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Rethinking Appropriateness of Actions in Environmental Decisions: Connecting Interest and Identity Negotiation with Plural Valuation

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Rethinking appropriateness of actions in environmental decisions: Connecting interest and identity negotiation with plural valuation

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ABSTRACT

Issues of interest, identity and values intertwine in environmental conflicts, creating challenges that cannot generally be overcome using rationalities grounded in generalised argumentation and abstraction. To address the growing need to engage interests and identities along with plural values in the conservation of biodiversity and ecological systems, we introduce the concept of 'appropriateness of actions' and ground it in a relational understanding of environmental ethics. A determination of appropriateness for actions comes from combining outputs from value elicitation with those of interest and identity negotiation in ways that are salient to specific people and their relationships to specific places. Drawing on the Blue Mountain Forest Partnership in the Pacific Northwest, we propose factors of success for supporting engagement with values, interests and identities in ways that allow people to work through conflicts and generate situationally appropriate solutions.

1. INTRODUCTION

How to combine the multiple values of nature to support environmental policy and decision-making is a globally important conservation question at present. The Post-2020 Global Biodiversity Framework (Convention on Biological Diversity, 2022) has recently set ambitious targets for not only conserving biodiversity globally, but also to improve equity, social inclusion and the well-being of people that depend on nature. This includes respecting the important role that Indigenous Peoples and Local Communities in nature positive futures and supporting a range of top-down and bottom-up governance processes (Friedmann et al., 2022). Engagement of more diverse stakeholders in biodiversity conservation is also seen as a priority for biodiversity conservation going forward; for example, the European Biodiversity Strategy for 2030 seeks to establish an inclusive approach to conservation through engaging with residents, civil society, local authorities, the private sector, academia and scientific institutions (European Commission, 2020).

Yet most plural valuation strategies relegate issues of power and conflict to the analytical periphery. A number of authors (McShane et al., 2011; Berbés-Blázquez et al., 2016; Hirsch 2018; Martín-López et al., 2019; Balvanera et al., 2020). Turnhout et al. (2020), highlight how scholars interested in the integration of multiple knowledge systems have tended to depoliticise the integration process, rendering invisible the very real stakes of the actors operating both inside and outside of formal valuation procedures. Thus, scientific arguments used to represent universal ideas of the 'best solution' have "ignored political differences between participants, including positions, interests and beliefs" (p. 16). Valuations are articulated by diverse institutions with different types and levels of power and interest (Jacobs et al., 2020), necessitating new techniques for eliciting and combining the multiple values of nature (e.g., Zafra-Calvo et al., 2020; Termansen et al., 2022) with participatory and deliberative processes that promote accountability, diversity, humility and equitable power relations (Lahsen and Turnhout, 2021). The IPBES Values Assessment describes the influence of institutions (both formal and informal rules) in promoting or constraining value expressions in decision-making through different forms of power (e.g., rule-making power, framing power, structural power) (Anderson et al., 2022). Nevertheless, despite scholarly advancements in deliberative valuation (Harmáčková et al., 2021; Kenter et al., 2016; Sagoff, 1998; Spash, 2007) and conservation conflict management (Siebenhüner, 2018; Ainsworth et al., 2020), we are concerned that there remains a lack of philosophical and practical guidance for understanding how to deal with environmental issues and conflicts in ways that combine the rationality of argument, data and information of plural valuation approaches with the rationality of rhetoric that is underpinned by different interests and identities.

The solution we propose to the philosophical and practical challenges of considering together plural values, interests and identities hinges on the 'relational turn' in the conservation social sciences (West et al., 2020) and in the literature of environmental ethics (Norton and Sanbeg, 2021). The relational turn is characterised by a move beyond the duality of conceptualising the value of nature instrumentally (providing direct benefits to humans) or intrinsically (having inherent value in and of itself) to considering the plurality of values that arise from the special relationships that people have with their resources and their place (Chan et al., 2016; Arias-Arévalo et al., 2017; Díaz et al., 2018; IPBES, 2022; Zafra-Calvo et al., 2020). From this starting point, we make the case for a way of understanding the outputs of processes that include and account for

values, interests and identities in terms of their ‘appropriateness.’ Appropriateness of actions entails understanding values in the context of specific places and the connections people develop with them in relation to their interests and senses of identity.

