawski; and Trafimow vary considerably in how they address critical realism and its implications for replication. Haig's preference for Kaidesoja's "naturalised" version of critical realism and Lipton's inference to the best explanation is deeply problematic. While Derksen and Morawski concede that they deal only indirectly with critical realism, their endorsement of "performativity" negates it. In Trafimow's case, ontology's regulative role is untenably diminished and ultimately supplanted by classic methodologism. I conclude that replication should be replaced by exploratory stratified contextualism.

Keywords

critical realism, methodology, ontology, philosophy of science, replication

Defending transcendental realism contra Haig's Kaidesojan alternative and inference to the best explanation

As Haig (2024) notes, Bhaskar (1975/2008a, 2015) makes explicit use of transcendental arguments, which concern conditions of possibility, that is, what makes something possible or intelligible. So, for Bhaskar, the intelligibility of scientific practice transcendently presupposes an independent and structured natural world. In proffering his "number of misgivings" (Haig, 2024, p. 585) about Bhaskar's transcendental realism, Haig begins with his assertion that viewing Bhaskar's ontology of the real, the actual, and the empirical as "ontological levels, in a strong sense, presents a problem" (p. 586). Yet, he accepts that levels in psychology are "ontologically fundamental, but are best regarded as heuristic idealizations" (p. 586). I find this confusing, since if levels are ontologically fundamental then ipso facto they are sui generis real and thus cannot be heuristic, let alone

Corresponding author:

Robert Archer, Independent Researcher, Parva, Street End Lane, Heathfield, TN21 8SA, UK.

Email: Robert.archer@warwickgrad.net

idealised. It may be, of course, that Haig's position is simply one of so-called "weak" emergence. Either way, Haig asserts that Bhaskar's stratified ontology is too rigid and inflexible to be of any use, despite his acceptance that critical realism "usefully draws attention to the neglect of the ontological dimension of replication" (p. 588). He concludes his commentary by recommending that anyone attracted to critical realism "would do well to shed BCR's [Bhaskar's critical realism] reliance on a priori transcendental arguments and redirect their attention to Kaidesoja's (2013) naturalist reworking of this philosophy" (p. 589).

However, Haig's recommendation is undermined by Kaidesoja's (2013) flawed characterisation of Bhaskar's use of transcendental arguments. Kaidesoja's "naturalised" version of critical realism exemplifies a tendency among some nontranscendental philosophers wrongly to identify transcendentalism with idealism, antinaturalism, apriorism, foundationalism, and infallibilism (McWherter, 2015). I share McWherter's concern that Kaidesoja's critique of Bhaskar (endorsed by Haig) could exacerbate the tendency to make such false identifications among those less familiar with critical realism and transcendental philosophy, especially in psychology. So, it is important that we subject Haig's Kaidesoja-inspired recommendation to critical evaluation. First, as McWherter notes, Kaidesoja relies on a putative necessary connection between transcendental arguments and Kant's transcendental idealism in his criticism of Bhaskar's use and conception of transcendental arguments. But such necessity, as McWherter forcefully argues, is merely assumed and ultimately question-begging, since Kaidesoja does not show that Kant was right. Second, Kaidesoja (2013) fails to appreciate the dialectical continuity between Kant and Bhaskar vis-à-vis the transcendental method. Third, Haig's comment on Bhaskar's use of a priori transcendental arguments overlooks the fact that these arguments are based on a posteriori initial premises. However, this reliance on initial premises does not undermine or weaken the a priori reasoning used to determine the transcendental conditions of what is being explained (McWherter, 2015).

While I was unable to elaborate on Bhaskar's (2008b) Describe, Retroduce, Eliminate, Identify, Correct [DREI(C)] schema, which replaces Popper's (1959) hypothetico-deductive model, Haig (2024) overlooks the additional Resolve, Redescribe, Retrodict, Explain, Identify, Correct [RRREI(C)] schema. Instead, he argues that Kaidesoja's (2013) view, which suggests Bhaskar's DREI(C) schema resembles inference to the best explanation (IBE), can be further developed by incorporating Lipton's (2004) elaboration of IBE. Despite Haig's (2023) correct observation that using IBE as a "rough synonym for abduction . . . muddies the methodological waters" (p. 1683), a more serious issue remains. Lipton's acknowledgement that the logical form of IBE does not necessarily presuppose a causal theory of explanation leaves it ontologically anchorless. Hence, for example, Ladyman's (2006) suggestion that his account would be more plausible if it were tied to realism about natural necessity. Indeed, Lipton's account is insufficient to justify the scientific realism that Haig himself espouses (Wright, 2018).

