

JYX



JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Cortés-Capano, Gonzalo; Hausmann, Anna; Di Minin, Enrico; Kortetmäki, Teea

Title: Ethics in biodiversity conservation : The meaning and importance of pluralism

Year: 2022

Version: Published version

Copyright: © 2022 The Authors. Published by Elsevier Ltd.

Rights: CC BY 4.0

Rights url: <https://creativecommons.org/licenses/by/4.0/>

Please cite the original version:

Cortés-Capano, G., Hausmann, A., Di Minin, E., & Kortetmäki, T. (2022). Ethics in biodiversity conservation : The meaning and importance of pluralism. *Biological Conservation*, 275, Article 109759. <https://doi.org/10.1016/j.biocon.2022.109759>



Perspective

Ethics in biodiversity conservation: The meaning and importance of pluralism

Gonzalo Cortés-Capano^{a,b,c,*}, Anna Hausmann^{b,c,d}, Enrico Di Minin^{b,c,e}, Teea Kortetmäki^a^a Department of Social Sciences and Philosophy, School of Resource Wisdom, University of Jyväskylä, Jyväskylä, Finland^b Helsinki Lab of Interdisciplinary Conservation Science, Department of Geosciences and Geography, University of Helsinki, FI-00014 Helsinki, Finland^c Helsinki Institute of Sustainability Science (HELSUS), University of Helsinki, FI-00014 Helsinki, Finland^d Department of Biological and Environmental Science, School of Resource Wisdom, University of Jyväskylä, Jyväskylä, Finland^e School of Life Sciences, University of KwaZulu-Natal, Durban 4041, South Africa

ARTICLE INFO

Keywords:

Sustainability
Ethical pluralism
Value pluralism
Environmental justice
Recognition
Pragmatism

ABSTRACT

Addressing the global extent of the current biodiversity crisis requires engaging with the existence of multiple equally legitimate values, but also with diverse ethical perspectives underpinning conceptions of right and wrong actions. However, western monist positions have mostly explicitly or implicitly directed conservation strategies by defining the space of legitimate arguments, overlooking solutions that do not fit neatly the chosen approaches. As ignoring diverse ethical positions leads to injustices and reduces the potential of conserving biodiversity, there is a need to recognise and navigate the ethical landscape. Ethical pluralism may provide opportunities to do so. However, the ethical underpinnings of pluralism have not been fully considered in biodiversity conservation. In this article, we elaborate the meaning, importance and limits of ethical pluralism while highlighting opportunities and challenges that the position may entail in biodiversity conservation science and practice. We argue that ethical pluralism allows recognising not only the existence of incommensurable plural values, but also that moral conflicts should embrace intra and inter-cultural criticism and the legitimacy of agonism and dissent, as opposed to monistic and relativistic approaches. We conclude by discussing how grounding ethical pluralism in environmental justice and environmental pragmatism may contribute to navigating the ethical landscape in biodiversity conservation. Particularly, we highlight opportunities to: i) promote (non-anthropocentrically understood) recognition and environmental justice in biodiversity conservation and, ii) move beyond theoretical debates seeking the single best ethical theory and focus on ethical diversity as a common source of possible solutions.

1. Introduction

Humanity is currently facing an unprecedented global biodiversity crisis that threatens food, water and health security and the continuation of many nature's contributions to people, compromising human well-being and the existence of numerous non-human species (Díaz et al., 2019). The extent of the crisis requires identifying ambitious biodiversity conservation goals and actions that would contribute to addressing other key challenges (e.g. climate change, social equity) and aim at achieving a good quality of life for all (Díaz et al., 2020). By targeting these challenges, biodiversity conservation is an inherently value-laden, mission-oriented discipline and practice (Elliott, 2020; Soulé, 1985). However, conservation actions can be conceived and implemented

around diverse concerns, such as nature's intrinsic value, the rights of indigenous peoples, poverty alleviation, or the economic value of "biological resources" (Robinson, 2011). Therefore, the existence of multiple legitimate, sometimes conflicting, values and ethical positions in dispute, challenges the design and implementation of biodiversity policies, particularly in situations where there are high stakes and there is the need to make urgent decisions under uncertain social-ecological conditions (Colloff et al., 2017).

Collective action for conservation often leads to value-related conflicts both within any given culture and even more so in multicultural societies and intercultural cooperation (O'Neill et al., 2007). Value conflicts between different stakeholders become morally problematic when the values of one group (such as conservation scientists) lead to

* Corresponding author: Department of Social Sciences and Philosophy, School of Resource Wisdom, University of Jyväskylä, Jyväskylä, Finland.

E-mail addresses: gonzalo.d.cortes-capano@jyu.fi (G. Cortés-Capano), anna.a.hausmann@jyu.fi (A. Hausmann), enrico.di.minin@helsinki.fi (E. Di Minin), teea.t.kortetmaki@jyu.fi (T. Kortetmäki).

<https://doi.org/10.1016/j.biocon.2022.109759>

Received 12 March 2022; Received in revised form 27 September 2022; Accepted 2 October 2022

Available online 10 October 2022

0006-3207/© 2022 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

decisions and actions that represent the violation of moral obligations or claims of another group (such as the local community at the conservation site). Value conflicts may arise, for example, around land allocation issues, including creating protected areas for biodiversity or allocating areas for commodity production implying extractive uses and unequal distribution of benefits and burdens (Martinez-Alier, 2021). Conflicts become particularly difficult when adhering to any of the choices, or routes of action, implies overriding or violating some other important values, or when actors embrace very distinct views regarding how the conflict should be resolved. Overlooking these conflicts, or attempting to conserve biodiversity from unilateral perspectives (e.g. militarisation of conservation to tackle wildlife poaching and trafficking), can lead to unintended consequences, such as exacerbating injustices, even escalated violence (Duffy et al., 2019; Martin et al., 2020). On the other hand, although sometimes challenging, engaging with the multi-faceted complexity in conservation policy-making processes facilitates meeting socio-economic and ecological goals in the long term (e.g. Cetas and Yasué, 2016). To do this, biodiversity conservation requires engaging not only with a plurality of values but also with the existence of diverse ethical perspectives underpinning conceptions of right and wrong actions.

Biodiversity conservation ethics addresses normative questions of what should be conserved, how, and why, guiding actions and decisions over values and their potential conflict (Baard, 2022). Ethics as a philosophical discipline involves “systematizing, defending, and recommending concepts of right and wrong behaviour” (Fieser, 2021) and considers broadly questions around how we should (or should not) act, and what obligations we have, with relation to other beings (Hinman, 2007). By ethical reasoning, we refer more broadly also to non-academic approaches to ethical questions that are internal to humanity. Ethical reasoning influences economic, political, and other societal decisions that ultimately cause biodiversity loss by triggering its main drivers: land-use change, climate change, and over-exploitation. Ethical reasoning also influences people's perceptions of problems, of relevant factors in resolving them, and the disposition to promote and comply with policies and regulations to tackle them (Sandler, 2009). Thus, engaging with ethical reasoning is crucial as it shapes human actions and is influential to both biodiversity decline and its conservation.

