

RELATIONAL VALUES: A UNIFYING IDEA IN ENVIRONMENTAL ETHICS AND EVALUATION?

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ABSTRACT

There has been a recent spate of publications on how we should evaluate change to ecological systems, some of which have introduced the concept of "relational values. Environmental ethicists have, with a few exceptions, not engaged this debate. We survey the literature on relational values, noting that most advocates of the concept introduce relational values as an additional type of value, in addition to "instrumental" and "intrinsic" values. In this paper, we explore the idea that all environmental values are ultimately relational. We explore how such an approach can be articulated, and discuss the implications of this concept for the future of environmental ethics and value studies. One key implication is to suggest a stronger role for empirical ethnography.

KEYWORDS

relational values; ecosystem services; instrumental values; intrinsic values

I. Introduction:

How should we think about and talk about environmental values, and how should we adjudicate disagreements regarding decisions that affect those values? These questions have discomfited both theoreticians and environmental practitioners for decades. Recently, there has been a spate of publications, including in scientific and policy journals, that have once again addressed these questions (Tallis and Lubchenco, 2014; Vucetich et al., 2015; Batavia and Nelson, 2017; Piccolo, 2017). It is time to survey this emerging literature and explore the relationship between these new initiatives and the field of environmental ethics.

The Millennium Ecosystem Assessment (MEA, 2005) constituted the first serious, science-based attempt to develop a conceptual framework to systematically assess the relationship between human well-being and nature. The MEA used the concept of ecosystem services (ES), divided into distinct categories, to identify the benefits and values that people derive from nature. The MEA was criticized for failing to adequately account for the complexities and diversity of socio-ecological systems (Carpenter et al., 2009). Shortly after the introduction of the MEA, a study of The Economics of Ecosystems and Biodiversity (TEEB) was created in Europe to integrate economic concepts and tools with environmental values to inform policy-making (TEEB, 2010). Using a similar economic conceptualization of value as the MEA, TEEB sought to develop a more inclusive framework for the economic accounting of environmental value. This framework places ES at its center while expanding the set of identified environmental values by adopting the total economic value (TEV) valuation method, which is inclusive of direct use, indirect use, option, quasi-option, and existence values (Jax et al., 2013).

The latest attempt to provide a conceptual framework for environmental values is the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) (Díaz et al., 2015; 2018). IPBES jettisons formal distinctions between types of ecosystem services in favor of the more conceptually inclusive category of ‘nature’s contributions to people’, which tries to combine western science epistemology and the concept of ‘nature’s gifts’ representing local and indigenous knowledge systems. The distinction between intrinsic values and anthropocentric values, the latter of which they define as inclusive of both instrumental and broader human values, is explicitly embodied within the framework. This latest effort has been challenged on the basis that the framework conflates different definitions of values that are incommensurable (Maier and Feest, 2016). Although the IPBES is presented as a scientific framework describing different valuations of nature’s contribution within diverse socio-cultural contexts, Maier and Feest (2016) argue that it is in fact a

normative framework since it claims to be a structure of values or norms. Further, these critics show that IPBES implicitly relies upon economic categories of value based in fixed human preferences (Maier and Feest, 2016).

While these ecosystem service categories sometimes correspond with traditional categories of environmental ethics, yet one more idea--that some or all environmental values should be understood as 'relational values'--seems to cut across those categories. This idea may offer a basis for a fresh and illuminating discussion of how humans do and should value natural objects and processes. In this paper, we examine the concept of relational values and explore whether it might serve to re-organize our thinking about environmental values. Further, we will consider important implications for the future of environmental ethics and policy that would follow if one adopts and applies the idea of relational values as we understand it.

In the field of Environmental Ethics, and also in more applied fields such as IPBES and TEEB, dealing with environmental values, discourse has generally recognized two broad types of values, 'instrumental' (referencing usefulness to humans) and 'intrinsic' (referencing values that are in some sense independent of human values). While one might expect that environmental thinkers and activists would like to embrace and use both types of values to support actions and policies affecting the environment, little success has been achieved in harnessing the two types of value together because the two types are apparently incommensurable and rest on different philosophical bases. Instrumental valuations rest upon Jeremy Bentham's utilitarian maxim that directs actors to act so as to maximize well-being of sentient beings. Advocates of intrinsic values in nature, on the other hand, cite Immanuel Kant, and insist that some elements of nature have a 'dignity,' the concept Kant introduced to designate the special status of rational beings.