Moreover, whilst Haig (2024) praises Bhaskar's schema for its explicit acknowledgement of "the importance of abductive, or retroductive, reasoning" he chooses to "ignore Bhaskar's fine-grained distinction between the two" (p. 589). However, the distinction between abduction and retroduction cannot be ignored because abductive conclusions provide the starting point for retroductive inferences. As Ritz (2020) rightly notes,

retroduction qua inferential mode concerns what must necessarily be true ontologically and informs the tenability of the abductive hypothesis. It is thus unsurprising that Haig endorses Kaidesoja (2013) since Kaidesoja similarly obfuscates the role of retroduction by illicitly bifurcating the conventional and retroductive accounts¹ of transcendental argumentation into competing standalone descriptions (McWherter, 2017). As Kaidesoja (2013), Bhaskar (1975/2008a), and McWherter (2015) all agree, the derivation of the conclusion of the conventional account is secondary: the real interest lies in the justification of the main premise in transcendental analysis. The transcendental claim can itself only be established retroductively, since “in reasoning from something to its non-causal explanatory condition of possibility . . . we have to use the kind of fallible retroductive inference also found in scientific reasoning” (McWherter, 2017, p. 520).

Derksen and Morawski, “performativity,” and the epistemic fallacy

Bhaskar (1975/2008a) categorially distinguishes between the *intransitive* and *transitive* aspects of natural science, that is, he ontologically differentiates between the independent existence of the objects, mechanisms, and events of the natural world, and the processes of conceptual investigation. Equally, for Bhaskar (1975/2008a), conflating the intransitive and transitive aspects is to commit either the ontic fallacy (knowledge as direct and unmediated) or the epistemic fallacy (reduction of the object of knowledge to knowledge itself). Derksen and Morawski (2024) commit the epistemic fallacy since “performativity” ultimately collapses the distinction between transitive knowledge-claims and their intransitive referents. This is borne out by their shifting our focus away from science as a transcendently explanatory undertaking (the essence of representation) to science as performative: “science *produces* [emphasis added] realities, it is not a mirror of nature . . . That, at least, is one way of looking at it” (Derksen & Morawski, 2024, p. 598). In the end, such permissiveness gives way to normativity: we are required to leave the representational perspective on scientific research and adopt “a performative outlook” (p. 601).

However, this is to turn transcendental realism on its head since we are no longer in the business of explaining the intelligibility of experimentation in natural science and the grounds for the deepening of scientific knowledge itself. Derksen and Morawski (2024) suggest that I “seem” to adopt a performative perspective when I write that “it is not the regularity of events . . . that underwrites replication, but rather the artificial creation of such regularity of events through human manipulation” (p. 575). The only “performative” aspect here is the artificial creation of the experiment itself designed to activate and isolate an intransitive causal object and record its effects. What needs separating is that the latter constitutes an intervention into an already existing reality, which is ontologically independent of, and irreducible to, such intervention. So, yes, the experiment is a created reality, but it is not constitutive of the very reality it seeks to explain. The Rortian science-is-not-a-mirror perspective they endorse conflates the social (transitive) production (or “construction”) of scientific knowledge with its independent intransitive foundation. As Bhaskar (1991/2011) trenchantly argues, Rorty commits the epistemic fallacy, inherits a positivist ontology, and “damagingly *underdescribes* science, generally

reducing it to a mere instance of discourse” (p. 13). Of course, as Derksen and Morawski (2024) rightly point out, technoscience produces many (often undesirable) things just as social scientific methodologies have profoundly shaped (an increasingly global) social reality (Law & Urry, 2004). What is often missing is that these performative (or “enacted”) products not only possess an intransitive irreducibility but also have their grounds of (performative) possibility transcendently comprised of intransitive media operating within open nested systems.

Trafimow, methodologism, and the irresistible lure of “hard” science

Trafimow’s (2024) pseudocharges of “straw person making” and misrepresentation of my argument seem to reflect a refusal to engage substantively with ontology and to acknowledge its primacy in regulating methodology. I want to address four specific assertions made by Trafimow.

First, I do not conflate being a Popperian with believing that replication matters. The impetus behind my article stemmed from the use of Popperian philosophy of science to legitimate replication, both of which are deeply problematic and logically distinct. Second, I do not insist on invariant causal laws. On the contrary, I reconceptualise them as causal tendencies (Archer, 2024, pp. 565, 575). Third, I do not dismiss, downgrade, or, indeed, “abandon” methodology. My point was that ontology necessarily has primacy, as it provides the foundational framework for understanding the nature of reality and the phenomena we study. This does not diminish the importance of methodology; it remains crucial because it is how we explore reality. Indeed, my article was focused on adopting the correct methodology for the correct (ontological) reasons. Fourth, Trafimow’s (2024) assertion that I use ontology atypically is perhaps a bit unfair, since my definition of it as “what the world is like” (Archer, 2024, p. 562) is simply a broad and colloquial way of conveying its essence, namely the study of being.