Ethical positions may sometimes stand on a plurality of equally valuable reasoning and principles that are irreducible to one another. However, most of the research, public debate and policy-making on the global biodiversity crisis have explicitly or implicitly followed the main western normative positions, either deontology, where right actions are those conforming to certain rules or duties, or utilitarianism, where right actions are those that maximise the greatest good to the greatest number (Shafer-Landau, 2019). These positions may narrow the space of legitimate arguments and focus points regarding the right conservation strategies without giving equal regard to solutions that do not fit neatly the chosen approach. While the ongoing discussion manifests various, sometimes conflicting, ethical positions (Batavia and Nelson, 2017; Dickman et al., 2015; Ghasemi, 2021; Kopnina et al., 2018), other western and non-western ethical approaches are mostly underrepresented. Examples of the ethical approaches that have received less attention or that have been oversimplified in the mainstream conservation discourse include among other: hinduism, buen vivir, ubuntu, nyikina ethics, buddhism, ethics of care, virtue ethics and confucianism (see respectively e.g., Gairola, 2020; Gudynas, 2011; Mabele et al., 2022; Milgin et al., 2020; Paterson, 2006; Raghuram, 2016; Sandler, 2009; Thomas-Walters et al., 2020). Calls for inclusivity in biodiversity conservation that overlook crucial dimensions of justice (e.g. recognition, equity) risk to suppresses marginal views by constructing a global, yet ethically non-inclusive, conservation agenda (Matulis and Moyer, 2017; Trisos et al., 2021). Marginalising diverse, sometimes conflicting, ethical perspectives is both unjust and reduces the potential of conservation actions to have a long-term positive impact on humans and non-humans (Martin et al., 2016; Matulis and Moyer, 2017).

The concept of pluralism generally refers to the view that there is a coexisting diversity of fundamental ethical principles, entities, processes or perspectives (e.g., concepts, worldviews, values, politics), which might be neither reduced to one another nor to some other ultimate one (Shafer-Landau, 2019). In the last decade, there has been a growing attention towards pluralistic approaches to increase the recognition of diversity when addressing some key challenges in conservation and sustainability sciences. These include pluralistic approaches to knowledge co-creation, post-development alternatives, perspectives on biodiversity conservation and decision-making (see, e.g., Caniglia et al., 2021; Kothari et al., 2019; Pascual et al., 2021; Robinson, 2011, respectively). For example, plural valuation of biodiversity allows to better capture and describe the diversity of values assigned to biodiversity by different stakeholders, including intrinsic (i.e., the value of nature for nature's own sake), instrumental (i.e., the value of nature as provider of benefits to satisfy human needs and interests), and relational values (i.e., the principles and virtues emerging from human-nature relations) (Zafra-Calvo et al., 2020). However, calls for pluralism in conservation science have not sufficiently addressed the ethical meanings and underpinnings of pluralism to engage with the broad diversity of interests, values, and moral views in biodiversity conservation. For example, while plural valuation addresses important descriptive questions recognising multiple values ascribed to biodiversity, it does not necessarily engage with normative questions, such as how humans should behave towards biodiversity. In addition, focusing on people's values, knowledge and livelihoods as primarily concerned with nature may lead to overlooking broader social-ecological complexity influencing human-nature relations (Cortés-Capano et al., 2020; Fabinyi et al., 2014) and the long-term viability of biodiversity conservation interventions at different scales.

In this article, we aim to advance understanding of pluralism in biodiversity conservation ethics. In particular, we elaborate the meaning, importance and limits of ethical pluralism in order to integrate philosophical soundness into the discussions, while highlighting opportunities and challenges that the position may entail in biodiversity conservation science and practice. Ethical pluralism is a theoretical position within ethics which maintains that there is more than one ultimate fundamental moral theory for resolving what is right and wrong (Hinman, 2007). While ethical pluralism has been extensively developed and discussed in other fields, the position has generally been overlooked in conservation science. We first differentiate between different types of pluralism (i.e. plural valuation, plural values and ethical pluralism) to make sense of it and then describe the importance of embracing ethical pluralism in conflicts emerging from conservation decision-making, as opposed to monistic or relativistic approaches, and exemplify contexts where pluralism is particularly important. We then discuss how grounding ethical pluralism in environmental justice and environmental pragmatism in ethics may contribute to navigating the ethical landscape in biodiversity conservation. Particularly, we highlight opportunities to: i) promote recognition and justice in biodiversity conservation and, ii) move beyond theoretical debates seeking the single best ethical theory and focus on ethical diversity as a common source of possible solutions. Finally, we highlight opportunities and challenges of ethical pluralism in complex political arenas for collective action and policymaking (usually involving different stakeholders, with different interests, legitimacy and power). In this sense, we discuss the role of just deliberation processes and agonistic pluralism to help address some of the ethical-political challenges in biodiversity conservation.

2. Values in ethical monism, relativism, and pluralism

Different disciplines have produced a variety of theoretical conceptualizations of the meaning of values shaping and constraining our understanding of the world and influencing societal norms (Rawluk et al., 2019). Generally, values range in various continua between individual, shared, and social values; intrinsic, instrumental and relational values;

economic values; environmental and human values; and held and assigned values (Dietz et al., 2005; Kenter et al., 2015). Values can be contextual (situation-specific) or shared (transcendental) conceptions of what is good and desirable and guide action preferences and the evaluation of behaviour, people, and events (Kenter et al., 2015). While value monism conceives that other values can be reducible to one ultimate one (e.g., pleasure or happiness), at least when it comes to *morally relevant values*, value pluralism recognises that there are a number of distinct values, such as autonomy, knowledge, justice, equality, beauty, which cannot be reduced to one ultimate value (O'Neill et al., 2007) or set in a fixed ranking. Value pluralism does not prevent upholding a view that for the sake of practical governance, different values can be compared and traded-off by translating them to a single scale of valuation (e.g. economic value). Nevertheless, pluralist views often maintain that reducing plural values to a single exchange rate measure would be narrow in scope and thus inappropriate (e.g. monetary valuation of nature). Therefore, there is a need for further engaging with how different values are prioritised according to different ethical positions when biodiversity conservation is planned or practised (Rawluk et al., 2019).

Worldwide, both ethics as a discipline and different cultures manifest a diversity of approaches to moral reasoning, represented by various theories regarding what makes an action right/good or wrong/bad when interacting with other humans and non-humans (Sandler, 2009). Parties from different cultures, with diverse identities, power, and values may therefore hold not only different values but also different ethical positions with divergent goals. While conflicts between values and alternative actions might also emerge within unitary ethical views, the diversity of value propositions and competing moral principles will increase the likelihood of moral and value conflicts (Chapman et al., 2019; Ellis et al., 2019). Some of these conflicts can be ethical dilemmas: situations where there are multiple conflicting demands or relevant moral values, none of which overrules the other, and none of the action options is good in all respects (McConnell, 2018). For example, debates around wildlife trade regulations (e.g., banning or legalising trade in wildlife) might be driven by different and sometimes conflicting ethical positions, emerging from diverse contexts along supply chains. This may include a deontologist position opposing to e.g. wildlife farming because it violates a duty to treat animals in a certain way, while a consequentialist position may be

supporting it with the argument that it will reduce harvesting on wild populations (Coals et al., 2019). Notably, they both claim contributions to biodiversity conservation, but also violate some of the moral values or obligations important for the other position. These and other conflicts that emerge from conservation policies and actions can be conceived with a monistic, a relativistic or a pluralist ethical view (Fig. 1).