As a result of this divergence, the discussion of environmental values has generally been riven by sharp controversy, with one group emphasizing usefulness to humans, and another emphasizing independent value in nature. The former group tends toward reductionism, and often equates human well-being with preference fulfillment as measured in economic models (Freeman, 2014). The latter group is generally critical of exclusively economic analysis of environmental values, insisting that human-centered values must in important cases be over-ridden by concerns for nature itself (Callicott, 1999).

This dilemma has not been resolved within the literature of environmental Ethics. It has been impossible to establish a non-controversial value foundation for the discussion and resolution of impasses regarding environmental actions and policies. Indeed, the problem has become a conundrum: advocates on both sides are convinced by arguments favoring their position, even as their opponents cite what they think are convincing arguments on the opposite side.¹

Aside from its intransigence as a theoretical problem, the instrumental/intrinsic argument has also been questioned because the categories of value and the distinctions they provide are not sufficiently fine-grained to address the real problems that environmental practitioners face on a daily basis (Himes and Muraca, 2018).

Can the traditional categories of values help to allocate resources so as to create a landscape that maximizes environmental value by summing up all the types of environmental values, positive and negative? A case can be made that they cannot, because human relationships with nature, far from being expressible simply in terms of unidirectional contributions to human welfare (instrumental) or in terms of values that exist independently of human values and valuation (intrinsic), are more complex and multi-faceted than can be represented in a few gross categories (Himes and Muraca, 2018). In fact, human beings value nature in complex ways dependent on context, and it is these contextual relations that constitute the cultural richness of environmental values. Managing systems will require fine-grained analysis of how individuals in local cultures use, interact with, and cherish elements of the natural world they encounter.

I. Relational Values

In a recent paper, Chan et al. (2016) argue that the traditional distinction between ‘instrumental’ and ‘intrinsic’ values is not exhaustive of the types of environmental values. Rather than taking sides in this polarized debate, the authors advocate an additional type of natural value, which they characterize as *relational*. They define relational values as

¹ That the debate has receded from its prior dominance in discussions of environmental ethics can be observed by perusing the tables of contents of recent issues of *Environmental Ethics*. We should note that the sharpness of this debate has also been dulled by the (in our view helpful) introduction of ideas from virtue ethics, the ethics of care, and ecofeminism. These additions to the field, along with a field-wide shift toward more practical, real-world problems, have encouraged a more pluralistic approach to environmental ethics and shifted emphasis toward discussion of real-world environmental problems rather than foundational issues. Sophisticated treatments of virtue ethics (Hourdequin, 2015), care ethics (Jax et al., 2018), and ecofeminism (Plumwood, 2002) have recently been developed that illuminate and support a broader approach to environmental values.

‘preferences, principles, and virtues associated with relationships, both interpersonal and as articulated by policies and social norms’ (Chan et al., 2016: 1462). Relational values are introduced and illustrated by reference to empirical and ethnographic studies of attitudes toward, and values experienced by, members of indigenous and other communities.

Referring to environmental values as *relational* implies that such values are associated with people and what they value in a situation. So relational values always involve a *person or persons* choosing *an outcome that is possible*, in a *situation/context*. The reasons a person has for such choices can be referred to as ‘relational values’. We understand values as reasons to act in a certain way (Bromley, 2006).

Any full understanding of how humans value nature must capture both what is universal, and what is local and particular, in the way humans make choices. We note that practices in which positive environmental value is experienced typically involve three aspects:

- (1) A need, desire or affinity of a subject for *an event/experience* ;
- (2) The experience is perceived to offer some benefit/or enjoyment to the subject, or to fulfill some felt obligation of the subject;
- (3) Need for a means--either realistically or, in the imagination--to bring about the event and enjoy the benefit/fulfillment from the experience.

These three aspects capture much that is common in all experiences of environmental value--and may satisfy some of the attractions of a unified system of values. While (1) to (3) establish the common elements of relational values, it must be noted that, in practice and in application to particular value judgments in varied situations, various ideas, cultural norms and expectations associated with the practice involved, sometimes referred to as ‘framing’, will differ in different culture. This conceptualization of the problem of characterizing environmental values poses the question: Can advocates of relational values provide an understanding of environmental values that is superior to the traditional categories of instrumental and intrinsic based on the insight that *all* environmental values are relational in nature?

