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People and Nature

PERSPECTIVE

Expanding the life framework of values

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Abstract

1. Conceptualising and organising the range of value orientations and worldviews underpinning human–nature relationships is useful for understanding different, and sometimes conflicting, perspectives on how nature should be managed and working towards just and equitable policies.
2. We test the applicability and current scope of the *Life Framework of Values* (*living from-*, *living in-*, *living with-* and *living as-nature*) by aligning it with pre-existing literature, drawn heavily from the context of wildlife management and conservation, but with wider relevance.
3. Pre-existing value categorisations align with the *Life Framework of Values* in accounting for instrumental, relational and intrinsic values of nature. However, the framework does not account for the multiple ways in which people may be considered as *living against-*, *living separated from-* and *living disconnected from-/living indifferently to-nature*. By first considering these additional worldviews, we then propose the introduction of a complimentary overarching *living apart from nature* value frame.
4. We identify three pathways by which people may fall within the *living apart from nature* frame: (1) loving nature so deeply that you choose to separate yourself from it (*living separated from nature*), (2) disregarding nature to the extent that you are willing to destroy it (*living against nature*) and (3) becoming indifferent or disconnected, a state that can emerge from modern urban lifestyles (*living disconnected from-/living indifferently to-nature*).
5. *Synthesis and applications*. Including the *living apart from nature* frame to the Life Framework of Values allows for a more realistic and complete view of the diversity of human–nature interactions thus helping it contribute to addressing

the global biodiversity crisis and transforming societies towards more sustainable pathways. Future research should focus on empirically testing the extent to which people fit discretely and consistently into Life Frames or worldviews as opposed to simultaneously holding diverse positions on different specific issues.

KEYWORDS
conservation conflict, human–nature interactions, relational value, socio-ecological conflict, worldview

1 | INTRODUCTION

Understanding the diverse values that underpin human relationships with nature is crucial for developing functional policies to address the global biodiversity crisis (IPBES, 2022). Many researchers have attempted to conceptualise the diversity of values people associate with nature. While such frameworks often lack empirical testing, they are useful ways of providing a heuristic or conceptual overview of the complexity of human–nature interactions. O'Connor and Kenter (2019), Kenter and O'Connor (2022) and IPBES (2022) recently introduced the *Life Framework of Values*, a new integrative typology that delineates nature's values into four interrelated and overarching *life frames*. These reflect anthropocentric worldviews, highlighting the direct benefits nature provides to human livelihoods (*living from*-, *living in*-nature), as well as ecocentric and pluricentric understandings of the world expressing more mutually beneficial human–nature relationships (*living with*-, *living as*-nature). These *Life Frames of Value* and similar frameworks (e.g. O'Neill et al., 2007; Pascual et al., 2023) not only help conceptualise and organise values into broader categories but are also crucial in developing targeted and contextualised strategies to address the global biodiversity crisis and transform societies towards more sustainable pathways (Pascual et al., 2023).

Given its potential for understanding the root causes of wicked conservation problems and socio-environmental conflicts, evaluating the applicability of the *Life Framework of Values* is useful to assess its current scope and its suitability. Oftentimes, socio-environmental conflicts, such as 'human–wildlife conflicts' (e.g. carnivores preying on livestock) or 'conservation versus economic development conflicts' (e.g. transforming pristine forest into pasture or cropland) are not merely about access to or competition over resources (Redpath et al., 2013). Most often, these clashes are also deeply rooted in divergent values, meanings attached to place, and worldviews (Özkaynak et al., 2023). In these scenarios, shared understandings are often missing. Instead, different interest groups, be they conservationists, local communities, economic entities, or policy makers, may hold divergent interests, values and non-compatible beliefs about what should or should not be done. If managed poorly, ignored or simply not understood, these situations can escalate quickly, leading to entrenched positions, leaving no outlook for agreeable consensus decisions (Redpath et al., 2013). Exploring and understanding the range of human worldviews that influence decision-making in these settings allows for uncovering the roots of socio-environmental conflicts—a key prerequisite for working towards just and equitable solutions that acknowledge and represent the diverse worldviews at play. In this paper, we aim to explore to what extent the recently proposed *Life Framework of Values* dimensions align with pre-existing literature, how the life value frames interrelate with one another and identify any missing elements. The *Life Framework of Values* is the most influential tool for understanding nature's values to have been developed in recent years, having been widely discussed throughout the literature as well as adopted in practice within the work of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (Harmáčková et al., 2022; Luque-Lora, 2024). Our perspective paper emerges from several interdisciplinary discussions held within the TransWILD (Transformative wildlife management to enhance biodiversity protection and ecosystem services provision in shared and protected multi-use landscapes across Europe) project. As a team of researchers whose professional entry point is from the perspective of wildlife management, wildlife conservation and human–wildlife conflict, we noticed that the *Life Framework of Values* did not fully capture some aspects, which are mentioned in other conceptual frameworks widely used in our field (e.g. Blanco et al., 2019; Ceauşu et al., 2019; IUCN, 2023). These discussions, grounded in our professional experience and previous knowledge of nature valuation and human–nature interactions, gleaned from decades of working in multiple European, Asian and African countries, formed the basis for this perspective piece. The selection of literature was not the result of a systematic review, but rather of an iterative process during which literature was brought forward by individual team members based on familiarity and relevance, collectively discussed and integrated to refine our perspective.

