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# Political ecology and ontology: Is literal critical realism the answer? A response to Knudsen

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## Abstract

In a recent article in this journal, Ståle Knudsen argues that the recent trend to flat ontology in political ecology is mistaken and urges more engagement with critical realism as introduced by Roy Bhaskar. His article also criticizes how various political ecologists have used critical realism. In this response, I argue that Knudsen misses the point firstly about my work but more generally also on two further matters: the challenges of discussing ontology for environmental problems that are embedded in human experience and discourse, and on his insistence that ideas about critical realism should be limited to a literal reading of Bhaskar's writings decades ago. This response gently questions Knudsen's tone and argument by making two points. Firstly, debates about critical realism should not be limited only to Bhaskar's original framework concerning different domains of the actual, empirical, and real, but also to ideas that have built on this framework. Second, political ecology does not only ask what is ecologically real but also how, and with what politics, are ideas of reality made and used. Bhaskar's writings in the 1970s were foundational to debates about critical realism, but are insufficient for understanding how ideas of ecological reality are made, persist, and include or exclude different perspectives. This article examines Knudsen's discussion of the Tragedy of the Commons as an example.

**Keywords:** critical realism, Roy Bhaskar, depth ontology, tragedy of the commons, new materialisms

## Résumé

Dans un article récent de cette revue, Ståle Knudsen soutient que la tendance récente à « l'ontologie plate » dans l'écologie politique (la political ecology) est erronée et appelle à plus d'engagement avec le réalisme critique tel qu'introduit par Roy Bhaskar. Son article critique également la façon dont divers écologistes politiques ont utilisé le réalisme critique. Dans cette réponse, je soutiens que Knudsen passe à côté de l'essentiel, d'abord sur mon travail, mais plus généralement sur deux autres questions: les défis de discuter de l'ontologie pour les problèmes environnementaux qui sont intégrés dans l'expérience et le discours humains, et sur son insistance sur le fait que les idées sur le réalisme critique devrait se limiter à une lecture littérale des écrits de Bhaskar il y a des décennies. Cette réponse remet doucement en question le ton et l'argument de Knudsen en faisant deux remarques. Premièrement, les débats sur le réalisme critique ne devraient pas se limiter uniquement au cadre original de Bhaskar concernant différents domaines de l'actuel, de l'empirique et du réel, mais aussi aux idées qui se sont construites sur ce cadre. Deuxièmement, l'écologie politique ne demande pas seulement ce qui est écologiquement réel, mais aussi comment, et avec quelle politique, les idées de réalité sont-elles fabriquées et utilisées. Les écrits de Bhaskar dans les années 1970 ont été à la base des débats sur le réalisme critique, mais sont insuffisants pour comprendre comment les idées sur la réalité écologique se forment, persistent et incluent ou excluent différentes perspectives. Cet article examine la discussion de Knudsen sur la « tragédie des biens communs » à titre d'exemple.

**Mots-clés:** réalisme critique, Roy Bhaskar, ontologie des profondeurs, tragédie des biens communs, nouveaux matérialismes

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## Resumen

En un artículo reciente en esta revista, Ståle Knudsen argumenta que la tendencia reciente a la 'ontología plana' en la ecología política es errónea e insta a un mayor compromiso con el realismo crítico tal como lo introdujo Roy Bhaskar. Su artículo también critica cómo varios ecologistas políticos han utilizado el realismo crítico. En esta respuesta, sostengo que Knudsen pierde el punto primero sobre mi trabajo, pero más generalmente también sobre otros dos asuntos: los desafíos de discutir la ontología para los problemas ambientales que están incrustados en la experiencia y el discurso humanos, y en su insistencia en que las ideas sobre el realismo crítico debería limitarse a una lectura literal de los escritos de Bhaskar hace décadas. Esta respuesta cuestiona suavemente el tono y el argumento de Knudsen al señalar dos puntos. En primer lugar, los debates sobre el realismo crítico no deben limitarse solo al marco original de Bhaskar sobre los diferentes dominios de lo actual, empírico y real, sino también a las ideas que se han construido sobre este marco. En segundo lugar, la ecología política no solo pregunta qué es ecológicamente real, sino también cómo y con qué política se hacen y utilizan las ideas de la realidad. Los escritos de Bhaskar en la década de 1970 fueron fundamentales para los debates sobre el realismo crítico, pero son insuficientes para comprender cómo se elaboran, persisten e incluyen o excluyen diferentes perspectivas las ideas de la realidad ecológica. Este artículo examina la discusión de Knudsen sobre la 'Tragedia de los Comunes' como un ejemplo.