Ethical monism conceives that one moral theory is generally applicable everywhere and most appropriate for resolving what is morally right, including the resolving of conflicting claims by different actors (Fig. 1). Ethical monism can support both value monism and value pluralism. Ethical monism with value monism takes that all valuations are reducible to a single ultimate value, e.g. well-being, dignity, or utility (e.g. blanket restrictions to trade wildlife or increasing militarization to stop poaching of threatened species). Ethical monism can also acknowledge the existence of plural legitimate values or goods (Fig. 1), which could, however, potentially lead to ethical dilemmas according to the same principle/norm. While it is possible to consider only those positions monist that provide a clear ordering of principles so that dilemmas can always be resolved without a doubt, other approaches may consider that a monist position can also lead to unresolvable dilemmas. Trying to identify a single moral theory is generally applicable everywhere, as in ethical monism, may lead to the debate on which ethical theory is the best one to resolve ethical dilemmas. For example, act utilitarianism posits that morally relevant questions (e.g. biodiversity conservation related questions and conflicts) should be resolved by comparing the consequences of different alternative ways of action with a predetermined standard single or multiple value. A rights-based deontological approach, in turn, posits that all ethical questions should be addressed as questions of rights (or entitlements) and corresponding duties. Notably, there are ethical questions where different theories anyway lead to suggesting similar resolutions albeit for different reasons (e.g. Norton, 1994). In this sense, among the commonly suggested entitlements are those that create obligations of justice to secure the conditions of humans for a worthwhile human life. One might also propose that there are conservation related duties to non-human nature. These can include duties to sentient beings, living beings, or threatened species (see, e.g., Nussbaum, 2006; Rolston, 1985; Wienhues, 2020, respectively).

While different monist ethical positions might agree on the

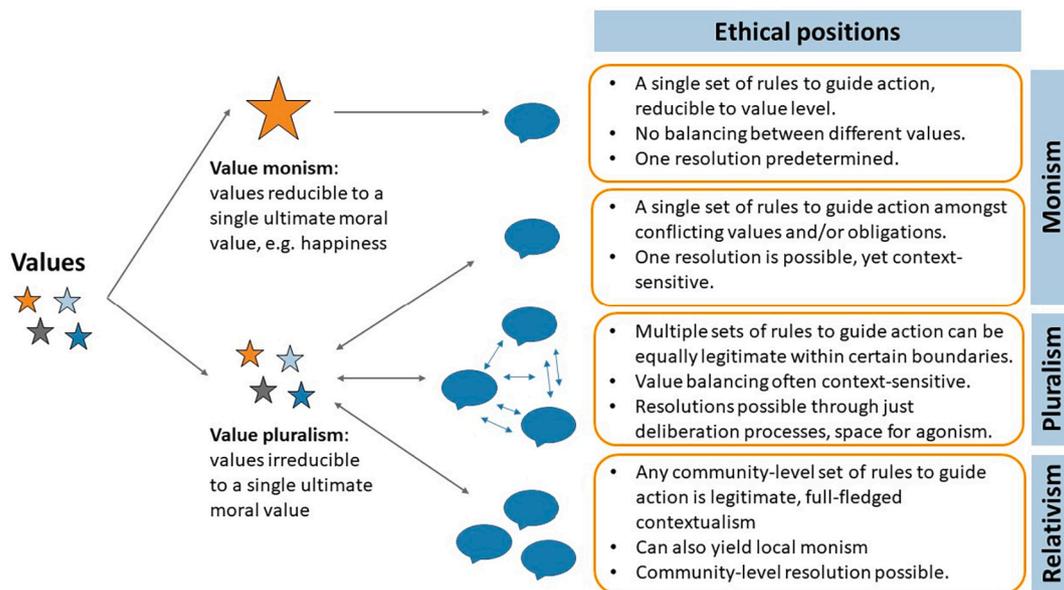


Fig. 1. Ethical monism, relativism and pluralism relative to values in biodiversity conservation. The stars are examples of different existing values. Value monism and pluralism refer to the set of values that influences moral action, including desirable good(s) and/or undesirable bad(s). The precise function of moral value(s) depends on the ethical theory considered. The boxes about ethical positions summarize the key points of the relationship between values and ethical monism, pluralism and relativism.

appropriateness of resolutions (e.g. conserving certain species) although for different reasons, both value and moral monism can lead to different problems due to their reductionist and stunting implications. Societies organized around narrow hegemonic purposes (e.g. as Sparta was for war) will allow only a fraction of their inhabitants to live their lives in a manner consistent with their flourishing (Galston, 1999). The rest will be pinched and stunted to some degree, and some ways of life will be ruled out altogether (e.g. no Socrates in Sparta). In biodiversity conservation, stunting can happen if the proposed or enacted measures restrict the lives of certain communities or peoples in ways that are relevant to their way of living well. Thus, conservation actions grounded in monistic frameworks restrict the scope of relevant values and ethical principles. Those conservation practices that follow predetermined and often externally imposed action-guiding rules risk generating exclusions or other implications that conflict unjustly with the moral views and the flourishing of the affected communities (Brush, 2020; Chapman et al., 2019; Schlosberg, 1999). The failure to recognise cultural diversity and therefore the imposition of conservation models (e.g., protected areas excluding local people) may give rise to serious disagreement and unintended, undesirable consequences (e.g., non-compliance, social conflict and injustices) for human well-being and biodiversity (Kashwan et al., 2021). This can follow either from monism but also from the approaches that acknowledge many values yet try to make them commensurable via a ‘proxy value’, using monetary valuation as a common measure of comparison between competing values and objectives (e.g. biodiversity, landscape, cultural meanings, scientific values (O’Neill et al., 2007).

Ethical relativism takes the other extreme compared to monism. It acknowledges the existence of multiple and legitimate ethical positions, which are valid and applicable only for particular places and societies at a given time, and for cultures enacting them, without recognising any universal standards for moral judgment (Hinman, 2007; Shafer-Landau, 2019). Relativism thus recognises that all normative perspectives present in any community are equally valid (Fig. 1). For example, actions related to wildlife trade, such as blanket trade bans or wildlife farming initiatives, can be judged as right or wrong only according to the subjective views of the very communities affected. The lack of any common standards for judging the appropriateness of conservation actions that have consequences for humans and non-humans hinders the achievement of cross-cultural agreements beyond specific social groups or cultures. In this sense, the moral acceptability of wildlife trade (e.g., consumption of threatened species for food, or how anti-poaching activities are implemented) would be left to community-specific perceptions, even if wildlife trade increases a species risk of extinction and/or provides transmission mechanisms for the emergence of global pandemics. While pragmatic agreements can be reached on simple matters where the similar resolution is in the self-interest of any community, it is very hard to get any normative stand on complex problems, such as climate change or biodiversity loss, with moral relativism. In addition, relativism might justify social oppressions and subjugation when they are rooted in cultural traditions (e.g., the oppression or marginalization of women or of people with certain physical characteristics). Therefore, relativism is both instrumentally and ethically inadequate to address issues that would require engagement and deliberation for biodiversity actions involving heterogeneous societies and cultures at regional and global levels.

Ethical pluralism implies a different stance from ethical monism and relativism (Fig. 1). Contrary to ethical monism that aims at finding one ultimate high-level theory (often employing only one moral principle) for resolving normative questions, moral pluralism posits that diverse moral theoretical approaches might be correct (Hinman, 2007; O’Neill et al., 2007). This might give rise to diverging moral obligations and guidelines which can be equally legitimate and simultaneously theoretically defensible. Therefore, according to ethical pluralism, it is impossible to unify different theoretical approaches into a single theory or to point out ‘the ultimate moral theory’. In the conservation context, moral pluralism recognises the existence of diverse legitimate ethical

principles to guide conservation policies and actions in different contexts and administrative scales (from local to global). In the context of wildlife trade, for example, the identification of conservation actions aimed at reducing harvesting pressure on threatened species should consider the plurality of fundamental ethical principles and underlying values in the contexts of implementation. In this sense, trade bans may well work in certain contexts but fail in other where they clash with the fundamental ethical values or principles of local stakeholders (e.g. the autonomy of local people to make a living of their choice). However, ethical pluralism does not mean moral relativism, where all normative stances are equally legitimate and true in the communities upholding them (Berlin, 1990). Ethical pluralism recognises that conflicts should embrace intra- and inter-cultural criticism of practices, institutions, and traditions and calls for the definition of some criteria or sets of values that any justifiable ethical approach would accept. Therefore, moral theories and arguments are still exposed to critical evaluation, and insufficiently or inappropriately justified moral arguments are rejected (Hourdequin, 2015). In this sense, pluralism goes beyond recognising the empirical reality of difference (e.g. there might be multiple legitimate right ways to conserve biodiversity), to understanding that some differences will never come together and, therefore we should be open to differences while making connections across them through engagement (James, 1977).