2 | UNPACKING THE FRAMES

The concept of 'value' is one of the most ubiquitous terms in the social sciences, but with different definitions and connotations in the fields of philosophy, psychology, sociology, human geography, social economics and anthropology. Value concepts in different shapes and forms have been widely applied to human–nature research (e.g. Heberlein, 2012; Manfredo, 2008). Broadly speaking, social science research has often viewed values as fundamental and dominating forces shaping a person's life, value orientations as concepts of

humanity's role and place in nature, and both as operational criteria that guide people's decision-making and actions. For the purpose of this paper, there is reasonable consensus that values are human beliefs that have a cognitive, affective and behavioural component (Schwartz, 2012). Furthermore, they may be intangible, implicit, difficult to express, unstated and poorly represented in policy processes (Chan et al., 2012). Within the IPBES framework, 'value' encompasses various interpretations and constructs: as a principle linked to a specific worldview or cultural context, as an individual's or community's preference for a particular state of the world, as the significance of something for itself or for others, or simply as a measure of material worth (IPBES, 2022).

The IPBES framework develops through a cognitive hierarchy in which (1) 'life frames' represent the overarching dimensions through which we can understand and interpret human–nature relationships, (2) 'worldviews' reflect the broader cultural and epistemic lenses through which humans understand the natural world, (3) 'broad values' represent moral principles and orientations towards the natural world, (4) 'specific values' capture more context-dependent instrumental, intrinsic or relational values concerning the importance of the natural world and (5) 'value indicators' provide qualitative and quantitative measurements of specific values (Pascual et al., 2023). This conceptual structure echoes that of previous frameworks and other scholarship traditions where abstract components (e.g. worldviews) gradually trickle down into more observable elements (e.g. value indicators). In social-psychology (e.g. Fulton et al., 1996; Ross et al., 2018; Teel & Manfredo, 2010), for example, 'values' and 'value orientations' (i.e. basic belief patterns) shape the more specific and tangible 'attitudes', 'norms', 'behavioural intentions' and actual 'behaviours'. Although not directly comparable, 'worldviews' from the IPBES framework and 'value-orientations' from the social-psychology tradition act as higher-order principles through which people understand their place in the world and their relationship with nature. From a psychological/anthropological perspective, the relational model theory similarly explains how people organise, interpret and regulate their social relationships, and it identifies four elementary psychological models (i.e. communal sharing, authority ranking, equality matching and market pricing) through which human social life can be comprehensively understood (Fiske, 1992). When extended to human-nature relationships (e.g. Muradian & Pascual, 2018), these relational models act as culturally grounded frames which broadly organise the ways in which human society understands and interacts with the natural world. Although these cognitive hierarchies differ in scope and emphasis, they hold a shared understanding that human–nature relationships are shaped by layered structures, which guide how values are formed, articulated, and manifested. Crucially, they help us situate the *Life Framework of Values* within a broader landscape of scholarship concerned with how worldview and value typologies operate at multiple levels of abstraction (see Appendix A for definitions).