In section 2, we argue that the various influences of power in conservation decision-making point to a need to expand from plural valuation approaches to include considerations of interests and identities. In section 3, we distinguish and compare the different modes of rationality employed in plural valuations versus interest or identity-based negotiations and discuss some of the challenges of bringing these modes of rationality together in a decision context. In section 4, we lay out an approach for responding to these challenges by centring argumentation in the relationships between the people involved in the issues and the places they care about and fostering the generation of solutions that are situationally appropriate. In section 5, we present an example to illustrate the situationally appropriate weaving together of values, interests, and identities in environmental decision-making. In section 6, we we offer steps which could help facilitators surface interests, identities and values towards the identification of appropriate solutions, and draw on recent literature to highlight key factors that may underpin the success of such efforts.

2. POWER DYNAMICS AND THE LIMITS OF PLURAL VALUATION

Plural valuation entails clear framing of the management context and action-oriented purpose, taking account of different theoretical perspectives, and developing processes for combining cognitive models about human-nature relations (Zafra-Calvo et al., 2020). Power dynamics can influence whose values are expressed or recognised (Anderson et al., 2022; Vatn, 2015). These dynamics also shape decisions about how to combine, aggregate or compare values based on different assumptions about the importance of ecosystems for humans and non-humans. Power dynamics affect how values drawn from normative (e.g., this should occur) and descriptive grounds (e.g., 1000 people assigned aesthetic values to this place) are balanced against each other (Kenter et al., 2019; Kenter et al., 2015; Raymond et al., 2019). Also, stakeholders involved in a valuation process can be influenced by a range of external legal, market and social norms as well as other informal and formal rules and mechanisms that underpin behaviour, expectations and assumptions within a given context. These levers institutionalise certain types of value expressions in environmental decision-making (Vatn,

2015; Everard et al., 2016). Power, including overt (direct control of people's decisions), covert (controlling how people decide) and latent or implicit (control of social narratives and discourses) can be mediated by these institutions (see Hirsch et al. 2013, and overview by Martín-López et al., 2019).

Such power dynamics have been acknowledged during the development of deliberative valuation approaches for expression and formation of shared values (Irvine et al., 2016; Kenter et al., 2016; Ravenscroft, 2019). However, to date most deliberative valuation approaches have sought to manage power relations through procedural rules (e.g., norms that support a community's shared values) and rational discourse (e.g., procedures of debate and discussion that enable equal and free participation) (Vargas et al. 2017). Missing from this debate are approaches to negotiation that account for different stakeholder interests and provide avenues for engaging with the issues of justice that can emerge in such deliberative settings (Kenter et al., 2019).

New approaches are emerging to begin to address these issues. Vargas et al. (2017) propose a more inclusive approach to deliberation, which does not seek to secure inclusion through procedural rules and rational discourse, but rather allows for rhetorical speech. Participants draw upon these alternative forms of communication to build a common informational base and to foster understanding, build trust, justify arguments and represent diverse interests and identities. The literature on conflict management in conservation studies draws upon a wider set of terms for enabling the formation and expression of shared values that is typically overlooked in plural valuation studies, including aspects of interest and identity. It also provides strategies for negotiation or mediating conservation conflicts grounded in deeper interests and identities, and for engaging with rhetoric that is associated with those interests and identities.