Returning to the above-mentioned paper by Chan et al. (2016), with this characterization of relational values in mind, we can assess whether relational values will do the work the authors set out to achieve--to question the hegemony of the traditional categories

of instrumental and intrinsic values. We applaud the paper's exploration of environmental values in the context of empirical research on communities that live close to and depend upon their natural habitats. Much can be learned by paying attention to the expressions members of those communities use to articulate natural values as they experience them, without trying to reinterpret these expressions as representative of one of the more usual categories of environmental values. The authors' point is that these expressions often embody special relationships and that reducing them to either utilitarian or intrinsic value terminology may miss important nuances.

In the paper in question, the group described relational values as a third type of values, in addition to the much-discussed instrumental/utilitarian and intrinsic/inherent values so common in environmental ethics and conservation biology. Authors write: '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 respect to nature and the environment.' Authors explicitly say that relational values are a third type of values: 'Relational values are not present in things but derivative of relationships and responsibilities to them.' (Chan et al., 2016: 1462).

Chan et al. (2016) and a number of papers with similar goals (Himes and Muraca, 2018; Muraca, 2016; Neuteleers, 2020 for example), accept the two traditional types of environmental values--instrumental and intrinsic--and then, proposes a third type of values, relational values, which refer to the actual experiences and sense of appropriateness individuals often feel based on the relationships they have with an object or process. These values are present when a person or group expresses a feeling that, given activities and the context of those activities, certain actions and attitudes in that context are appropriate, while other actions and attitudes would be inappropriate--indeed, 'wrong' given the relationships involved. It should be noted that, given this interpretation, relational values can also include *appropriate* uses of nature to support human welfare. Most advocates of relational values thus identify three types of value: instrumental, intrinsic, and relational. While we agree that recognizing relational values is important and that its acceptance will lead to important improvements in how we evaluate changes to environmental systems, here we will explore the alternative idea that relational values should not be thought of as a third type beside the other two, but rather that relationality is a shared aspect of *all* environmental values. If all environmental values are relational, understanding these values will depend upon, and require, careful attention to the context in which the values are experienced. The traditional

categories of 'intrinsic' and 'instrumental' encourage practitioners to associate values with objects, but emphasis on relations will attach values to a place and a time. Once focus is directed toward values as they occur in a specific place, experiences of actors will be enriched by the metaphors and narratives that give meaning to those actors and their associates. This point is clearly made in Klain et al., (2014) where they state and criticize the assumption that 'experts can identify and characterize priority [Ecosystem Services] across stakeholder groups without local participation.' This line of reasoning encourages ethnographical methods, a point to which we return in Section III.

Before proceeding, it is necessary to respond to a possible objection to treating all environmental values as relational. One understanding of 'intrinsic value' defines the idea as value something has *in itself*, depending on no other thing for that value. Holmes Rolston, III, for example, has asserted that nature has value 'objectively' and that such value exists independently of human beings or any conscious being. Rolston's position, however, has not fared well within environmental ethics. J. B. Callicott (1999), for example, has 'deconstructed' Rolston's understanding by arguing against the view that nature's value can be 'objective'. Valuing requires a valuer, he argues, and therefore even intrinsic value must be *attributed* to nature by some conscious being. Indeed, a number of authors have reached a similar conclusion, that the independence of intrinsic value can be understood to refer to attributions of value by a conscious being, as long as that attribution does not depend upon the interests and values of the attributor (O'Neill, 2002; Batavia and Nelson, Batavia and Nelson, 2017). While a few environmental ethicists continue to refer to objectively existent intrinsic value, how could such values be supported by anything more than intuition (a notably weak support) (Norton, 1992)? Following this attributive understanding of intrinsic value, we continue to seek a comprehensive understanding of all environmental values as relational.

Accordingly, the central focus of this paper is to evaluate the hypothesis that all environmental values are relational in nature, and to explore the implications for theory and practice of accepting this hypothesis. We thus propose a fundamental change in the scope of application of this idea. As noted above, the much-cited paper in *The Proceedings of the National Academy of Science* explicitly states that relational values are a third type of value (Chan et al., 2016). Similarly, Himes and Muraca (2018) define three types of values: instrumental, intrinsic, and relational. Initially, they agree with us that all values are relational

in the sense that all values emerge in a three-part situational relationship: a *person*, faces *choices* in a *situation*, with respect to an event, object or process.