Among the four life frames proposed by O'Connor and Kenter (2019) and IPBES (2022), *living from nature* refers to valuing nature for its contributions to human livelihoods, mainly accounting for instrumental values (e.g. food and energy) as well as the relational values through which a preferred quality of life is sustained (e.g. life support value, cultural meaning). Accordingly, the *living from nature* frame is largely reflective of the value typologies captured through sustainable use, classical ecosystem services and total economic value approaches. However, the cultural value of nature represented in the *living from nature* frame requires further examination and differentiation between the relational values derived from consumptive activities and those relational values extracted through non-consumptive activities. This difference is captured through *living in nature*, which additionally frames the natural environment as a contributor to the development of non-consumptive values such as a sense of place, identity and heritage. Importantly, this life frame acknowledges the experiential dimensions through which people culturally inhabit landscapes and actively co-create and express place-based meanings. The *living from-* and *living in*-nature frames are compounded by worldviews in which nature's 'services' are viewed as assets which must be safeguarded. The stewardship and safeguarding of nature, which are embodied by the *living with nature* frame, do not stem solely from the desire or need to preserve the integrity of natural resources for secured and sustained human use. Instead, *living with nature* also encompasses the intrinsic value of nature and the idea that the natural world, regarded as other-than-human, is entitled to the same agency and right to prosper as human beings. This dimension is often associated with a sense of care, stewardship or responsibility towards nature. Such pluricentric and non-utilitarian visions of nature find their further extension in the *living as nature* frame. While echoing *living with nature*, this fourth life frame embodies more profound connections between humans and the natural world, emphasising that humans are inseparable from nature, just as much a part of it as any other animal or living being. It often assumes that humans live—or should live—in balanced harmony with the ecosystems they inhabit. These connections are often represented through ideas of deep spiritual connections to nature and multispecies kinship, and are most frequently documented in non-Western traditions and cosmologies (IPBES, 2022; Kenter & O'Connor, 2022).

The *Life Framework of Values* echoes several other conceptual bases that have been established to understand and categorise nature value orientations (see Figure 1 and Appendix B), many of which are structured along the same instrumental-relational-intrinsic dimensions. For example, value typologies (derived from a social-psychology perspective) compiled by Kellert (Ross et al., 2018) in relation to wildlife, and then later extended to broader socio-ecological systems, constitute a cornerstone in the understanding of relational human–nature value flows. Kellert's typologies account for values underpinning physical human–nature relationships and different degrees of human consumption of nature ('dominionistic', 'utilitarian'); intellectual relationships with nature describing values such as knowledge, attraction and identity ('scientific', 'naturalistic', 'aesthetic', 'symbolic'); and emotional relationships stemming from more profound experiences and interpretations of nature ('humanistic', 'moralistic', 'spiritual') (Kellert, 1997). Additionally, Kellert lists