It seems that the main point of contention between us concerns the role of ontology and its connection to methodology. Trafimow (2024) acknowledges the “*potential* [emphasis added] relevance” of ontology (p. 592), but he also prefers to provide “examples about how methodological decisions can influence the probability of replication, *irrespective* [emphasis added] of Archer’s (2024) ontological argument” (p. 593). He later concedes that ontology is not irrelevant but argues that “the extent to which it matters should not be allowed to downgrade methodology” (p. 594). While Trafimow appears to recognise the significance of ontology, he downplays its foundational role by implying that methodological considerations can operate independently of ontological arguments. However, his concern that methodology might be “downgraded” if too much emphasis is placed on ontology overlooks the fact that ontology precedes methodology. Elevating methodology independently of ontology risks developing methods that are disconnected from the phenomena under investigation. Although ontology’s primacy does not negate the importance of methodology, it underscores that research methods must be firmly integrated with ontological considerations to ensure their appropriateness. Trafimow’s position seems to misunderstand ontology’s ineluctable influence on methodology. By suggesting that methodology can influence outcomes irrespective of

my ontological argument, he seems to imply that methodology can be considered in isolation. Yet methodology is intrinsically tied to ontological assumptions, and even if this connection is not explicitly recognised, an implicit ontology is always present.²

Ultimately, methodological isolationism prevails, with Trafimow (2024) asserting that we can dispense with ontology and instead adopt the “superior path” of becoming “much better methodologists” (p. 595). This is classic methodologism and relates to the long-standing desire that psychology be as successful as the “hard” sciences, where replication is held to be paradigmatic (e.g., Trafimow, 2012). However, the “hard” versus “soft” dichotomy is ill-conceived and misses the point that there are different sciences precisely because of their distinctive *sui generis* ontologies (Uher, 2021). Hence, the qualified application of transcendental realism to psychology is necessary because the human psychosocial world is fundamentally different from the physical world (Archer, 2024).³

Concluding remarks: Why replication is inappropriate in psychology

All three commentaries endorse the methodological norm of replication in some form, albeit for disparate reasons. However, Derksen and Morawski’s (2024) advocacy of replication, citing its “disruptive potential,” reinforces methodologism, as does Haig’s (2024) recognition of the complexity involved. Trafimow (2024), on the other hand, epitomises the hegemonic stranglehold of psychology’s emulation of natural science methodologies. These methodologies, characterised by deconcretised experimentalism (replicative or otherwise), statistical reductionism, and destratified variabilisation, may have won the popularity contest (Teo, 2024), but the ultimate battle over what might be the “best” approach continues. What has yet to be accepted is that replication (direct or conceptual) remains far removed from quotidian natural science, where its relatively limited use is considered axiomatic (Anjum & Mumford, 2018; Guttinger, 2020). Transcendental realism explains its limited application in natural science, while critical realism highlights its complete untenability in the social sciences, particularly in psychology.

At the heart of reproducibility in psychology is empirical regularity. However, the nature and extent of this regularity can never be fully understood or addressed solely within the framework of natural-scientific materialist metaphysics. For the distinctive nature of human subjectivity⁴ is such that the norms of replication and generic experimentalism (embodying variables and statistical correlations) are completely ill-suited. In contrast, critical realist psychology embraces an exploratory stratified contextualism that incorporates the temporal interplay of individual open-systemic psychic embodiment and wider social-cultural causal conditioning. As Teo (2024) nicely encapsulates:

Human mental life is embedded in history, culture, and society, and in inter-personal and personal realities. It would be limiting to reduce psychological competences and performances to intra-psychological dispositions and tendencies because they must be studied in nexus to real-life activities. (p. 350)

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ORCID iD

Robert Archer  <https://orcid.org/0000-0002-8253-4705>

Notes

1. The conventional account of a transcendental argument concerns its logical form (where major premise: only if Q, then P; minor premise: P; conclusion: Q). The major premise constitutes the transcendental claim, which can only be established reductively.
2. For instance, statistical methods implicitly presuppose an individualistic ontology, as they cannot incorporate the stratified open nature of social reality (Archer, 2002, pp. 154–159).
3. This perspective echoes Popper's (Popper & Eccles, 1977/1985) theory of Three Worlds, where World 1 represents the physical, World 2 the mental, and World 3 the products of human minds. In fact, his concept of World 3 has played an integral role in shaping the development of critical realism's stratified social ontology, particularly concerning the nature and causal autonomy of culture (Archer, 2000). However, despite his reluctance to provide an explicit ontology of the mind (Popper & Eccles, 1977/1985, p. 4), Popper argues that World 2 comprises causally efficacious emergent mental states. Popper's view aligns with Bhaskar's (2015) conception of the mind–body relationship as “synchronic emergent powers materialism” (p. 97).
4. Here, I would argue that the immateriality of subjective mentality is the final, decisive factor in the issue of replication (see also Klein, 2014).

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Author biography

Robert Archer started his academic career lecturing at the Universities of Birmingham and Bath, UK. His main publications are *Education Policy and Realist Social Theory* (Routledge) and, with the late Professor Martin Thrupp, *Education Management in Managerialist Times: Beyond the Textual Apologists* (McGraw Hill). His current research interests include psychosocial studies, philosophy of psychology, and social ontology.