Conservation scientists have drawn on the literature of conflict management to describe and manage many of the embedded social, political and identity-driven dimensions of conservation conflicts (Redpath et al., 2013; Game et al., 2014; Madden and McQuinn, 2014; Harrison and Loring, 2020). Effective negotiation is a cornerstone of such conflict management. It refers to a process by which parties communicate and exchange proposals in an attempt to reach agreement or consensus (Bercovitch and Jackson, 2001; Bercovitch et al.,

2009). The efficacy of consensus-based negotiation in the environmental context is exemplified by the increasingly prevalent use of Habitat Conservation Planning to achieve the goals of the Endangered Species Act, wherein, for example, the US Fish and Wildlife Service encourages landowners and environmentalists - who would likely otherwise stand in conflict to each other - to work together to identify cost-effective ways of protecting habitat while allowing certain forms of development to proceed. Different problem contexts, of course, may warrant very different approaches to negotiation.

3. COMPARING AND COMBINING PLURAL VALUATION WITH INTEREST AND IDENTITY NEGOTIATION

In this section, we focus on two common strategies of negotiation: interest negotiation and identity negotiation. We distinguish them from each other and from plural valuation techniques, and then discuss how addressing power imbalances and justice issues could be enhanced by combining qualities from both plural valuation and conservation conflict management sources. We chose interest and identity over other foci of negotiation because they are two commonly considered foci in negotiation theory (Boulle and Alexander, 2020). Further, the issues at stake in interest and identity negotiation are likely to be less deeply rooted and thus 'negotiable' as compared to often intractable disputes grounded in, for example, basic human rights. We acknowledge at the outset that interest and identity negotiation are not always mutually exclusive. Indeed, conflicts involving identity also contain interests (Kelman, 1979, 1995). Furthermore, bargaining over issues of interest without also attending to identity in some instances can lead to further polarising of parties (Ross, 1993; Rothman and Olsson, 2001). For the purpose of simplicity, we begin by presenting interest and identity negotiation separately.

3.1 Interest negotiation

Interest negotiation entails a process where parties seek agreement on a set of issues, each underpinned by interests. Interests are the factors which underlie positional claims – they are also referred to as motivations, concerns, needs or priorities (Boulle and Alexander, 2020). For example, negotiating on whether to turn lights on or off in a room based on the interests that one person would like to sleep while the other person would like to finish their homework. When engaging diverse communities of interest in the management of

conservation conflicts, conflict mapping is commonly used to map interests with respect to stakeholder values, attitudes and goals (Redpath et al., 2013). Interest negotiation is context-based, treats all stakeholders in a democratic and accountable manner, and focuses on an iterative dialogue with stakeholders about aims, objectives, capacities, reasons and motivations for actions (Ainsworth et al., 2020).

3.2 Identity negotiation

Identify negotiation entails a process for engaging one's emotions as well as personal and social realities (Keiffer-Lewis, 2022). It typically involves negotiating identities underpinning one's connectedness (e.g., being a proud member of a given community) or feelings of agency (or competence, autonomy, self-efficacy, self-determination) with regards to managing the issue at stake. The process aims to challenge one's self-identity and others' identity by e.g., drawing on knowledge and skills of leaders that represent the desired culture of a group (Swann et al., 2009). Identity negotiation moves beyond interest negotiation by considering the emotions and issues of self-construal that underpin intractable conflicts.

Often deep-seated issues are at play that the interest-based approach may not adequately address (Shapiro, 2017). Madden and McQuinn (2014) assert that identity conflict involves not only values, but also beliefs and social-psychological needs central to the identity of a given party. When identity conflict arises, parties are willing to take extraordinary measures to win (Burton, 1984). However, professional negotiators can help reduce identity conflicts. Identity-based approaches to negotiation highlight the potential for identity shift during negotiation, and function to encourage problem-solving rather than combative approaches to decision-making and conflict management. For example, Atran and Axelrod (2008) suggest that conservation conflicts can be addressed in identity negotiation by refining sacred values to exclude outmoded claims, and/or by shifting the context and reframing responsibility. Facilitators also need to deal with the substance of the dispute, with process factors related to decision-making design, equity and authority, and with relationship factors focussing on building dignity, respect, and trust among stakeholders (Madden and McQuinn, 2014).