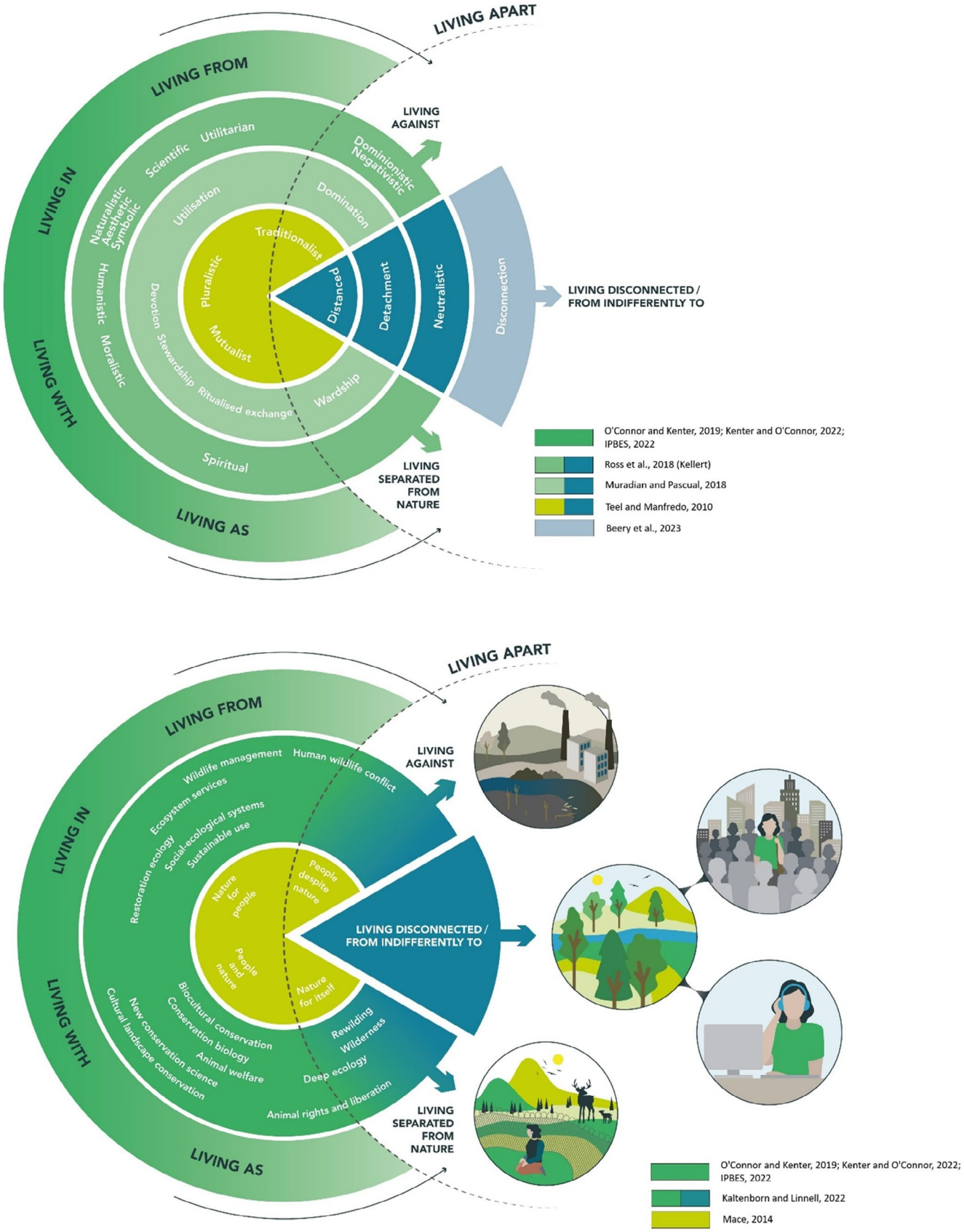

FIGURE 1 The figure at the top shows the alignment of pre-existing value typologies with the four frames of the *Life Framework of Values* proposed by IPBES and our proposal for a new, fifth life frame of people *living apart from nature*. The figure at the bottom shows how these life frames relate to existing conservation paradigms and research approaches (Kaltenborn & Linnell, 2022; Mace, 2014) and illustrates the different ways in which people can be located in the *living apart from nature* life frame.

two value typologies termed as 'neutralistic' and 'negativistic' which describe feelings of indifference and aversion towards the natural world, respectively (Ross et al., 2018). A similar categorisation is proposed by Muradian and Pascual (2018) who focus largely on unpacking relational value flows ('stewardship', 'devotion', 'ritualised exchange' and 'wardship'), while placing physical human-nature relationships under the relational models of 'domination' and 'utilisation'. Similarly to Kellert (1997), Muradian and Pascual (2018) introduce a seventh relational model, 'detachment', which describes indifference to non-human entities, largely attributed to a lack of direct experience with nature.

Different contributions to value theory deconstruct sub-sets of values to greater or lesser degrees. Some contributions adopt broader value categories to explain relational models, while others dissect broad value categories into more specific subsets. Teel and Manfredo (2010) propose a more comprehensive classification through the categories of 'traditionalism' and 'mutualism'. These describe a more exploitative vision of nature where human superiority is maintained, and the idea that humans and nature exist at the same hierarchical level, respectively. 'Pluralism' is subsequently introduced as a dimension which combines aspects from both former relational models, whereas 'distanced' is adopted to describe human relationships resulting from a feeling of indifference towards nature.