**Palabras clave:** realismo crítico, Roy Bhaskar, ontología profunda, tragedia de los comunes, nuevos materialismos

## 1. Introduction

In a recent article in the *Journal of Political Ecology*, Ståle Knudsen (2023) takes issue with how "new materialisms" have been employed in political ecology, and he explores the "depth ontology" of critical realism developed by Roy Bhaskar as an alternative to the "flat ontologies" of new materialism. This article also includes direct criticisms of various authors in political ecology who, he argues, have misrepresented critical realism in their work. Indeed, Knudsen targets Piers Blaikie (2012); Peter Dickens (1992); Sally Eden (2001); Ryan Galt (2013); Sian Sullivan (2017); Damian White, Alan Rudy, and Brian Gareau (2016); Karl Zimmerer and Tom Bassett (2003), as well as myself (2001, 2003), for allegedly distorting critical realism by failing to adhere to Bhaskar's work accurately enough.

In this response, I take issue with the tone of Knudsen's article but mostly with his overall argument that we should interpret critical realism only through a literal reading of Bhaskar's work in the 1970s rather than as a diverse and growing field. Presenting us with 1970s fodder preserved in aspic is the problem here, rather than any personal comments.

My argument in this response is twofold. First, critical realism is not simply what Bhaskar wrote but an ongoing set of discussions that cannot be isolated to one writer alone (even one as influential and charismatic as Roy Bhaskar). Second, political ecology cannot be reduced to questions of ontology and realism in the sense implied by Bhaskar and Knudsen because this fails to engage with the political factors that characterize political ecology, and which influence how ecological truth claims reflect and enforce social inequalities. In particular, I argue that Knudsen's own discussion of the Tragedy of the Commons in his article attributes an unchallengeable ontology to a propositional concept that requires more political analysis of how and why this concept remains stable and authoritative in environmental debates.

## 2. Varieties of critical realism?

Critical realism is a branch of philosophy that distinguishes between the "real" and "observable" worlds. One of the key tenets of critical realism is that humans can generate knowledge and science about complex processes, but human experiences and theories can never indicate the mind-independent reality of causal structures. Critical realism is most commonly linked to the work of the British philosopher Roy Bhaskar. A colorful character, Bhaskar used his time at the University of Oxford to pursue his deep personal interest in the philosophy of science, which led to various influential books, including *A realist theory of science* (Bhaskar, 1975) and *The possibility of naturalism* (Bhaskar, 1979).

In his article, Knudsen draws on the "depth ontology" of critical realism to critique the so-called "flat ontologies" of the new materialisms adopted by analysts such as Sarah Whatmore (1999) and Bruno Latour

(Latour, 2004, 2005). In particular, he refers to Bhaskar's (1975) delineation of three domains of "real", "actual", and "empirical", in which only actual and empirical knowledge is known to observers, but the underlying real mechanisms cannot be reduced to these more fleeting insights. Accordingly, critical realists refer to the epistemic fallacy as when ontological questions are reduced to epistemological terms indicated by actual or empirical knowledge. According to Knudsen, the new materialisms confuse actualism with ontology (2023, p. 5). Meanwhile, Knudsen also argues that other authors who have discussed critical realism within political ecology (those listed above) have not reported nor used depth ontology properly.

My first point is to ask whether the topic and debate about critical realism be fixed to a literal reading of Bhaskar, or his framework of depth ontology. Knudsen obviously says so. But this appears to be a moot point. The online resource *The Web Site for Critical Realism*<sup>2</sup> has a glossary that refers almost entirely to Bhaskar's writings. However, a different website issued by the University of Warwick<sup>3</sup> states that critical realism "evolved from the writings of" Bhaskar. What about other writers on this theme?

