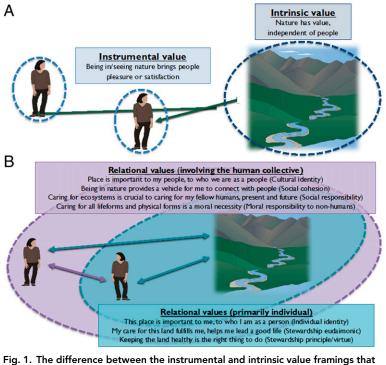


Why protect nature? Rethinking values and the environment

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A cornerstone of environmental policy is the debate over protecting nature for humans' sake (instrumental



dominate environmental literatures and relational values. Whereas intrinsic value (A) pertain only to the value inherent in an object, and instrumental values (A) pertain to the value of the object for a person, relational values (B) pertain to all manner of relationships between people and nature, including relationships that are between people but involve nature (e.g., a relationship of impact via pollution, which is mediated by a watershed).

values) or for nature's (intrinsic values) (1). We propose that focusing only on instrumental or intrinsic values may fail to resonate with views on personal and collective well-being, or "what is right," with regard to nature and the environment. Without complementary attention to other ways that value is expressed and realized by people, such a focus may inadvertently promote worldviews at odds with fair and desirable futures. It is time to engage seriously with a third class of values, one with diverse roots and current expressions: relational values. By doing so, we reframe the discussion about environmental protection, and open the door to new, potentially more productive policy approaches.

Defining Relational Values

Few people make personal choices based only on how things possess inherent worth or satisfy their preferences (intrinsic and instrumental values, respectively). People also consider the appropriateness of how they relate with nature and with others, including the actions and habits conducive to a good life, both meaningful and satisfying. In philosophical terms, these are relational values (preferences, principles, and virtues associated with relationships, both interpersonal and as articulated by policies and social norms). They include "eudaimonic" values, or values associated with a good life (Fig. 1; also see dataset for additional references throughout, available at dx.doi. org/10.13140/RG.2.1.5146.0560). Relational values are not present in things but derivative of relationships and responsibilities to them (Fig. 2). In this sense, an individual preference or societal choice can be

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questioned or reframed based on its consistency with core values, such as justice, care, virtue, and reciprocity.

Relational notions of values are prominent across a wide swath of humanity, including classic (e.g., Aristotelian), contemporary Western, Indigenous (e.g., Tsawalk, Sumak kawsay), feminist (e.g., care ethics), and Eastern philosophies (e.g., Confucian, Buddhist). Notions of a good life rooted in relationships are expressed in diverse worldviews, including Ubuntu in South Africa, the Gandhian Economy of Permanence in India, Buen Vivir in several Latin American countries, and North American "back to the land" movements. Moreover, the five "moral foundations" common to many people-purity/sanctity, authority/respect, ingroup/loyalty, fairness/reciprocity, and harm/care (2)are better understood through lenses of relationships and a good life than through instrumental or intrinsic values. Pope Francis's widely reported encyclical On Care for Our Common Home was abundant in its expression of relational values (3).

It matters little that in theory intrinsic and instrumental values might be stretched to include relational considerations if-as we argue-the usual framings of instrumental and intrinsic values fail to resonate with many lay-people and decision-makers. In social contexts of all kinds-including friendship, marriage, partnerships, parenting, extended family, community, and teams-many people naturally think of what is appropriate for that relationship, not only what benefits them, others, or nature. Of course, we may derive (and provide) considerable benefits, sometimes deciding that a focus on the relationship itself helps realize such benefits. However, we may resist arguments that rely only on instrumental or intrinsic logic, and be motivated more by the relationship as an end in itself.

Relational Values and Nature

Relational values also apply to interactions with nature. Some people's identities are rooted in long-term care and stewardship, such as volunteer streamkeepers and urban or rural farmers. Some people and social organizations hold worldviews that encompass kinship between people and nature, including many indigenous and rural societies, and the many who subscribe even partly to the notions of "Mother Nature," "Mother Earth," Gaia, and so forth. Many people believe that their cultural identity and well-being derive from their relationships with human and nonhuman beings, mediated by particular places (Fig. 2 B and C, dx.doi.org/10.13140/RG.2.1.5146.0560). Caring for and attending to places can be essential for perpetuating cultural practices and core values (e.g., their proyecto de vida (4)-a collective vision for a selfdetermined and sustainable life in the community). According to these views, the value of the land is not independent of humans (i.e., not intrinsic). Moreover, it may be treacherously reductionist, if not offensive, to suggest that nature exists to provide (instrumental) utility to humans. Such views are not limited to indigenous people: when asked about benefits from land or seascapes, many people of diverse backgrounds describe intimate kin and stewardship relationships with them (5, 6).