3. Navigating the ethical landscape: opportunities from ethical pluralism

Navigating the ethical landscape in the context of the global biodiversity crisis is challenging. Conflicts between different values and ethical principles are possible within any system of moral beliefs and the need for ethical pluralism does not imply that it would facilitate agreement over highly contested conservation related questions, such as identifying just and effective actions to regulate the wildlife trade. However, unexpected problems may emerge when implementing conservation actions if pluralism is systematically neglected. In particular, this includes i) the neglect of a *plural valuation of nature*, or the multiple ways in which people assign values to the non-human world and to human-nature relations; ii) the failure to acknowledge a *plurality of values* (e.g. individual, shared, and social) involved in the case of value conflicts around conservation issues; and iii) the lack of acknowledgement of the *plurality of ethical approaches*, relevant to the context and stakeholders involved. Together with value pluralism and plural valuation of nature, embracing ethical pluralism encourages biodiversity conservation to explicitly engage with normative questions which are intrinsic to the discipline.

We propose that ethical pluralism in the context of biodiversity conservation should be conceived as multiple open processes that ought to be navigated with the common goal of conserving biodiversity in a just way, following general principles and engaging with contextual dimensions without predefining a single path or endpoint. To do this, we argue that such position should be at least grounded in insights from environmental justice and from environmental pragmatism in ethics. From an environmental justice perspective, ensuring recognition and inclusiveness through a human needs and capabilities approach can provide a basis for addressing ethical pluralism by providing criteria for justifying or rejecting the competing claims (with the criteria that the competing claims must not create patterns of oppression or aggravated injustices). From an environmental pragmatism perspective, identifying converging principles across ethical positions while making space for agonism and dissent in just deliberation processes can provide a basis for practical applications of ethical pluralism.

The most prominent approaches to environmental justice emphasise the importance of recognising socio-cultural differences, improving the consideration of marginalised groups and the relationships between the state of the environment and human vulnerability (e.g., Coolsaet, 2021; Schlosberg, 2007). Hence, justice in biodiversity conservation

necessitates recognition as respect for difference and openness to the plurality of positions (Martin et al., 2016; Pascual et al., 2021). Recognising and working with multiple ethical perspectives and knowledge systems can both foster justice and broaden the epistemic and value base for better informed, and thus more effective, decision-making (Caniglia et al., 2021; Kadykalo et al., 2021; Turnhout et al., 2020). For example, this should extend beyond knowledge integration to fully recognising indigenous ethical positions, sovereignty and self-determination regarding their worldviews, knowledge and rights to land (Latulippe and Klenk, 2020). In addition, although conservation policies should prioritise local people as key decision-makers, they also need to take into account the power and role of ‘outside’ actors (e.g. transnational corporations) influencing the local context (Büscher and Fletcher, 2019).

Incorporating aspects of recognition centred on addressing needs and capabilities and respecting the socio-cultural differences (in, for example, the valuation of nature) of individuals and communities (Martin et al., 2016; Nussbaum, 2011; Schlosberg, 2013) would provide opportunities to embrace ethical pluralism while avoiding moral relativism regarding subjective accounts of well-being. A human needs perspective recognises that there are certain universal, non-relative and non-substitutable needs (i.e. physical and mental health, relationships and participation, autonomy), encompassing a range of capabilities, or dimensions of well-being (Brand-Correa and Steinberger, 2017). However, in line with pluralism, the ways in which these universal needs are satisfied are plural and shaped by culture, values and ethics (Max-Neef, 1991). Adequately disentangling the diversity of ways in which the satisfaction of needs influences possibly conflicting perceptions around a conservation issue and around conservation actions is crucial for identifying legitimate spaces for solutions. This requires different stakeholders involved in the issue to critically reflect on the different perceptions around *who* is involved (e.g., species, ecosystems, local people, private companies, public institutions, power relations and structures), *where* does it happen (e.g. places, histories, context), and *how* does it happen (e.g., goals, processes, markets, knowledge, practices, feedbacks). A more comprehensive understanding of these crucial dimensions provides a basis to deliberate around normative questions related to who, where, and how *should* conservation actions be implemented to adequately address the issue and advance towards just social-ecological goals. In addition, a capabilities and needs-based approach to ethical pluralism could contribute to recognising non-humans, expanding moral consideration beyond anthropocentric perspectives (Kortetmäki, 2018; Schlosberg, 2013; Taylor et al., 2020). A needs-based approach to well-being has also been proposed as a promising way to overcome anthropocentric orientations in the prominent well-being and sustainability discourses and bridge divergent worldviews to collaborate towards the shared goal of well-being (Kortetmäki et al., 2021).

In line with insights from environmental pragmatism (Katz and Light, 2013), embracing ethical pluralism to address the multi-faceted complexity of the biodiversity crisis provides opportunities to broaden the space for many practical solutions emerging from value and ethical diversity (Robinson, 2011). This requires moving beyond theoretical debates seeking the single best ethical theory and focus efforts on identifying principles expressing shared values compatible with different ethical positions, without necessarily committing to any single foundational ethical theory (Arras, 2002; Lecaros Urzúa and López Gaete, 2018). We suggest that conserving biodiversity should constitute such a shared value that can be agreed upon by any reasonable ethical position, even if they do that for different reasons. The identified principles should be used to assist conservation decision-making in particular contexts (e.g. the rightness of creating a new protected area and the moral permissibility of limiting certain human activities in the area) and should be continuously refined based on the analysis and application on these concrete cases (Arras, 2002).

As an example of the required approach, bioethics has established a set of mid-level principles grounded in shared values of human dignity and inherent worth. The proposed principles aim to be agreed across

different ethical-theoretical standpoints and include: i) respect for autonomy (the value of self-direction regarding one's life and choices); ii) beneficence (the value of enhancing the welfare of others); iii) non-maleficence (the value of avoiding imposing harm on others); and iv) justice as treating equals equally (the value of according each person her due) (Beauchamp and Childress, 2019; Flynn, 2021). Importantly from a pluralist perspective, a stronger emphasis on solidarity has been proposed from an African perspective as a more fundamental principle than autonomy (Fayemi, 2021). In addition, other set of principles frameworks have been proposed focusing on animal ethics (Fraser, 2012) and practical environmental ethics (Lecaros Urzúa and López Gaete, 2018). These point us towards an important remark that would, admittedly, require more detailed scrutiny for the full argument: the status of non-human nature in the pluralist framework. As noted above, humans are assumed to have dignity and inherent value that also sets the limits to what kinds of ethical approaches can be embraced within pluralism (e.g. not a chauvinist or a socially oppressive approach). Likewise, we suggest, taking the biodiversity conservation goals seriously requires stepping beyond moral anthropocentrism (e.g., Kortetmäki, 2018; Schlosberg, 2013; Taylor et al., 2020).