In one section of Knudsen's article that I find particularly irksome, he alleges I relied on secondary sources for my own writings mentioning critical realism. One might ask, how would he know?<sup>4</sup> But more importantly, my own discussion of so-called critical political ecology was never intended to repeat Bhaskar, *per se*, but discuss connections between critical realism, critical science, and critical theory (Forsyth, 2003: chapter 1). This task was always wider than reading and repeating Bhaskar alone. Indeed, perhaps a more prominent influence on that book was the philosopher of science Rom Harré, who was Bhaskar's Ph.D. supervisor, and whose own work has emphasized the diversity of approaches to understanding science and realism. His books include the important *Varieties of realism* (Harré, 1986) and *Varieties of relativism* (Harré & Krausz, 1996). Might there not be varieties of critical realism too?

This point also has implications for disciplinary boundaries. Questions of scientific realism are often discussed strictly within philosophy of science without questions of political, social, or cultural influence (e.g. Saatsi, 2018). Rom Harré crossed these boundaries by developing ideas of realism in relation to psychology and discourse (Harré *et al.*, 1999; Harré & Gillett, 1994). Also, some twenty years after Bhaskar, Harré was a Ph.D. supervisor to Maarten Hajer, who—while never a critical realist in the sense of Bhaskar—has undertaken notable work on environmental storylines as discursive representations of truth about environmental risks (Hajer, 1993).<sup>5</sup> Hajer also later argued that discourse analysis in political research should not just show how language facilitates different arguments but also shapes supposedly "real" visions of the world (Hajer & Versteeg, 2005). This is not "critical realism", but it is a critical approach to representations of reality.

The question is whether all discussions of critical realism have to be rooted to what Bhaskar wrote in the 1970s, or whether it is possible to engage with more diverse insights, including from different fields. If people called critical realism "Bhaskarism", Knudsen might have a point. But even fields named after specific people also have varieties—think of neo-Marxism, or post-Marxism.

### 3. Political ecology and critical realism

The second question is, how should political ecology use ideas about critical realism?

Knudsen seems clear: analysts should use it to engage in debates about ontology in order to avoid the pitfalls of actualism and the epistemic fallacy. But how does Knudsen do this? And what does the depth ontology—or Bhaskar's different domains of real, actual, and empirical—deliver?

In his article, Knudsen uses the example of the Tragedy of the Commons. According to Garrett Hardin's (1968) famous article, attempts to protect "commons" are doomed because resource users' pursuit of individualistic self-interest cannot be controlled (although, arguably, Hardin's main concerns were more

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<sup>2</sup> <http://www.criticalrealism.com/index.php> Accessed 23 March 2023.

<sup>3</sup> <https://warwick.ac.uk/fac/soc/ces/research/current/socialtheory/maps/criticalrealism/> Accessed 23 March 2023.

<sup>4</sup> Actually Knudsen's claim is false, partly because I had the good fortune to live close to the British Library and could access these and other works quickly.

<sup>5</sup> Although it should be made clear that Hajer uses discourse in a Foucauldian way, whereas Harré's own work on discourse does not.

Malthusian as he focused especially on the need to "relinquish the freedom to breed" (1968, p. 1248)). The Tragedy has been discussed many times, but perhaps most famously by institutionalists who argue that common-property regimes can avoid the Tragedy (Ostrom, 1990) or more contextual analysts who argue that the thesis of the Tragedy is incorrect (e.g. Cox, 1985).

Knudsen takes issue with these critics of the Tragedy. He argues (2023, pp. 16-17) that these criticisms overlook two important assumptions: that there will usually be forces at play other than the Tragedy of the Commons dynamic within open systems; and that the logic of the Tragedy is not directly observable in events or enactments. And consequently, "the tendency [to tragedy] is an emergent feature that cannot be reduced to the property of the actors and the resource and is a generative mechanism at work." Crucially, he writes, "that this real tendency does not manifest in certain events is *not proof* that this tendency does *not exist*, only that—in an open system with other forces or tendencies at work—its potential has not been actualized" (emphasis in original).