3.3 Comparing Interest and Identity Negotiation with Plural Valuation Strategies

In interest negotiation, the boundary conditions for interest are much wider than in plural valuation, and different people, groups and organisations are free to canvass both how they interpret the issues at hand and how and why parties want different things. The outcomes of interest negotiation relate to maximising the gains from shared interests and bundling losses from divergent interests (Boulle and Alexander, 2020).

In contrast, identity negotiation recognises that conflicts do not solely result from differing values and unmet interests, but also both implicit and explicit assaults to core identity and belonging in a given place. People seek to balance interaction goals (e.g., social relations) and identity-related goals, including goals related to agency and psychological coherence (Swann and Bosson, 2008). Biases in parties' modes of thinking exist during negotiation, in part to ensure the survival of identities that are being challenged. Parties who receive unfavourable feedback during the process of negotiation are considerably more depressed, anxious, and hostile than those who receive favourable feedback (Swann, 1987). Accordingly, one cannot deal with identity threats without engaging with emotion.

When deliberating on plural values, different forms and systems of knowledge are often drawn upon to inform discussions or review the outcomes of discussions (Kenter et al., 2016; Raymond et al., 2014). In plural valuation strategies, power is employed by individuals and institutions to promote or inhibit the expression of values (Hirsch et al., 2013; Vatn, 2015; Balvanera et al., 2020; Zafra-Calvo et al., 2020). In contrast, in interest-based negotiation the goal is for the facilitator to support negotiation within and across interests to find compromises, synergies and – when possible - 'win-wins'. Objective criteria for enabling may be drawn upon, but in many cases new narratives are developed between parties to reframe the interests and benefits of the conciliation (Boulle and Alexander, 2020).

When focusing on interests, it is often challenging for parties to move out of their own trenches or normative assumptions, affecting the ability to manage conflicts. Thus, in identity negotiation, discussions move towards validating different identities, and seeking to promote affiliation between identities while also respecting autonomy of parties in terms of their own decision-making (Shapiro, 2017). In intractable conflicts, facilitators seek to deal with the emotion of identity (Shapiro, 2010), including affiliation and

autonomy. Affiliation deals with one's emotional connections to the other side, e.g., do we feel close or distant, included or rejected? Autonomy refers to the degree to which parties feel free to make decisions without imposition from others (Shapiro, 2019). When individual affiliation or autonomy become threatened in cases of conflict, individuals enter a divisive mind-set (Shapiro, 2017), which leads to an oversimplified ingroup-outgroup distinction. Individuals adopt a self-righteous attitude and see the other side as adversarial (Shapiro, 2010). Empirical studies employing relational identity theory have found that leaders who help parties define their relationship with a particular person or group (i.e., how they can co-exist) rather than reinforce their core identity, lead to improved resolution of conflicts and the building of trust (Sabatier et al., 2006). However, all humans still seek a level of autonomy. Thus, the challenge is to promote workable relationships between parties through building emotional affiliation while also providing space for them to cultivate their own voice and sense of self and self-efficacy (Shapiro, 2017).

Mediators can guide each of plural valuation, interest and identity negotiations; however, their role varies across each type. In interest negotiation, mediators have an important role in creating a 'safe space' for genuine dialogue and are encouraged to be 'value-neutral'. Facilitation of dialogue is often built around challenging the assumptions of each party; separating people-issues from problem-issues; guiding issues based on the level of priority assigned to them by parties; using external standards to justify positions and interests; unpacking gains and bundling losses from negotiation; and establishing procedures for resolving future uncertainties (Boulle and Alexander, 2020). In contrast, in identity negotiation, mediators have an important role in invoking moral determination to improve relations. For example, encouraging each party to identify what underpins their identity, to work through emotional pain, and to reach for connection, empathic understanding, attachment, care, and hallowed kinship (Shapiro et al., 2019). In plural valuation, the facilitator has an important role in defining criteria concerning stakeholder and participant representation, the institutional context, the extent of consideration of values, and the extent and exposure to new information.