While both Chan et al. (2016) and Himes and Muraca (2018) assert that all values are relational in their genesis, or source, in a process of valuation, Himes and Muraca distinguish between the ‘origin’ and the ‘content’ of valuation. They define the *content of valuation* as ‘the product of the *process of valuation* and it refers to *what* is valued and how the value is articulated’ (Himes and Muraca, 2018; Muraca, 2011). These ‘products’ are divided into three categories. Following Callicott (1999), they recognize attributed intrinsic values. They also recognize values that are ‘merely instrumental’ which includes objects whose value is a means to an external goal. These values are ‘substitutable’ in the sense that instrumentally valued objects might be replaced by alternative objects that fulfill the value in question.

But as Himes and Muraca (2018) correctly surmise, these two categories are incomplete if one believes there are human-oriented values that are not substitutable. Eudaimonistic values refer to the value of actions and proclivities that support a virtuous and flourishing life, and provide an example of relational values that are not substitutable. The content of these valuations are not substitutable: they depend upon an important relationship between the valuer and a trait considered to be of value. For example, since courage may be an important element of a well-lived human life, the pursuit of such a life establishes an essential, non-substitutable relationship with that trait.

Himes and Muraca (2018) thus end with a position that embraces pluralism of categories of value which includes (1) instrumental/substitutable values; (2) value that recognizes intrinsic/inherent values attributed to natural subjects independent of human interests, and (3) relational values which include multiple forms of non-substitutable relationships with nature. Category (3) is a diverse category ensuring a pluralistic system of values, many of which are not commensurable with each other. This system results from applying the distinction between the origin and content of relationships in our understanding of environmental values.

We believe, however that this distinction is unnecessary and that it exists as a holdover from, and as continued obeisance to, the traditional (and incomplete) dualistic categories of intrinsic and instrumental values. As an alternative, we propose to agree that all environmental values originate in a relationship. But unlike Himes and Muraca, we do not introduce a separable concept referring to the *content* of valuation. Rather, we recognize that

subjects engage in many relationships, and we turn to the task of identifying and categorizing these varied relationships directly, and try to understand them on their own terms, without parsing them into instrumental or intrinsic categories. Introducing the idea of content encourages attention to objects which beg to be placed in the traditional categories, whereas our emphasis on relationships over objects will direct our attention to the source of value in those relationships. So we find the distinction between source and content to be unnecessary. Worse, it distracts us from the relationships that guide subjects to express values that can serve as reasons to act.

In other words, we insist that the nature of an environmental value in any particular situation is discoverable by examining the perceptions and dispositions of the decider in that situation. Such an examination will uncover narratives and underlying metaphors that can characterize the type of value involved by understanding the describer's orientation and placement within the situation richly described in cultural terms (O'Neill et al., 2008), as will be discussed in the next Part. We therefore differ from most advocates of relational values in that we discuss features like 'substitutability' directly as features of a particular relationship, rather than as indicative of their inclusion in a traditional category such as 'instrumental' or 'intrinsic'.

Consider an example: Indigenous populations in the Pacific Northwest, famously rely upon salmon, especially during their migration back to their stream of origin, as a source of protein. Considered as a source of protein, the salmon are clearly 'instrumental' for the denizens of the tribes. However, many tribes also engage in rituals and celebrations around the annual return of the salmon, which have become key elements in their identity as a tribe. If, for some reason, such as the building of a dam, the annual migration does not occur, the tribal community will suffer a loss. The dam builders may recognize that the natives have suffered a loss, so they might purchase an appropriate amount of store-bought salmon and deliver it in trucks at a time appropriate for tribal celebrations. While one might immediately say: 'store-bought salmon, which has identical protein value to salmon that would have been caught if the migration had continued, provides a substitute that is of equal instrumental value in terms of provisioning. Suppose then, that the tribe's members reject the trucked-in salmon, and argue that, despite the substitution, they have suffered a loss of value. Their reason for

doing so lies in the particularity of the special relationship the tribe members experience with salmon.²

The moral of this story is that if one looks at objects and their characteristics as more important than relationships in assessing environmental values and, especially, if one thinks of objects as organized into categories based on the traditional, dichotomous concepts of value, one will tend to forget the importance of situation and relationships. A corollary of this moral is: saying that all environmental values are relational is enough; distinguishing relational origins from content only tempts us back into using anachronistic concepts. Paying attention to a person or persons, in situations, facing a choice is the locus of relational values. Values, so understood, can function as reasons individuals might use in arguing for preferred policies.