From an ethico-political perspective, ethical pluralism can provide opportunities to identify aspects of agreements on the need for certain conservation actions despite disagreements at the ethical theoretical level (e.g. about the intrinsic value of nature) (Norton, 1994). However, a narrow focus on consensus-seeking processes, without allowing for legitimate disagreement, might conceal power imbalances among stakeholders and favour a single framing of problems, potentially hindering pluralism (Berg and Lidskog, 2018; Díaz-Reviriego et al., 2019). In addition, it is important to notice that simply increasing participation is not necessarily a silver bullet for legitimate and effective biodiversity policy-making (Hurlbert and Gupta, 2015). Reciprocal recognition is crucial for justice in processes that involve actors with unequal power and participatory capacities (Martin et al., 2016). Special attention needs to be paid on how to design just deliberation processes (e.g. accounting for power, legitimacy, interests, Reed et al., 2018). In this sense, pluralism requires a recognitive commitment to the disagreement that emerges from difference (Brush, 2020; Schlosberg, 1999). In practice, this requires creating and/or supporting the political conditions for agonistic pluralism where dissent and contestation can thrive as important aspects of public life and democracy (Matulis and Moyer, 2017; Mouffe, 1999; Schlosberg, 1999). Agonistic pluralism considers opponents not as enemies but as adversaries whose existence is legitimate (Mouffe, 1999). In the context of biodiversity conservation, some conflicts might lack single satisfactory solutions yet compromises between adversary parties are possible based on shared mid-level principles, including those of democracy and recognition.

4. Conclusion

Different strategies have been implemented worldwide to help tackle the biodiversity crisis (e.g., the Convention of Biological Diversity [CBD: <https://www.cbd.int/>]) alongside meeting the Sustainable Development Goals [<https://sdgs.un.org/goals>]). However, the main global trajectories have not changed in this respect (Biermann et al., 2022; Díaz et al., 2019). In fact, none of the 20 Aichi targets for biodiversity, set in 2010, have been fully reached and only six have been partially achieved (Secretariat of the Convention on Biological Diversity, 2020). As new global biodiversity policies, such as the post-2020 Global Biodiversity Framework (Convention on Biological Diversity, 2020), are now being developed internationally, it is crucial to rethink how to develop more effective strategies. A question may arise: can and should there be global conservation ethics?

In this article we argue that, instead of searching for universal “silver-bullet” solutions to biodiversity loss and for unified standards for settling all conflicts, both justice and long-term effectiveness in conservation necessitate embracing ethical pluralism. In addition, the

recognition of plural, sometimes incommensurable values, ethical principles and knowledge systems is necessary for fostering justice. Recognition, as respect for different valuations and worldviews and their connections with various biodiversity-influencing practices provides opportunities to co-learn from and improve the existing practices and sustainable human-nature relations. A pluralist vision does not prevent from finding common conceptual ground, by sharing understanding of global biodiversity crisis and the need for conservation actions considering both humans and non-humans, across different cultures. This kind of common conceptual ground could, in our view, create the basis for developing global conservation ethics, without assuming its details to be the same across the different contexts and times.

The global conservation movement is divided on the ultimate reason of why and how we should conserve biodiversity (Büscher et al., 2017; Sandbrook et al., 2019). While its underpinning rationalities are evolving over time (Mace, 2014), divergent and opposite positions may arise when operational decisions should be made in policy-making involving a variety of stakeholders. Ignoring the ethical perspectives of stakeholders, including conservation science researchers, may lead to the proposal and implementation of illegitimate and ineffective policies (Martin et al., 2016; Meinard, 2017). Pluralism provides opportunities for accounting for ethical positions, integrating diverse people-people relations (e.g., institutions, power dynamics, social justice) with people-nature relations to widen the debate around conservation actions, ethics and well-being (Betley et al., 2022; Meinard, 2017). However, global sustainability and biodiversity conservation policies have been mostly formulated from morally anthropocentric perspectives (Moon and Pérez-Hämmerle, 2022; Washington et al., 2021). Designing and implementing a set of plural policies conceived beyond a single-species focus (e.g., beyond people-nature dualisms) is crucial to overcome anthropocentrism and to recognise the value of biodiversity for the sake of non-human nature itself, not only for the sake of human well-being and prosperity (Kortetmäki et al., 2021). This can also be seen as to promote a more sustainable integration of some of the concerns of social and ecological justice (Kopinina and Washington, 2020). Promising examples proving ground for ethical pluralism are emerging, such as the biocultural (Hanspach et al., 2020; Rozzi, 2013), convivial (Büscher and Fletcher, 2019; Massarella et al., 2021) and relational approaches to conservation (Himes and Muraca, 2018; West et al., 2020). These approaches are being co-produced, adopted and debated by diverse stakeholder groups (e.g. academics, social movements, policymakers) to increasingly represent, interpret and shape human and non-human dimensions in complex social-ecological systems. Grounding ethical pluralism on insights from environmental justice and environmental pragmatism would help to identify ways in which we might live with other humans and non-humans in a diverse world.

Declaration of competing interest

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

Data availability

No data was used for the research described in the article.

Acknowledgements

G.C.C, A.H., and E.D.M. thank the European Research Council (ERC) for funding under the European Union's Horizon 2020 research and innovation program (grant agreement #802933). G.C.C thanks the National Research and Innovation Agency, Uruguay (grant number POS-EXT_2015_1_123575). A.H. thanks the Mai and Tor Nessling Foundation (grant number 202200342). The authors are grateful to the editor and to

the anonymous reviewers for an interesting and constructive review process.