My problem here is that Knudsen's analysis seems to afford an ontological status to the Tragedy in somewhat essentialist terms. It seems to ignore how this concept is still a proposal for explaining commons management. It also overlooks the various values and assumptions about individualistic social behavior that the usual representation of The Tragedy bring. Indeed, there is a hint of cargo-cult<sup>6</sup> science about this treatment of the Tragedy, in that he tries to explain the outcome of a complex configuration of drivers as an ontologically consistent object rather than analyze how different drivers or objectives might arise at that outcome. Compare this with Emery Roe's (1991, p. 288) discussion of the Tragedy as a development narrative, which "...tell scenarios not so much about what should happen as about what will happen according to their tellers—if the events or positions are carried out as described." Catherine Brinkley (2020) uses more colorful language. Knudsen's overall point is that we cannot trust observations and events enough to dismiss the Tragedy in ontological terms. Presumably, this same logic can be applied to other convenient propositions, such as the existence of the tooth fairy.<sup>7</sup>

The point of this discussion is actually to agree with Knudsen that there is nothing predictable and automatic about the kinds of resource degradation that the so-called Tragedy aims to explain. (And certainly, these kinds of effects are to be avoided, even if we wish to disentangle this outcome from the pathways and essentialist behaviors the standard understanding of Tragedy implies).

But unlike Knudsen, I argue that the so-called depth ontology of critical realism is too much of a blunt instrument to analyze the diverse challenges of ecology and politics within resource management. The objective is not simply whether or not we can say if the Tragedy exists as an ontological reality. It is why this contested concept has become authoritative in organizing our thinking about scarcity, and linking this essentially to questions of methodological individualism, or what kinds of rights and rules might be seen as appropriate solutions (see also Cole *et al.*, 2014; Dell'Angelo *et al.*, 2017; Forsyth & Johnson, 2014; Karpoff, 2022). The insistence that the Tragedy should, despite everything, be considered an ontological reality because it can't be disproven as a reality impedes analysis of how the proposition is "made" an alleged reality through expert practices, public discourse, the state, and so on. It also fails to show how assumptions about the Tragedy can have exclusionary impacts on how environmental policy treats pastoralists, smallholders, women (if one takes Hardin's concerns about "breeding" literally), or the nature of scarcity in general. Or, to put it another way, the "stuff" of political ecology is not simply whether we can identify realist causes of problems or not; it is how social and political factors order society and ecology simultaneously in ways that have problematic impacts on how we explain the world and what kinds of social orders persist.

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<sup>6</sup> Cargo cult science is a term attributed to Richard Feynman (1974) that describes pseudoscientific work that seeks to confirm a hypothesis rather than subject it to critical scrutiny. It is based on the observation that some traditional societies in the South Pacific after the Second World War sought to bring back planes loaded with supplies by recreating the conditions under which these people experienced them, such as by building landing strips. See: <https://calteches.library.caltech.edu/51/12/CargoCult.htm> Accessed 23 March 2023.

<sup>7</sup> I am also reminded of T. S. Eliot's (1939) classic, *Macavity the mystery cat*, where every verse explains the prowess of the famous cat criminal because he is never found at the scene of the crime. See: <https://poets.org/poem/macavity-mystery-cat> Accessed 23 March 2023.

These points have implications for how Knudsen discusses the concept of 'emergence' in his article. According to the writings of Bhaskar (1975, pp. 95-103), emergence refers to the existence of a causal process that arises from (but is not the same as) a deeper causal structure.<sup>8</sup> Knudsen (2023, p. 13) takes me to task for how I used the word "emerge" to refer to the partial ways that knowledge about causes might take shape under different social experiences and in scientific research (Forsyth, 2003, p. 71). Knudsen (2023, p. 13) alleges I "got things rather upside down" because "emergence is a real dynamic taking place independent of human thought." Accordingly, he claims I committed the epistemic fallacy of confusing epistemological terms with ontology.

My text would have been clearer had I used the words "appear as real" rather than "emerge." But there are two points to be made in response to this comment. First, Knudsen's discussion of emergence in relation to the Tragedy still ascribes an ontological virtue to this concept that skips over the case that the concept is the problem, rather than the quality of evidence. This pays insufficient attention to how this particular framing of resource management has gained authority and continues to organize discussion.