Although intrinsic and instrumental values are critical to conservation, thinking only in these terms may miss a fundamental basis of concern for nature. Whereas intrinsic and instrumental values are often presented as stark alternatives, many important concerns may be better understood as relationships with both aspects. Consider a tree or grove deemed sacred, associated with collective histories, ancestors, or sustenance of many kinds. Is it valuable intrinsically (independent of human valuation) or instrumentally (for preference satisfaction)? Whereas the former might feel sterile or dismissively quaint, the latter seems to mistake symptom for cause: satisfaction does not produce sacredness, but rather is produced by the sacrosanct collective relationship. Thus, relational values link and enliven intrinsic and instrumental considerations.

Beyond Instrumental Values

Certain baggage accompanies instrumental notions of value. As a means (instrument) to something else, a thing is potentially replaceable. Money, as the universal equivalent, is the most common metric of that substitutability. Although instrumental values include concerns about life and livelihood-sustaining services,

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instrumental and commercial values can easily become blurred, as in market-centric ideologies and conservation programs involving some measure of commodification of nature and privatization of rights (7). Although seminal writings about ecosystem services pertained broadly to human well-being and not just monetary values (8, 9), powerful institutions have prominently promoted a neoliberal notion of ecosystem services focused on their implementation in markets and transactions, payment schemes, and cost-benefit analyses (10). In contrast, relational approaches might motivate conservation without putting a "price tag" on nature, bypassing such controversies and unintended consequences.

Recognizing relational values may also solve the dilemma that cultural ecosystem services are both everywhere and nowhere (11). Cultural ecosystem services, as nature's contribution to nonmaterial benefits derived through human–ecosystem interactions, are everywhere because they are inextricably intertwined with regulating and provisioning services in relationships of material and extramaterial benefits (Fig. 2D). Cultural services are thus better understood as the filters of value through which other ecosystem services and nature derive importance (12). Conversely, they are "nowhere" in that many cultural ecosystem services are missing from assessments and resulting policies. Cultural considerations fit poorly



Fig. 2. Examples of relational values. (A) A young water bird (*Charadrius* sp.) in a human hand illustrates stewardship of nature. In the parlance of relational values, regardless of a thing's current state, what matters most is humans' responsibilities, which stem from our relationships with that thing. (B) Transhumant shepherds and sheep dogs on their annual migration on the Iberian Peninsula. The relationship goes beyond management for human benefit, reinforcing cultural identity through active ritual care. (C) Ancient olive tree on Aigina Island, Greece, 1,500–2,000 years old. The tree is no longer harvested but has great symbolic significance for island people. Image courtesy of Henri-Paul Coulon (photographer). (D) Salmon fishing on the west coast of North America is particularly rich in relational values due to benefits and values such as sustenance, identity, and strengthening of social ties.

into the instrumental framing of ecosystem services because they are inherently relational: cultural services are valued in the context of desired and actual relationships (Fig. 1).

Reflections on "a good life" offer a partial defense against runaway consumerism, a fundamental driver of ecological degradation. Whereas instrumentalism considers value as derived from the satisfaction of preferences whatever they are, the relational notion of eudaimonia ("flourishing") entails reflection on the appropriateness of preferences, emphasizing that value is derived from a thing's or act's contribution to a good life, including adhering to one's moral principles and maintaining the roots of collective flourishing (13). Although the term is abstruse, the longstanding idea of eudaimonia brings attention to relationships between people and nature, and to the foundations of well-being (e.g., trust in neighbors, empathy, mindfulness, and purpose, rather than an accumulation of things). An instrumental view would generally consider self-limitation of consumption as a loss to be avoided. In contrast, a relational/eudaimonic perspective might welcome or instigate self-motivated limitation-for example, deemphasizing consumer gift-giving in favor of convivial shared experiencesas a shift toward more meaningful lives.

Policy Applications

Environmental policy and management should always consider the kinds of relationships people already have with nature, and how these might be engaged to lessen the negative effects of human lifestyles on ecosystems and enhance positive ones. To be more than mere marketing, environmental management must reflect on and possibly rethink conservation in the context of local narratives and struggles over a good life. Five examples follow.