By examining nature conservation approaches and their underlying assumptions and philosophies throughout the 20th and 21st centuries, Mace (2014) indirectly provides a similar understanding to that of Teel and Manfredo (2010) in their presentation of the historical development of different conservation paradigms based on changing understandings of human–nature interactions. Relational models between humans and nature consist of the categories 'nature despite people', where conservation efforts play out in response to the idea that nature can and should be exploited for human use; 'nature for people', reflecting approaches to conservation where the pretext is to preserve healthy ecosystems and its services for sustained human use; 'nature for itself', which reflects conservation approaches that seek to protect nature by reducing human access or excluding people from it; and 'people and nature', which embodies the acknowledgement of more reciprocal human-nature relationships. Reyers and Bennett (2025) revisit Mace (2014) and mention that conservation strategies have moved even further from 'people and nature' towards a 'people with nature' approach with an expanded understanding of the interconnections between humans and wider nature.

These (and other) pre-existing typologies substantially align with the *Life Framework of Values* in disentangling the instrumental, relational and intrinsic values of nature, as well as ecocentric and pluricentric understandings of the natural world. Crucially, this diverse set of typologies underscores the fuzziness of the categories underlying human–nature values. It is therefore likely that people do not fit neatly into discrete categories. Instead, they are most likely to be distributed along gradients (likely to be multi-dimensional, see Lehnen et al., 2022), with a currently unmapped degree of variation across categories that may be context dependent. However, these other typologies also indicate that there are multiple ways in which people may feel apart from, disconnected from, hostile or indifferent to or totally removed from nature. Such orientations are not currently reflected in the *Life Framework of Values*, yet they likely represent a major portion of the modern, urbanised human population—a key interest group (Bastmeijer, 2011) that can influence policy.

3 | REFINING THE FRAMES: 'LIVING APART FROM NATURE' AND HOW WE GET THERE

Accounting for the full plurality of values and worldviews is important and has often been lacking in assessments of nature values. While considerable attention has been placed on nature's values and human connection to nature, the realm of nature's negative values and human disconnection has been comparatively overlooked in sustainability discourses (Beery et al., 2023), despite being frequently discussed in other disciplinary areas that stem from a more hands-on experience of actually managing human–nature interactions (e.g. Blanco et al., 2019; Ceauşu et al., 2019; IUCN, 2023) and identified by other authors (Bhatia et al., 2020; Lehnen et al., 2022; Luque-Lora, 2024).

While the *living from nature* frame certainly captures the instrumental value of nature, it falls short of reflecting the scale of resource use and the sets of values underpinning resource extraction, as well as other value orientations or worldviews, which drive human beings to be hostile to nature or actively seek to destroy it (or certain parts of it). These positions are, on the other hand, well represented in much of the preexisting literature through typologies such as 'dominionistic', 'negativistic' (Kellert, 1997; Ross et al., 2018), 'domination' (Muradian & Pascual, 2018), 'traditionalist' (Teel & Manfredo, 2010) and 'nature despite people' (Mace, 2014). The work of Wim Zweers particularly focuses on a section of these dimensions, where the author makes a distinction between the 'despot' and 'the enlightened despot' (Bastmeijer, 2011). These respectively embody (1) a human attitude to nature where human beings exploit nature with no restraint, and (2) a human attitude to nature where human beings exploit nature but do so with the conscience that they are dependent on it and must therefore exercise some degree of restraint in exploiting it.

Crucially, some value orientations or worldviews that currently fall under the *living from* nature frame can be driven by profoundly anthropocentric worldviews, by the perceived right to exploit (and overexploit) or modify nature and by the idea that humans are superior to the natural world. These narratives and worldviews are not only expressed by a desire to control the natural world (e.g. to reduce human–wildlife interactions by removing or controlling conflictful species, or converting habitats and ecosystems to agricultural production) but may also be embodied by more extreme emotions and attitudes such as antipathy, fear, aversion and intolerance (Castillo-Huitrón et al., 2020; Jacobs et al., 2014). Although these feelings may represent negative valuations of nature, they nonetheless

express meaningful human–nature relationships in which the natural world is important for people because it embodies a potential danger or barrier to their goals and wellbeing (e.g. safety, sustenance). We argue that these worldviews should be recognised as an own group, which we term as *living against nature*, or at least against some aspects or components of nature and placed outside of the existing *living from nature* frame (Figure 1).