References

- Arras, J.D., 2002. Pragmatism in bioethics: been there, done that. *Soc. Philos. Policy* 19, 29–57. <https://doi.org/10.1017/S0265052502192028>.
- Baard, P., 2022. *Ethics in Biodiversity Conservation*. Routledge.
- Batavia, C., Nelson, M.P., 2017. Heroes or thieves? The ethical grounds for lingering concerns about new conservation. *J. Environ. Stud. Sci.* 7, 394–402. <https://doi.org/10.1007/s13412-016-0399-0>.
- Beauchamp, T.L., Childress, J.F., 2019. *Principles of Biomedical Ethics*. Oxford University Press, New York, USA.
- Berg, M., Lidskog, R., 2018. Pathways to deliberative capacity: the role of the IPCC. *Clim. Chang.* 148, 11–24. <https://doi.org/10.1007/s10584-018-2180-8>.
- Betley, E.C., Sigouin, A., Pascua, P., Cheng, S.H., MacDonald, K.I., Arengo, F., Aumeeruddy-Thomas, Y., Caillon, S., Isaac, M.E., Jupiter, S.D., Mawyer, A., Mejia, M., Moore, A.C., Renard, D., Sébastien, L., Gazit, N., Sterling, E.J., 2022. Assessing human well-being constructs with environmental and equity aspects: a review of the landscape. *People Nat.* 00, 1–18. <https://doi.org/10.1002/pan3.10293>.
- Biermann, F., Hickmann, T., Sènit, C.-A., Beisheim, M., Bernstein, S., Chasek, P., Grob, L., Kim, R.E., Kotzé, L.J., Nilsson, M., Ordóñez Llanos, A., Okereke, C., Pradhan, P., Raven, R., Sun, Y., Vijge, M.J., van Vuuren, D., Wicke, B., 2022. Scientific evidence on the political impact of the sustainable development goals. *Nat. Sustain.* 1–6. <https://doi.org/10.1038/s41893-022-00909-5>.
- Brand-Correa, L.I., Steinberger, J.K., 2017. A framework for decoupling human need satisfaction from energy use. *Ecol. Econ.* 141, 43–52. <https://doi.org/10.1016/j.ecolecon.2017.05.019>.
- Brush, E., 2020. Inconvenient truths: pluralism, pragmatism, and the need for civil disagreement. *J. Environ. Stud. Sci.* 10, 160–168. <https://doi.org/10.1007/s13412-020-00589-7>.
- Büscher, B., Fletcher, R., 2019. Towards convivial conservation. *Conserv. Soc.* 17, 283. <https://doi.org/10.4103/cs.cs.19.75>.
- Büscher, B., Fletcher, R., Brockington, D., Sandbrook, C., Adams, W.M., Campbell, L., Corson, C., Dressler, W., Duffy, R., Gray, N., Holmes, G., Kelly, A., Lunstrum, E., Ramutsindela, M., Shanker, K., 2017. Half-earth or whole earth? Radical ideas for conservation, and their implications. *Oryx* 51, 407–410. <https://doi.org/10.1017/S003065316001228>.
- Caniglia, G., Luederitz, C., von Wirth, T., Fazey, I., Martín-López, B., Hondrila, K., König, A., von Wehrden, H., Schöpke, N.A., Laubichler, M.D., Lang, D.J., 2021. A pluralistic and integrated approach to action-oriented knowledge for sustainability. *Nat. Sustain.* 4, 93–100. <https://doi.org/10.1038/s41893-020-00616-z>.
- Cetas, E.R., Yasué, M., 2016. A systematic review of motivational values and conservation success in and around protected areas. *Conserv. Biol.* 31, 203–212. <https://doi.org/10.1111/cobi.12770>.
- Chapman, M., Satterfield, T., Chan, K.M.A., 2019. When value conflicts are barriers: can relational values help explain farmer participation in conservation incentive programs? *Land Use Policy* 82, 464–475. <https://doi.org/10.1016/j.landusepol.2018.11.017>.
- Coals, P., Burnham, D., Loveridge, A., Macdonald, D.W., 'T Sas-Rolfes, M., Williams, V.L., Vucetich, J.A., 2019. The ethics of human-animal relationships and public discourse: A case study of lions bred for their bones. *Animals* 9, 52. <https://doi.org/10.3390/ani9020052>.
- Colloff, M.J., Lavorel, S., van Kerkhoff, L.E., Wyborn, C.A., Fazey, I., Gorrard, R., Mace, G.M., Foden, W.B., Dunlop, M., Prentice, I.C., Crowley, J., Leadley, P., Degeorges, P., 2017. Transforming conservation science and practice for a postnormal world. *Conserv. Biol.* 31, 1008–1017. <https://doi.org/10.1111/COBI.12912>.
- Convention on Biological Diversity, 2020. *ZeroDraft of the Post-2020 Global Biodiversity Framework*. Kunming, China.
- Coolsaet, B., 2021. *Environmental Justice; Key Issues, Key issues in Environment and Sustainability*. Routledge, New York, USA.
- Cortés-Capano, G., Toivonen, T., Soutullo, A., Fernández, A., Dimitriadis, C., Garibotto-Carton, G., Di Minin, E., 2020. Exploring landowners' perceptions, motivations and needs for voluntary conservation in a cultural landscape. *People Nat.* 2. <https://doi.org/10.1002/pan3.10122>.
- Díaz, S., Settele, J., Brondizio, E.S., Ngo, H.T., Agard, J., Arneth, A., Balvanera, P., Brauman, K.A., Butchart, S.H.M., Chan, K.M.A., Garibaldi, L.A., Ichii, K., Liu, J., Subramanian, S.M., Midgley, G.F., Miloslavich, P., Molnár, Z., Obura, D.O., Pfaff, A., Polasky, S., Purvis, A., Razaque, J., Reyers, B., Chowdhury, R.R., Shin, Y.-J., Visseren-Hamakers, I., Willis, K., Zayas, C.N., 2019. Pervasive human-driven decline of life on earth points to the need for transformative change. *Science* 1327. <https://doi.org/10.1126/science.aaw3100>.
- Díaz, S., Zafra-Calvo, N., Purvis, A., Verburg, P.H., Obura, D., Leadley, P., Chaplin-Kramer, R., De Meester, L., Dulloo, E., Martín-López, B., Shaw, M.R., Visconti, P., Broadgate, W., Bruford, M.W., Burgess, N.D., Cavender-Bares, J., DeClerck, F., Fernández-Palacios, J.M., Garibaldi, L.A., Hill, S.L.L., Isbell, F., Khoury, C.K., Krug, C.B., Liu, J., Maron, M., McGowan, P.J.K., Pereira, H.M., Reyes-García, V., Rocha, J., Rondinini, C., Shannon, L., Shin, Y.J., Snelgrove, P.V.R., Spehn, E.M., Strassburg, B., Subramanian, S.M., Tewksbury, J.J., Watson, J.E.M., Zanne, A.E., 2020. Set ambitious goals for biodiversity and sustainability. *Science (New York, N. Y.)* 370, 411–413. <https://doi.org/10.1126/science.abe1530>.