First, restoration or conservation activities can enable widespread participation in planning and implementation (14, 15) to strengthen locally owned "cultures of nature" (15). Such people-centric activities might be perceived as more legitimate and more broadly inviting by engaging relationships with nature, with people through nature, and vice versa.

Conservation is still often thought of as something imposed on local peoples by outsiders; it must instead be seen as something we all negotiate collectively as good stewardship. For example, many payments for ecosystem services are tightly constrained payments for particular actions decided centrally (e.g., offering compensation per tree or per hectare, advancing the commodification of nature). Such programs can be redesigned to foster existing relationships among landowners and with the land, engaging landowners and communities to undertake stewardship actions of their design through cost-sharing and collective action (e.g., via a grant- or reverse-auction model). Such costsharing for community-based or locally designed conservation should mitigate widespread concerns about fairness associated with the prevailing market-based approach to payments for ecosystem services (16), and enable more effective and creative conservation.

Second, including relational values could help conservation planning integrate approaches rooted in both Western scientific and local knowledge traditions. Doing so would give appropriate priority to existing ways of "knowing" landscapes and seascapes, perhaps increasing local appreciation for systematic sciencebased approaches (17), and vice versa.

Third, environmental initiatives could solidify and adapt home-grown stewardship by leveraging social relationships. The bond between parent or mentor and child can serve as a conduit for social norms of respect for, knowledge of, and passion about nature, via activities including fishing and hunting, foraging or gardening, hiking, or bird-watching. It is also possible to cultivate values and relationships through prolonged and repeated experiences with peer groups, via laboring on the land or outdoor adventure. Bonding is facilitated by explicit disarming of defenses as through play, struggling and suffering together, and celebrating (18). In rural resource-based communities, which are generally experiencing substantial out-migration but have historically featured social ties to the land, the task may be to enable the continuation of such practices in environmentally sustainable ways.

Fourth, using relational values might extend care for our places into care for other people's places (e.g., via the Golden Rule, a foundational relational principle, "Do unto others ..."). The importance of social relationships for nature applies equally—but differently—to rural communities as to urban ones. All relationships with nature pertain here: the tangible relationships of food producers, the imaginary ones of arm-chair wilderness lovers, and especially the material relationships with degradation we all have via consumption of natural resources delivered through global supply chains. Perhaps by cultivating relationships with organizations, and culturally sensitive relationships with faraway places, nongovernmental organizations might jumpstart a movement that takes real responsibility for the roles we play as complicit actors in market-driven environmental impacts (e.g., paying to mitigate impacts via the aforementioned reverse auctions or grants). Contrast the ingredients for lasting bonds (above: struggling, suffering, celebrating together) with the social gatherings typical of some conservation organizations: formal donor dinners and receptions where interpersonal connections may often be fleeting.

Fifth, more sustainable relationships with nature might come in part from more responsible relationships to the products that are increasingly fixtures of "modern" life. Planned obsolescence of many products fosters ephemeral and purely utilitarian relationships. Cultivating lasting relationships with things—for example, through fixer or do-it-yourself workshops might counteract disposable mentalities and also reduce environmental impacts associated with resource extraction and manufacturing.

A relational values approach cannot eliminate trade-offs, but the strategies above should yield broadly viable approaches to sustainability, in part by transcending the unhelpful dichotomy of sustaining either human well-being or nature for its own sake.

A culture change in environmental policy and practice may be necessary. Any plan to foster relational

values yields protests that it detracts from "real" conservation as can be measured numerically, for ease of performance evaluation. Investments in relationships and identities should not need justification based on short-term outcomes for biodiversity or human wellbeing. Without investing in human–nature relationships and broadly shared values, the proenvironment community may soon find that the relational values that have always propelled it are rapidly deteriorating. Fortunately, relational-value resurgences from other sectors might be leveraged for environmental protection (e.g., the "care economy," connected parenting, and farmer's markets movements).

Relational and eudaimonic values are finally receiving attention in governmental circles, including the Intergovernmental Platform on Biodiversity and Ecosystem Services (19). If activists, researchers, practitioners, policymakers, and private-sector leaders internalize this message, perhaps environmental decisions will better account for our relationships with nature and many notions of a good life. Attending to such values is key to the genuine inclusion of diverse groups in environmental stewardship and to achieving social–ecological relationships that yield fulfilling lives for present and future generations.

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