Just as in the original life frames, there is much complexity to be accounted for when exploring negative values (or disservices) associated with nature. Feelings such as antipathy and aversion, often driven by fear, as mentioned when defining the *living against nature* frame, can also have other implications when explaining human–nature relationships (Castillo-Huitrón et al., 2020; Luque-Lora, 2024). These interpretations are addressed by Kellert's (1997) value orientation classification, in which feelings such as fear and aversion feed ideas that humans and nature are viewed as incompatible and should, therefore, live separately (Ross et al., 2018). The natural world may be viewed by people as inconvenient or out of place. For example, some may believe that there is no place for nature (e.g. wildlife) in urban environments, or that transcending planetary boundaries through human expansion into outer space and other technical fixes is essential for human progress. However, some other beliefs about humans and nature living separately may originate from extreme ideas about the intrinsic value of nature without humans or radical forms of animal ethics. These perspectives value nature so highly that they seek to exclude human interference in the lives of animals or in ecological processes, perceiving such human interference as inherently negative. These worldviews can be viewed as extreme forms of, or occupying the spectrum just beyond, the *living as nature* frame from the initial framework. Some elements of these are already found in other classifications through 'wardship' (Muradian & Pascual, 2018), and 'mutualist' (Teel & Manfredo, 2010), however, the clearest expression of these worldviews typically finds their material and disciplinary extension in narratives of wilderness, rewilding, animal rights, and land sparing through which nature is allocated a separate place to exist on its own premises (Kaltenborn & Linnell, 2022; Teel & Manfredo, 2010). We propose to group these diverse models as an own worldview category of *living separated from nature* (Figure 1) where the separation is a conscious and deliberate choice. While we do recognise the inherent ambivalence of this worldview typology, it is arguably valuable in demonstrating how separation may on the one hand stem from profound moral or ethical stances which advocate for minimising human interference in the natural world, and on the other hand emerge from a perception of human-nature incompatibility which is rooted in human domination and superiority. Therefore, living separated from nature can be understood as not being tied to a single value orientation but as a common functional narrative potentially emerging from distinct and even opposing human values.

While all of the previously mentioned worldviews result from interacting with, or at least acknowledging, nature to some extent, a state of separation from nature can also simply be a result of the lack of interaction with nature: that is, stemming from 'disconnection'. IPBES (2022) fails to align with preexisting literature on the topic of 'disconnection' which is presented through categorisations such as 'distanced' (Teel & Manfredo, 2010), 'detachment' (Muradian & Pascual, 2018) and 'neutralistic' (Kellert, 1997; Ross et al., 2018). These conceptualisations of disconnection largely emerge from the idea that humans can simply be indifferent to, or unaware of, nature. Beery et al. (2023) provide a more articulated and differentiated interpretation of disconnection by outlining the following dimensions: 'material', 'experiential', 'cognitive', 'emotional', 'philosophical', 'sociocultural' and 'institutional-political'. Considering the different areas of disconnection allows for an understanding of values and worldviews that go beyond the traditional 'positive' and 'negative' value dichotomy associated with the natural world. Arguably, nature matters here through its total absence from an individual's or group's reality which, however, is inherently value-laden because of social, cultural and economic conditions. Through these contributions, we differentiate a final worldview of *living disconnected from-/living indifferently to-nature* (Figure 1).

By taking into consideration the relational models (or absence of relationship) in the worldviews of *living against-*, *living separated from- and living disconnected from-/living indifferently to-nature*, we propose the introduction of an overarching value frame called *living apart from nature* (Figure 1). Crucially, we use a circular representation of the existing *Life Framework of Values* as a starting point to explain how we get to this dimension via three very different pathways, in effect originating from opposite ends of the spectrum but arriving at a broadly similar situation: (1) loving nature so much that you deliberately separate yourself from it (*living separated from nature*), (2) disregarding nature to the extent that you are willing to destroy (or at least impoverish) it (*living against nature*) and (3) becoming indifferent or disconnected (*living disconnected from-/living indifferently to-nature*), a state that can emerge either from extreme forms of both *living against* and *living separated* worldviews, or by a lack of direct experience and connection to nature. Although these worldviews describe different degrees of apartness from nature, be it through aversion, fear, moral separation or indifference, each of these worldviews represents a way in which the natural world becomes meaningful to people.

4 | CONCLUSION

The *Life Framework of Values* as proposed by IPBES substantially advances our understanding of the diverse values humans attach to nature, highlighting how different value bundles under each frame interact and overlap. However, it misses the worldviews of 'living against nature', 'living separated from nature' and 'living disconnected from-/living indifferently to-nature', which have previously been documented in value typologies and relational models throughout the literature. As these worldviews likely characterise a substantial share of the population worldwide—and given their enormous influence on policy development—it is essential that they are not left unaddressed.