- Díaz-Reviriego, I., Turnhout, E., Beck, S., 2019. Participation and inclusiveness in the intergovernmental science-policy platform on biodiversity and ecosystem services. *Nat. Sustain.* 2, 457–464. <https://doi.org/10.1038/s41893-019-0290-6>.
- Dickman, A., Johnson, P.J., van Kesteren, F., Macdonald, D.W., 2015. The moral basis for conservation: how is it affected by culture? *Front. Ecol. Environ.* 13, 325–331. <https://doi.org/10.1890/140056>.
- Dietz, T., Fitzgerald, A., Shwom, R., 2005. Environmental values. *Annu. Rev. Environ. Resour.* 30, 335–372. <https://doi.org/10.1146/annurev.energy.30.050504.144444>.
- Duffy, R., Massé, F., Smidt, E., Marijnen, E., Büscher, B., Verweijen, J., Ramutsindela, M., Simlai, T., Joanny, L., Lunstrum, E., 2019. Why we must question the militarisation of conservation. *Biol. Conserv.* 232, 66–73. <https://doi.org/10.1016/j.biocon.2019.01.013>.
- Elliott, K.C., 2020. Framing conservation: 'biodiversity' and the values embedded in scientific language. *Environ. Conserv.* 47, 260–268. <https://doi.org/10.1017/S0376892920000302>.
- Ellis, E.C., Pascual, U., Mertz, O., 2019. Ecosystem services and nature's contribution to people: negotiating diverse values and trade-offs in land systems. *Curr. Opin. Environ. Sustain.* 38, 86–94. <https://doi.org/10.1016/j.cosust.2019.05.001>.
- Fabinyi, M., Evans, L., Foale, S.J., 2014. Social-ecological systems, social diversity, and power: insights from anthropology and political ecology. *Ecol. Soc.* 19 <https://doi.org/10.5751/ES-07029-190428>.
- Fayemi, A.K., 2021. Reconsidering solidarity in an african modified principlism. *S. Afr. J. Bioeth. Law* 14, 50–54. <https://doi.org/10.7196/SAJBL.2021.v14i2.744>.
- Fieser, J., 2021. *Ethics*. In: *The Internet Encyclopedia of Philosophy*.
- Flynn, J., 2021. *Theory and bioethics* [WWW document]. In: *The Stanford Encyclopedia of Philosophy*. (Accessed 1 February 2022).
- Fraser, D., 2012. A "Practical" ethic for animals. *J. Agric. Environ. Ethics* 25, 721–746.
- Gairola, S.U., 2020. Review article on relation between hinduism and environment - a vedic approach. *Asian J. Environ. Ecol.* 13, 19–25. <https://doi.org/10.9734/ajee/2020/v13i330183>.
- Galston, W.A., 1999. Value pluralism and Liberal political theory. *Am. Polit. Sci. Rev.* 93, 769–778. <https://doi.org/10.2307/2586111>.
- Ghasemi, B., 2021. Trophy hunting and conservation: do the major ethical theories converge in opposition to trophy hunting? *People Nat.* 3, 77–87. <https://doi.org/10.1002/pan3.10160>.
- Gudynas, E., 2011. Buen Vivir: today's tomorrow. *Development* 54, 441–447. <https://doi.org/10.1057/dev.2011.86>.
- Hanspach, J., Jamila Haider, L., Oteros-Rozas, E., Stahl Olafsson, A., Gulsrud, N.M., Raymond, C.M., Torralba, M., Martín-López, B., Bieling, C., García-Martín, M., Albert, C., Beery, T.H., Fagerholm, N., Díaz-Reviriego, I., Drews-Shambroom, A., Plieninger, T., 2020. Biocultural approaches to sustainability: a systematic review of the scientific literature. *People Nat.* 2, 643–659. <https://doi.org/10.1002/pan3.10120>.
- Himes, A., Muraca, B., 2018. Relational values: the key to pluralistic valuation of ecosystem services. *Curr. Opin. Environ. Sustain.* 35, 1–7. <https://doi.org/10.1016/j.cosust.2018.09.005>.
- Hinman, L.M., 2007. *Ethics: A Pluralistic Approach to Moral Theory*.
- Hourdequin, M., 2015. *Environmental Ethics: From Theory to Practice*. Bloomsbury Publishing.
- Hurlbert, M., Gupta, J., 2015. The split ladder of participation: a diagnostic, strategic, and evaluation tool to assess when participation is necessary. *Environ. Sci. Pol.* 50, 100–113. <https://doi.org/10.1016/j.envsci.2015.01.011>.
- James, W., 1977. *A Pluralistic Universe*. Harvard University Press, Cambridge.
- Kadykalo, A.N., Cooke, S.J., Young, N., 2021. The role of western-based scientific, indigenous and local knowledge in wildlife management and conservation. *People Nat.* 00, 1–17. <https://doi.org/10.1002/pan3.10194>.
- Kashwan, P., Duffy, R.V., Massé, F., Asiyani, A.P., Marijnen, E., 2021. From racialized neocolonial global conservation to an inclusive and regenerative conservation. *Environ. Sci. Policy Sustain. Dev.* 63, 4–19. <https://doi.org/10.1080/00139157.2021.1924574>.
- Katz, E., Light, A., 2013. *Environmental Pragmatism, Environmental Pragmatism*. Routledge, London. <https://doi.org/10.4324/9780203714140>.
- Kenter, J.O., O'Brien, L., Hockley, N., Ravenscroft, N., Fazey, I., Irvine, K.N., Reed, M.S., Christie, M., Brady, E., Bryce, R., Church, A., Cooper, N., Davies, A., Evely, A., Everard, M., Fish, R., Fisher, J.A., Jobstvogt, N., Molloy, C., Orchard-Webb, J., Ranger, S., Ryan, M., Watson, V., Williams, S., 2015. What are shared and social values of ecosystems? *Ecol. Econ.* 111, 86–99. <https://doi.org/10.1016/j.ecolecon.2015.01.006>.
- Kopinna, H., Washington, H., 2020. *Conservation: Integrating Social and Ecological Justice*. Springer Nature Switzerland, Switzerland.
- Kopinna, H., Washington, H., Gray, J., Taylor, B., 2018. The 'future of conservation' debate: defending ecocentrism and the nature needs half movement. *Biol. Conserv.* 217, 140–148. <https://doi.org/10.1016/j.biocon.2017.10.016>.
- Kortetmäki, T., 2018. Can species have capabilities, and what if they can? *J. Agric. Environ. Ethics* 31, 307–323. <https://doi.org/10.1007/s10806-018-9726-7>.
- Kortetmäki, T., Puurtinen, M., Salo, M., Aro, R., Baumeister, S., Duflot, R., Elo, M., Halme, P., Husu, H.-M., Huttunen, S., Hyvönen, K., Karkulehto, S., Kataja-aho, S., Keskinen, K.E., Kulmunkki, I., Mäkinen, T., Näyhä, A., Okkolin, M.-A., Perälä, T., Purhonen, J., Raatikainen, K.J., Raippalinnä, L.-M., Salonen, K., Savolainen, K., Kotiaho, J.S., 2021. Planetary well-being. *Humanities and Social Sciences Communications* 8 (1), 1–8. <https://doi.org/10.1057/s41599-021-00899-3>, 2021 8.
- Kothari, A., Salleh, A., Escobar, A., Demaria, F., Acosta, A., 2019. *Pluriverse: A Post-development Dictionary*. Tulika Books, New Delhi, India.
- Latulippe, N., Klenk, N., 2020. Making room and moving over: knowledge co-production, indigenous knowledge sovereignty and the politics of global environmental change decision-making. *Curr. Opin. Environ. Sustain.* 42, 7–14. <https://doi.org/10.1016/j.cosust.2019.10.010>.
- Lecaros Urzúa, J.A., López Gaete, G., 2018. Making environmental ethics more practical: a model of principlism. *J. Appl. Ethics* 9, 95–116.
- Mabele, M.B., Krauss, J.E., Kiwango, W., 2022. Going Back to the roots: Ubuntu and just conservation in southern Africa. *Conserv. Soc.* 20, 92. <https://doi.org/10.4103/cs.cs.33.21>.
- Mace, G.M., 2014. Whose conservation? *Science* 345, 1558–1560.
- Martin, A., Armijos, M.T., Coolsaet, B., Dawson, N., Edwards, G.A.S., Few, R., Gross-Camp, N., Rodriguez, I., Schroeder, H., Tebboth, M.G.L., White, C.S., 2020. Environmental justice and transformations to sustainability. *Environment* 62, 19–30. <https://doi.org/10.1080/00139157.2020.1820294>.
- Martin, A., Coolsaet, B., Corbera, E., Dawson, N.M., Fraser, J.A., Lehman, I., Rodriguez, I., 2016. Justice and conservation: the need to incorporate recognition. *Biol. Conserv.* 197, 254–261. <https://doi.org/10.1016/j.biocon.2016.03.021>.
- Martinez-Alier, J., 2021. Mapping ecological distribution conflicts: the EJAtlas. *Extr. Ind. Soc.* 8, 100883 <https://doi.org/10.1016/J.EXIS.2021.02.003>.
- Massarella, K., Nygren, A., Fletcher, R., Büscher, B., Kiwango, W.A., Komi, S., Krauss, J.E., Mabele, M.B., McInturff, A., Sandroni, L.T., Alagona, P.S., Brockington, D., Coates, R., Duffy, R., Ferraz, K.M.P.M.B., Koot, S., Marchini, S., Percequillo, A.R., 2021. Transformation beyond conservation: how critical social science can contribute to a radical new agenda in biodiversity conservation. *Curr. Opin. Environ. Sustain.* 49, 79–87. <https://doi.org/10.1016/j.cosust.2021.03.005>.
- Matulis, B.S., Moyer, J.R., 2017. Beyond inclusive conservation: the value of pluralism, the need for agonism, and the case for social instrumentalism. *Conserv. Lett.* 10, 279–287. <https://doi.org/10.1111/conl.12281>.
- Max-Neef, M.A., 1991. *HumanScale Development: Conception, Application and Further Reflections*. The Apex Press, New York.
- McConnell, T., 2018. *Moral dilemmas*. In: *The Stanford Encyclopedia of Philosophy*.
- Meinard, Y., 2017. What is a legitimate conservation policy? *Biol. Conserv.* 213, 115–123. <https://doi.org/10.1016/j.biocon.2017.06.042>.
- Milgin, A., Nardea, L., Grey, H., Laborde, S., Jackson, S., 2020. Sustainability crises are crises of relationship: learning from Nyikina ecology and ethics. *People Nat.* 2, 1210–1222. <https://doi.org/10.1002/pan3.10149>.
- Moon, K., Pérez-Hämmerle, K.-V., 2022. Inclusivity via ontological accountability. *Conservation Letters*, e12888. <https://doi.org/10.1111/conl.12888> n/a.
- Mouffe, C., 1999. Deliberative democracy or agonistic pluralism? *Soc. Res.* 66, 745–758.
- Norton, B.G., 1994. *TowardUnity Among Environmentalists*. Oxford University Press, Oxford.
- Nussbaum, M.C., 2011. *CreatingCapabilities: The Human Development Approach*. Harvard University Press.
- Nussbaum, M.C., 2006. *Frontiersof Justice: Disability, Nationality, Species Membership*. Harvard University Press, Cambridge, MA.
- O'Neill, J., Holland, A., Light, A., 2007. Environmental values. In: *Environmental Values*. Routledge. <https://doi.org/10.4324/9780203495452/ENVIRONMENTAL-VALUE-S-JOHN-NEILL-ALAN-HOLLAND-ANDREW-LIGHT>.
- Pascual, U., Adams, W., Díaz, S., Lele, S., Mace, G.M., Turnhout, E., 2021. Biodiversity and the challenge of pluralism. *Nat. Sustain.* <https://doi.org/10.1038/s41893-021-00694-7>.
- Pateron, B., 2006. Ethics for wildlife conservation: overcoming the human-nature dualism. *Bioscience* 56, 144–150. [https://doi.org/10.1641/0006-3568\(2006\)056\[0144:EFWCOT\]2.0.CO;2](https://doi.org/10.1641/0006-3568(2006)056[0144:EFWCOT]2.0.CO;2).
- Raghour, P., 2016. Locating care ethics beyond the global north. *ACME Int. J. Crit. Geogr.* 15, 511–533.
- Rawluk, A., Ford, R., Anderson, N., Williams, K., 2019. Exploring multiple dimensions of values and valuing: a conceptual framework for mapping and translating values for social-ecological research and practice. *Sustain. Sci.* 14, 1187–1200. <https://doi.org/10.1007/s11625-018-0639-1>.
- Reed, M.S., Vella, S., Challies, E., de Vente, J., Frewer, L., Hohenwallner-Ries, D., Huber, T., Neumann, R.K., Oughton, E.A., Sidoli del Ceno, J., van Delden, H., 2018. A theory of participation: what makes stakeholder and public engagement in environmental management work? *Restor. Ecol.* 26, S7–S17. <https://doi.org/10.1111/rec.12541>.
- Robinson, J.G., 2011. Ethical pluralism, pragmatism, and sustainability in conservation practice. *Biol. Conserv.* 144, 958–965. <https://doi.org/10.1016/j.biocon.2010.04.017>.
- Rolston, H., 1985. Duties to endangered species. *Bioscience* 35, 718–726. <https://doi.org/10.2307/1310053>.
- Rozzi, R., 2013. Biocultural ethics: from biocultural homogenization toward biocultural conservation. In: *Linking Ecology and Ethics for a Changing World: Values, Philosophy, and Action*. Springer, Netherlands, pp. 9–32. https://doi.org/10.1007/978-94-007-7470-4_2.
- Sandbrook, C., Fisher, J.A., Holmes, G., Luque-Lora, R., Keane, A., 2019. The global conservation movement is diverse but not divided. *Nat. Sustain.* 2, 316–323. <https://doi.org/10.1038/s41893-019-0267-5>.
- Sandler, R.L., 2009. *Characterand Environment: A Virtue-oriented Approach to Environmental Ethics*. Columbia University Press, New York, USA.
- Schlosberg, D., 2013. Theorising environmental justice: the expanding sphere of a discourse. *Environ. Polit.* 22, 37–55. <https://doi.org/10.1080/09644016.2013.755387>.
- Schlosberg, D., 2007. *Defining Environmental Justice: Theories, Movements, and Nature, Defining Environmental Justice: Theories, Movements, and Nature*. Oxford University Press. <https://doi.org/10.1093/ACPROF/OSO/9780199286294.001.0001>.
- Schlosberg, D., 1999. *Environmental Justice and the New Pluralism*. Oxford University Press, New York.