III. Values, Relationships, and Culture

As a starting point for understanding relational values, we note that environmental values are often initially expressed or implied in vernacular speech, which is highly variable across cultures (Klain et al. 2014; Klain et al., 2017). In almost all of the attempts to characterize and measure environmental values by environmental professionals, as mentioned above, these varied expressions are translated into a general theoretical framework that posits one or a few basic types of values. Some traditional theorists seek to reduce all expressions of value to instrumental value (Freeman et al., 2014) and others emphasize the importance of intrinsic values (Taylor, 1981), with each theorist offering their own reduction of vernacular expressions of value into their theoretically derived type. Yet other theorists translate vernacular utterances into both types, creating a dualistic system that requires a means of making these comparable (Martinez-Alier et al., 1998).

Little success has been achieved in reducing vernacular speech into the two traditional forms of value, however. If we rely heavily on metaphors to understand how people experience environmental values in the pursuit of their life programs, and we recognize that members of different cultures live by different metaphors, then the program of reducing values to one or two categories can be expected to distort those cultural memes.

² The difference between store-bought salmon and salmon caught by indigenous fishers is an example of what is referred to by Roldan Muridian and Unai Pascual (2018) as a shift in ‘relational models’ which, in turn, are understood as involving shifts in the ‘frame’ of a discussion.

Today, in the most powerful cultures in the world, the market metaphor dominates, but this can be challenged. The market metaphor can be useful in application to many decisions (Norton, 2015; 2017), but when the market metaphor is imposed on decisions affecting indigenous people, it often functions to support colonial exploitation, create severe distributional inequities, and foster alienation among those who live by other metaphors. If one pays attention to ethnographic and anthropological studies, and listens to people explain their attitudes toward nature in vernacular language, it is clear that nature is valued in multiple ways within most cultures and that, across cultures, natural values varies widely (Gould et al., 2015; Graeber, 2001).

For example, while vegetarians in advanced technological cultures can make a strong case based on concern for animals and for damages to environments due to livestock production, those arguments ring hollow to a traditional Inuit, who may have as strong an environmental conscience as a vegetarian in advanced technological societies, but whose life and culture would be disturbed if they tried to live as vegetarians. Metaphors, and the stories people tell express those metaphors, give meaning to their lives within their natural and cultural context (Johnson, 1993; Campbell, 1988). In a culture where the guiding metaphor is one of kinship among species, and where the consumption of members of other species are considered a gift, actions are likely to be judged appropriate or not given both the underlying metaphors and the specific situation in which the action is taken (Gould et al. 2015; Chan et al., 2016). Concepts such as appropriation and exploitation--expressive of the capitalist/ownership model as seen in colonialism--do not translate well across this divide.

To take another example it is currently common among environmental policy experts to classify the value proffered to people by well-ordered systems of nature and artifact, such as stable ocean currents or the creation and sustenance of productive soils, as regulating ecosystem services (MEA, 2005). Efforts have been made to place a dollar value on such services (Costanza et al., 1997; Daily, 1997), hoping to advertise some unrecognized ways in which people should value nature. Indeed, attempts have been made to commodify and monetize these regulatory processes (TEEB, 2010). It is important to note that such dollar estimates to measure the value of 'services' and attributing monetary measures to characterize and assess these values rests on a metaphor: they are 'services' someone is willing to pay for.

From these and similar examples, we see that environmental values rest upon a metaphorical basis, and these metaphors shape the relationships people live through (Raymond et al., 2013). Choices among metaphors are not resolvable by quantification, or even direct comparisons, however; they are, rather, subject to analog reasoning, susceptible to judgments that they are, or are not, appropriate or fitting in various contexts and to varying degrees. Small changes in context can shift judgments of appropriateness; the suitability of a metaphor often depends on the cognitive state of those making the judgment, rather than on a correspondence with some objective ‘fact’ that can be shown to be correctly or incorrectly described. The very meaning of the metaphors we use and the narratives in which they are embedded are given life in our actions, and those actions--and people's explanations of them--are the best tutorial on environmental values available.

IV. Taxonomies and Methods for Understanding Relational Environmental Values ?

The question we seek to address in this section is; what are the implications of understanding all values as relational for communities seeking to plot a sustainable path into the future? Even though reduction to a couple categories misses important nuances in discussions of environmental value, we do expect that deliberations regarding what to do will benefit from some structure and categorization of values.