In this paper we proposed the addition of the broad 'living apart from nature' life frame, which includes *living against nature*, *living separated from nature*, and *living disconnected from-/living indifferently to-nature* worldviews. We use the *Life Framework of Values* to explain how we arrive at this added dimension via three different pathways: (1) loving nature so deeply that you separate yourself from it, (2) disregarding nature to the extent that you are willing to destroy it and (3) simply being indifferent or disconnected. Crucially, while elements of these worldviews may appear as non-valuing nature, they are rooted in value-laden interpretations of the natural world or certain aspects of it. Consequently, 'living apart from nature' embodies meaningful ways in which nature matters to people, even though meaning may be expressed through aversion, fear, moral separation or indifference.

The proposed expanded typology enriches our understanding of human–nature relationships and highlights the need for conservation strategies to recognise and address the full spectrum of human values towards, and interactions with, nature. Incorporating these additional categories into decision-making processes promises more realistic, effective, inclusive, equitable and context-specific solutions. The *living apart from nature* value frame allows us to account for an entire section of value orientations and worldviews which may often be overlooked or marginalised in conservation planning and governance. For example, in wildlife management settings such as predator recovery programmes where conflicts are common, acknowledging the *living apart from nature* value frame can allow practitioners to go beyond assumptions that people inherently care about or feel connected to nature, and instead support strategies aimed at building trust, mutual understanding or even just tolerance and reduce negative impacts that predators may have on human lives and livelihoods. While alternative extensions to the *Life Framework of Values* could have included finer grained sub-categories of values within the existing life frames, we argue that the addition of the *living apart from nature* value frame introduces a qualitatively different type of relationship, which is not previously represented in the *Life Framework of Values*. To lay the groundwork for a holistically informed engagement with the values that underpin human interactions and to ensure that policies accurately reflect the multifaceted nature of human values towards the natural world, we propose that the different typologies are assessed across a broad spectrum of global regions. To answer the open questions of whether people hold internally consistent and coherent worldviews across multiple issues, how specific practices or nature–human interactions align with single worldviews or how discrete these worldviews truly are, empirical research is essential. However, designing such studies requires a comprehensive and robust typology as a foundation.

AUTHOR CONTRIBUTIONS

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The authors declare no conflict of interest.

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This manuscript does not include any data.

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APPENDIX A

Definitions of the elements composing the cognitive hierarchies in the social psychology tradition, the *Life Framework of Values* and psychological anthropology (relational model theory).