Second, Knudsen does not understand that my book was not a literal application of Bhaskar's critical realism but instead was an analysis of who gets to define ecological reality. There is an interesting politics about how ecological processes appear real to different people, and then how these selective experiences are presented as real and universal for everyone.<sup>9</sup> The book did not claim we can achieve final ontological explanations of complex phenomena. Instead, it sought ways to make scientific research more inclusive of less represented people, even if that science is—like all knowledge—partial and incomplete (Forsyth, 2003: chapter 8).<sup>10</sup> There are many good examples of this type of democratization—for example, in how women's social movements reshaped research on breast cancer to seek alternatives to radical surgery as the standard proposed solution (McCormick *et al.*, 2003). Another example is how research on HIV/AIDs in the 1990s diversified from seeking to prevent HIV transmission to also allowing people with HIV to live more fulfilling lives (Epstein, 1996). In all of these cases, the objectives are to ask how, and with whose influence, we define so-called problems and to make scientific research more socially inclusive.

Moreover, seeking to diversify who gets to frame and generate knowledge is another example of how critical debates about scientific realism are more diverse than the work of Bhaskar in the 1970s. For example, my discussion of these topics drew in part from the work of Rom Harré and his colleagues in a book called *Realism rescued* (Aronson *et al.*, 1994). This book argued that steps towards scientific realism are possible even when there are different experiences and semantic interpretations of phenomena. Some political ecologists have effectively applied this approach when they have triangulated different truth claims about land degradation, often comparing "local" experiences with more formal expertise (e.g. Dahlberg & Blaikie, 1999). Doing this does not aim to produce universal and permanent explanations about the mind-independent ontological structures driving land degradation. (Indeed, such terms are also deeply embedded in diverse values). But it does offer some form of scientific progress—and hence steps towards scientific realism—by presenting evidence that can challenge the universality of existing environmental explanations. Moreover, it offers opportunities to refocus explanations in more diverse and socially inclusive ways. Dismissing this kind of scholarship because it is insufficiently in tune with Bhaskar's ideas about realism in the 1970s seems disconnected from the possible work that political ecologists can do to make scientific expertise more sensitive to environmental and social diversity.

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<sup>8</sup> 'Emergence' refers to how causal structures influence other, autonomous, things. The challenge of emergence is that it is not possible to infer the nature of either the causal structures or the things they influence from how emergence takes place. Or, as Bhaskar writes, "the operations of the higher level cannot be accounted for solely by the laws governing the lower order level in which we might say the higher-order level is 'rooted' and from which we might say it was 'emergent'" (Bhaskar, 1975, p. 95).

<sup>9</sup> This is a point also discussed by Latour (2004).

<sup>10</sup> Indeed, to use Bhaskar's terms, it is an exercise in changing who shapes transitive knowledge rather than exposing intransitive causal structures (Bhaskar, 1975, p. 12, acknowledged by Knudsen 2023, p. 11).

#### 4. Conclusion

Critical realism has been an arresting framework for understanding the challenges of explaining complex environmental problems. But interpreting critical realism through a literal reading of Bhaskar's work from the 1970s misses opportunities to ask how truth claims about ecology remain unchallenged, and what work they do in co-producing social structures and organizing research and environmental policy in non-transparent ways. A broader range of critical realist approaches—that might not follow Bhaskar to the letter but which ask related questions about science and realism—can offer more flexibility to be critical about truth claims. They can also connect these debates to current politics in a way that Bhaskar's foundational work never did.

Political ecology has a crucial role in critically analyzing environmental science and truth claims about ecology. It can also engage with these claims to make them more accurate, diverse, and socially inclusive, even if it cannot explain underlying ontological structures. It is a worthwhile and ongoing debate to ask how current thinking within new materialisms, science and technology studies, and critical approaches to scientific realism might adopt and expand ideas within political ecology. Taking analysts to task for not being sufficiently loyal to the original Bhaskar writings limits the potential of what ideas about critical realism might do when applied to fields beyond its original application in philosophy of science.

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