In this Part, we explore the possibility of introducing sub-categories of relational values--a taxonomy of relational environmental values that would take the place of the historical debates over the primacy of intrinsic values or instrumental values with a careful effort to differentiate types of environmental values based on the relationships and motivating metaphors supporting them. In addition to introducing some order and allowing useful sub-categorizations for discussion of fine points by theoreticians, these categories may prove helpful to participants in policy decision procedures to discuss relative importance and priority of various values as they are cited (Muraca, 2011; Arias-Arévalo et al., 2018). We hope that as practitioners work with these taxonomies, they find them useful in discussing environmental values in various situations. We doubt whether new taxonomies will be as helpful as developing *methods* to identify and characterize relational values.

Proposed taxonomies differ, perhaps because different authors have given the concept of relational values different scope. Most of the authors apply the concept ‘narrowly’, suggesting that relational values are an additional type of values in addition to instrumental and intrinsic values (Jax et al., 2018; Klain et al., 2014), while a few outliers--including

ourselves-- explore the idea that all values are relational, and that a full accounting of environmental values will encompass more sub-types of values (Arias-Arévalo et al., 2018: 10; Muradian and Pascual, 2018).

A second variation in this literature reflects a difference in the viewpoint of authors on the idea of ecosystem services, which has dominated environmental policy debate for almost two decades. Some authors introduce relational values under the conceptual umbrella that treats all environmental values as ‘services’. They use relational value to characterize additional types of values (for example, IPBES), while others see relational values as independent from ES thinking. Here, we mention two recent attempts, summarized here as illustrations of possible taxonomies of environmental values.

1. An interesting categorization of values, developed within the broader framework of ES, but emphasizing plurality of types of values as exemplified in varied human-nature relationships, has been proposed (Arias-Arevalo et al. 2018). They note that the choice of a value articulating method is based on a definition of value, names what data is relevant, and whose input matters. They identify six definitions of value that are used--and argued over--in the literature: 1. intrinsic value; 2. principles; 3. monetary value; 4. shared values; 5. ecological value; and 6. ways of concern (Arias-Arévalo et al., 2018: 10). They recognize that the human-nature relationships that shape a culture are strongly influenced by metaphors and narratives. These metaphors and narratives guide their classification of three broad metaphorical relationships: *gaining from nature*, *living for nature*, and *living in nature* which, in turn, include varying mixes of values under the six definitions. Further, they provide a detailed list of useful methods, associating these with the various types of values.

2. Muraca (2011) has developed the view that environmental values can be relational in nature, and she has developed a set of categories of value that separate ‘intrinsic value’ (= ‘moral inherent value’) from a complex set of relational values. Her approach provides a ‘map of moral significance’ that separates ‘fundamental relations’ (ontological conditions for entities to exist at all) from ‘functional relations’ (external links via reflection) (Muraca, 2011: 383). Functional relations are, in turn, divided into ‘intrinsic-eudaimonistic’ and ‘merely instrumental’ subcategories. Eudaimonistic values are values that are pursued for themselves, but as expressive of the subject's conception of a good life. Merely instrumental values, on the other hand, are means to individual ends and they are measurable and countable as fulfillments of individual preferences. Such preferences might be fulfilled by

adequate substitutes (adequacy usually being measured as offering an equal level of well-being in monetary terms), we can see that her position supports a more pluralistic approach to environmental values, and it has the interesting feature that her taxonomy is hierarchical, with layered and complex categories.

While any taxonomy can lead to insights, we think it is important not to assume--or even expect--that any given set of categories will be helpful in all situations. As we have emphasized the importance of metaphors and narratives, and insisted that they vary widely across situations and cultures, it seems unlikely that any categorization can achieve the conceptual hegemony once afforded the categories of instrumental and intrinsic values. Arguments above in Section III should warn us against an expectation that creative proposals will converge on a single system of categories. So, we expect there will be no one-size-fits all taxonomy of relational values.

Developing such taxonomies may prove useful, and we have no doubt there will be further taxonomies proposed. Indeed, in some cases it may be useful to develop a new set of categories to clarify values held in just one or a few situations. All peoples develop a variety of relationships with natural processes and events. These relationships reflect values that are nuanced, as they are experienced in specific situations. They vary according to local context, normative commitments, and the material conditions under which individuals and groups act. Thus, while members of all cultures must take food and fiber from nature, the understanding of the process and the nature of the experiences can differ dramatically across cultures. These relationships can only be understood if they are particularized by reference to specific narratives which, in turn, are given meaning by underlying metaphors.