Concept	Definition
Values	'…values are defined as fundamental, enduring beliefs or mental constructs that are used to evaluate the desirability of specific modes of conduct or the ends achieved through such conduct'. (Fulton et al., 1996) 'Values reflect life goals, beliefs and general guiding principles. They also reflect the opinions or judgements of the importance of specific things in particular situations and contexts. When considering the values of nature, values can refer to nature itself, how nature contributes to people's quality of life, in addition to the way people express the value of life-supporting processes, functions and systems—interrelating biophysical, spiritual or symbolic aspects'. (IPBES, 2022)
Value orientations	'Value orientations are complex but definitely patterned (rank-ordered) principles resulting from the transactional interplay of three analytically distinguishable elements of the evaluative process—the cognitive, the affective and the directive elements—which give order and direction to the ever-flowing stream of human acts and thoughts as these relate to the solution of "common human" problems'. (Kluckhohn & Strodtbeck, 1961) 'Wildlife value orientations are defined by the pattern of direction and intensity among a set of basic beliefs regarding wildlife much as fundamental value orientations have been defined as clusters of interrelated fundamental values'. (Fulton et al., 1996)
Worldview	'Mental lenses through which human social groups perceive, think about, interpret, inhabit and modify the world. Rooted in cultural traditions, they shape and are shaped by knowledge systems, languages and values. Epistemic worldviews pertain to diverse knowledge systems that hold often-implicit philosophical assumptions about how nature and values can be known, while human–nature worldviews guide perspectives on our conceptualization of and relationship with nature based on underlying value systems'. (IPBES, 2022)
Broad value	'They refer to life goals, general guiding principles and orientations towards the world that are informed by people's beliefs and worldviews (Dietz et al., 2005). Broad values include moral principles, such as justice, belonging, freedom, but also life goals, like enjoyment, health, prosperity. Broad values influence specific values and provide them with a general context and meaning'.(IPBES, 2022)
Specific value	'Specific values of nature are opinions or judgements regarding the importance of nature in a particular situation or context. Specific values can be grouped into three types: instrumental, intrinsic and relational values'.(IPBES, 2022)
Instrumental value	'Instrumental values, which relate to things that are a means to a desired or valued end or satisfy people's preferences, are the most commonly reported value type in environmental policy documents. They are generally associated with nature as an asset, capital or resource and are strongly related to the concept of ecosystem services'.(IPBES, 2022)
Relational value	'Relational values refer to the importance of desirable, meaningful and often reciprocal relationships—beyond means to an end—between humans and nature, and among humans (including across generations) through nature (e.g. sense of place, spirituality, responsibility, care, reciprocity, stewardship)'.(IPBES, 2022)
Intrinsic value	'Intrinsic values relate to the values of nature expressed independently of any reference to humans as valuers and include entities such as a habitat or species that are worth protecting as ends in-and-of themselves. They are consistent with biocentric worldviews and with the understanding of values as existing objectively in nature'.(IPBES, 2022)
Value indicators	'Indicators of value are quantitative and qualitative measures of the importance of nature to people. Indicators used to express the value of nature can be biophysical, economic and socio-cultural'.(IPBES, 2022)
Attitudes and norms	'Attitudes are defined as an association in memory between an object and an evaluation. Within this definition, evaluation refers to the imputation of some degree of "favour" or "disfavour" to the object and is crucial to the definition of an attitude. The objects that are evaluated are referred to as attitude objects and can be virtually anything, including persons, particular entities or behaviours'. (Fulton et al., 1996)
Behavioural intentions	'Intentions are assumed to capture the motivational factors that influence a behaviour; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behaviour' (Ajzen, 1991)
Behaviour	'Behaviour can be understood as the observable actions of an individual in a specific context, shaped by behavioural intentions, attitudes, norms (Ajzen, 1991) and underlying values' (Fulton et al., 1996).
Relational models	'The motivation, planning, production, comprehension, coordination and evaluation of human social life may be based largely on combinations of 4 psychological models. In communal sharing, people treat all members of a category as equivalent. In authority ranking, people attend to their positions in a linear ordering. In equality matching, people keep track of the imbalances among them. In market pricing, people orient to ratio values. Cultures use different rules to implement the 4 models' (Fiske, 1992) 'Human–nature interactions are configured by a complex arrangement of social conventions held by social groups in a particular period of time. Human–nature RMs are cognitive frames that give shape to relationships between people and nature' (Muradian & Pascual, 2018)

APPENDIX B

Relative alignment of *Life Framework of Values* dimensions with pre-existing value categorisations extracted from the literature, and additional dimensions examined in this paper. The categories do not align exactly—so their position relative to each other in a row in the table does not imply exact alignment.

IPBES (2022) and Kenter and O'Connor (2022)	Kellert in Ross et al. (2018)	Teel and Manfredo (2010)	Muradian and Pascual (2018)	Beery et al. (2023)	Kaltenborn and Linnell (2022)	Mace (2014) and Reyers and Bennett (2025)	This paper (living apart-)
	Dominionistic Negativistic		Domination		Human–wildlife conflict	Nature despite people	Living against nature
Living from nature	Utilitarian Scientific	Traditionalist	Utilisation		Wildlife management Sustainable use	Nature for people	
Living in nature	Naturalistic Aesthetic Symbolic				Ecosystem services Restoration ecology Social-ecological systems Cultural landscape conservation New conservation science		
Living with nature	Humanistic	Pluralist	Devotion Stewardship		Conservation biology Biological conservation	People and nature People with nature	
Living as nature	Moralistic Spiritual	Mutualist	Ritualised exchange Wardship		Animal welfare Deep Ecology		
					Animal rights and liberation		Living separated from nature
	Neutralistic	Distanced	Detachment	Disconnection dimensions	Rewilding Wilderness	Nature for itself	Living disconnected from-/ indifferently to-nature