- Secretariat of the Convention on Biological Diversity, 2020. *Global Biodiversity Outlook 5*. Quebec, Canada.
- Shafer-Landau, R., 2019. *Living Ethics: An Introduction With Readings*. Oxford University Press, New York, USA.
- Soulé, M.E., 1985. In: *What Is Conservation Biology?*, 35, pp. 727–734.
- Taylor, B., Chapron, G., Kopnina, H., Orlikowska, E., Gray, J., Piccolo, J.J., 2020. The need for ecocentrism in biodiversity conservation. *Conserv. Biol.* 34, 1089–1096. <https://doi.org/10.1111/cobi.13541>.
- Thomas-Walters, L., Cheung, H., Lee, T.M., Wan, A.K.Y., Wang, Y., 2020. Targeted values: the relevance of classical Chinese philosophy for illegal wildlife demand reduction campaigns. *People and Nature*, pan3.10127. <https://doi.org/10.1002/pan3.10127>.
- Trisos, C.H., Auerbach, J., Katti, M., 2021. Decoloniality and anti-oppressive practices for a more ethical ecology. *Nature Ecology & Evolution* 5 (9), 1205–1212. <https://doi.org/10.1038/s41559-021-01460-w>.
- Turnhout, E., Metzke, T., Wyborn, C., Klenk, N., Louder, E., 2020. The politics of co-production: participation, power, and transformation. *Curr. Opin. Environ. Sustain.* 42, 15–21. <https://doi.org/10.1016/j.cosust.2019.11.009>.
- Washington, H., Piccolo, J., Gomez-Baggethun, E., Kopnina, H., Alberro, H., 2021. The trouble with anthropocentric hubris, with examples from conservation. *Conservation* 1, 285–298. <https://doi.org/10.3390/conservation1040022>.
- West, S., Haider, L.J., Stålhammar, S., Woroniecki, S., 2020. A relational turn for sustainability science? Relational thinking, leverage points and transformations. *Ecosyst. People* 16, 304–325. <https://doi.org/10.1080/26395916.2020.1814417>.
- Wienhues, A., 2020. *Ecological Justice and the Extinction Crisis: Giving Living Beings Their Due, Ecological Justice and the Extinction Crisis*. Bristol University Press.
- Zafra-Calvo, N., Balvanera, P., Pascual, U., Merçon, J., Martín-López, B., van Noordwijk, M., Mwampamba, T.H., Lele, S., Ifejika Speranza, C., Arias-Arévalo, P., Cabrol, D., Cáceres, D.M., O'Farrell, P., Subramanian, S.M., Devy, S., Krishnan, S., Carmenta, R., Guibrunet, L., Kraus-Elsin, Y., Moersberger, H., Cariño, J., Díaz, S., 2020. Plural valuation of nature for equity and sustainability: insights from the global south. *Glob. Environ. Chang.* 63, 102115 <https://doi.org/10.1016/j.gloenvcha.2020.102115>.