The goal of taxonomizing relational values should not be expected to create a new and universal ontology, but rather to provide those deliberating about what to do with a set of tools and methods that can help them to articulate, weigh, and balance values on the way to choosing a pathway into the future for their community. This variation may depend on the context in which an evaluation is made.

Rather than placing the hopes of understanding relational values on developing one or more new taxonomies, we favor emphasizing the development of *methods* for studying and communicating actual values people face in the situations in which they live and make decisions. This possibility is explored in an essay by Klain, Satterfield, and Chan (Klain et al., 2014; Klain et al., 2017). These authors describe the development of a map-based

interview protocol and associated methodology allowing the identification and characterization of varied types of values; they offer categorizations that include both material and non-material (cultural) benefits and they recognize that many of these values can only be understood if one takes into account the underlying metaphors that undergird lifestyles and life choices of people who live in a place with specific cultural attitudes and values.

Whereas traditional categories of instrumental and intrinsic values are derived from theory, our ‘theory’ implies that all values originate in relationships that are understood as expressive of local narratives and deeply held metaphors. What is important on our view is to show how those metaphors and narratives connect to human activities in some place at some time. While one can learn from these attempts to find useful categorizations of relational values, they are most useful when they underplay ontology and emphasize methodology. We expect that different categorizations and taxonomies of value will be useful in different situations, since the relational values being categorized vary strongly with the metaphors that are in play in particular situations and in the discourse regarding appropriate actions in those situations.

We therefore see the approach of Klain et al. (2014), who do not emphasize categories so much as *methods*, as pointing in the right direction. Note that the actual taxonomy they offer includes a long list of types--more a listing than a taxonomy. Their map-based methodology highlights and locates the site of activities and associated values as experienced by persons, living within a particular culture in a physical space, and provides a semi-structured interview protocol to encourage the articulation of nonmonetary values as they are experienced in that space (Klain et al, 2014; Klain et al., 2017). While Muraca (2011) and Arias-Arévalo et al., (2018) have provided more aggregated categories, Klain et al. (2014), have moved the conversation forward by providing a map-based method that could be integrated with a number of different taxonomies).

So, we can draw two conclusions regarding categorizations of environmental values. First, we should not think of categories of value as universal and somehow definitive of the types of values one might find exemplified in real-life situations. Categories of values should not be designed to fit prior, theoretical categories; they should instead be proposed as tools for better understanding choices faced in particular situations. Second, what is important about such categorizations is their ability to help communities to better understand, articulate

and negotiate regarding what to do. Therefore, the test of a proposed categorization should be whether it leads to useful methods for identifying and measuring environmental values when a community faces difficult decisions regarding their environment (Keough and Blahna, 2006; Scott, 2015).

V. Values in Community-Based, Democratic Processes

The next step, then, will be to develop an illuminating procedure for making decisions that reflect authentic values. This is, of course, a daunting undertaking, but fortunately we do not have to start from scratch. First, we can cite a very large and growing literature, based in multiple fields of study, that show how public involvement and deliberation can improve decision making by including the voices of concerned citizens in the search for widely acceptable policies (Leach et al., 2002; Sabatier et al., 2005; Freeman, 2011; Maldonado, 2012; Scott, 2015; Jackson and Palmer, 2015; Norton, 2015).

Second, while it is notoriously difficult to assess which methods and efforts generally lead to better outcomes (Norton, 2015), there have been enough examples of public processes that have, if not ‘solved’ environmental problems at different scales, yielded outcomes that appear to be more satisfactory to the populace than solutions developed using cost-benefit analysis (CBA) or other comprehensive technical methodologies (Leach et al., 2002; Blomquist and Ingram, 2003; Keough and Blahna, 2006; Freeman, 2011).

We cannot, of course, claim that participatory processes can solve all problems, but there is enough evidence to conclude that such processes can break out of impasses resulting from reliance on the dichotomous categories, intrinsic vs. instrumental values. At present, discussions of what to do in concrete situations too often get diverted into theoretical, ideological disagreements and away from cooperation and shared methods.

VI. The Future of Environmental Ethics and Valuation: Ethnography

People's values, on our understanding, are the arguments they give for the particular choices they make. Those values are expressed in the language that has co-evolved with a given culture. As noted above, relational values always include a *person* choosing an *object* in a *context*. Relational values are thus best understood when expressed in the language of the relevant culture, which can be revealed by the methods of ethnography.

Recent work by scholars adopting an ethnographic approach to environmental evaluation within a local context has had promising results in identifying the kinds of values

people derive from their natural environment and assert as reasons for favored actions. An example of a study adopting such an ethnographic approach studied sites in both Hawai'i and British Columbia using physical maps of the area as the centerpiece of interviews (Gould et al., 2015). Using situational prompts to stimulate thought about how they relate to their environment, respondents were asked about the ways that they benefit from specific locations in the environment in which they live. The role of the maps in these interviews serve to situate environmental values within the context in which they are derived and experienced. If, as we argue, all values are relational, it follows that these values will only be relevant and can be ascertained under conditions where that relationship is invoked as appropriate. Therefore, maps, among other potential methodological devices, can be used to invoke the relationality of environmental values experienced within the specific context in which they originate. Accordingly, the study identified emergent themes specific to the geography and cultural history of its respondents that may be neglected without an explicit recognition of the importance of local context and sense of place. Interestingly, over half of the respondents spontaneously mentioned the difficulty of articulating their values associated with certain ecologies. Respondents repeatedly refer to a physical place or cultural practice as the essential nexus from which their values emerged. Without reference to the source of these values, critical elements of the relationship would be missed. Therefore, these findings suggest that the separation of the process of evaluation and their products may give a distorted representation of people's values.

Gould et al. (2015), referenced above, along with others across a wide variety of settings and policy contexts are important for several reasons (e.g. Gould and Lincoln, 2017; Rieprich and Schnegg, 2015; Lopes-Fernandes and Frazão-Moreira, 2017; Harrison et al., 2018). First, the ethnographic methodology allows for participants to articulate the character of their relationship to nature as they see it. This contrasts with research designs that presuppose a rigid theoretical framework of environmental benefits that may not be intelligible to those receiving the benefits. Second, these studies serve as examples of how ethnographic work can inform policy-making through methodological commitments to describing accurately the types of relationships and interactions that people have with their physical environment. These findings can then inform an approach to policy-making that emphasizes the process in which decisions are made, rather than setting out to find the supposedly optimal policy outcome irrespective of the particular context.

Environmental ethicists and environmental evaluators in general have tried to determine the value of ecosystems for people by developing theory and by identifying and measuring values based on those theories--theories that are too often developed without attention to the actual experiences of the people affected by decisions (Klain et al., 2014). Klain et al., (2014) challenge the assumption of most evaluators that ES and other evaluations can be achieved without involvement of the relevant public. They proceed to provide a survey and methodology for including ethnographical work in evaluation processes. Here, we have offered an alternative approach to identifying values important in local situations. These brief examples show that much that is useful in making difficult decisions can be brought to bear on those decisions if we think of environmental ethics--and other fields that evaluate change--as providing opportunities to learn, through ethnographic and social scientific study of the actual experiences and relationships that constitute the lives of people who live in an environment.

VI. Conclusion: A New Methodology for Environmental Ethics: Ethnography and Cognitive Science

In this concluding section, we briefly explore the far-ranging consequences of this proposed transformation of discourse regarding environmental values in contemporary society. If one adopts the approach highlighting relational values suggested here, two important shifts would take place in our understanding of environmental evaluation and decision making. The first of these involves a shift away from the dichotomized choices offered by the dualism of intrinsic versus instrumental evaluations. Secondly, our approach suggests a new direction/methodology for environmental ethics, encouraging empirical study of the relationships people experience in living with nature. Since the new approach focuses on peoples' relationships to nature in their day-to-day lives, the future of environmental ethics and environmental value studies will draw on the cognitive sciences, especially ethnography, rather than on attempts to identify and compare outcomes according to one or two global theories of environmental value. Environmental ethics would be guided by the methods of empirical philosophy. Rather than seeking measures of value that apply to all situations via a reduction of all experienced value to a common denominator such as welfare or intrinsic value, the emphasis will be on the particularities of the experience of culturally placed individuals who live out a narrative--based on guiding metaphors--that gives meaning to their

actions and choices. Accordingly, on the new approach, evaluation exercises will always be place-based and applicable mainly to particular situations and particular problems. Here, we refer to values as place-based, even if the problem is global like climate change, provided the advocates view larger systems from a local perspective. Further, attempts at careful evaluation of alternatives will be--or at least should be--embedded in a public process by which participants can share ideas and negotiate regarding possible policies that will be acceptable to parties with varied interests. The focus shifts to evaluating change in real situations where members of a community search for actions and policies that are acceptable to the diverse participants.

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