Plural valuation and interest and identity negotiation present various challenges and opportunities to ecosystem management. While plural valuation enables diverse values to become visible in environmental decision-making, power structures relating to value prioritisation and expression are often hidden behind

‘shields of neutrality and objectivity’ (Lahsen and Turnhout, 2021). Interest negotiation shines a stronger spotlight on issues of power (without resorting to power or rights contests) and recognises from the outset that compromises and trade-offs are necessary, and these may not always be grounded on single objective assessments of ‘truth’ (Ury et al., 1988). Yet, people still have different levels of power to frame issues, and unequal access to information (Hirsch et al. 2013). Further, parties adopt strategies to hide their interests, or to inhibit benefit-sharing (Boule and Andersson, 2020). A skilled facilitator is essential to be able to navigate such issues of representation and posturing. Identity negotiation is often beneficial in historically intractable conflicts where parties have ‘dug deep trenches’ grounded in competing interests. There are multiple institutional barriers to moving down this path. Discussing emotions is often outside of the boundaries of the technocratic logics of environmental policy and decision-making. In poorly facilitated processes, the surfacing of identities can lead to situations where one party attempts to ‘demonise’ the other, further fuelling conflicts. But in well-developed processes it can present opportunities for building empathy, trust, and a sense of common purpose (Shapiro, 2017). Table 1, below, compares interest and identity negotiation with plural valuation.

Table 1: The different starting points of interest negotiation, identity negotiation and plural valuation

	Interest Negotiation	**Identity Negotiation**	**Plural Valuation**
What do we see when we look through the lens?	Different people, groups, and organizations who interpret issues in different ways and who want different things	Challenges made to fundamental sense of self; threats to core identity; issues of belonging, continuity, meaning, transcendental values. Surfacing of negative emotions of e.g. shame, guilt, inferiority etc. But effective negotiations can build empathy, trust, and sense of common purpose.	Diverse (public) values of nature within and across spatial and temporal scales. Values from different theoretical and conceptual starting points are aggregated using a set of integrating methods or are shared and socialised through deliberation.
What does decision-making entail?	Negotiating across different interests to find compromises, synergies, win-wins	Getting people to un-trench, be willing to see past self and other, have their identities validated; seeking to promote affiliation between identities while also supporting autonomy.	Comparing, weighting and/or trading off diverse values of nature to come to a decision
What sorts of expertise / modes of engagement are called for?	Mediators and/or negotiators, support by appropriate technical experts	Nonpartisan facilitators, appropriate public processes, techniques for engaging identity. Willingness to explore the 'emotionality' behind conflicts.	Inter-disciplinary experts drawing on a diverse set of 'objectively defined' methods or criteria to identify and assess the multiple values of nature.
What challenges / obstacles to decision-making are highlighted?	People have different worldviews and levels of power to frame issues, and unequal access to information. Parties adopt strategies to hide their interests, or to inhibit benefit-sharing.	Entrenchment – people may demonise the "other" (the enemy) and there may be a perpetuation of conflict as part of upholding of identity. The epistemological positions of those in the negotiation may inhibit detailed consideration of emotions underpinning identity conflict. Objectivity and 'neutrality' are favoured. Power of veto assigned to certain logics.	Diverse, multi-scalar values are difficult to compare or combine, and there is a lot of uncertainty present in terms of the impacts on different values if alternative pathways forward are chosen. Power structures relating to value prioritization and expression are often hidden behind 'shields of neutrality and objectivity'. Issues of value activation - tacit and implicit knowledge of values means that people find it difficult to express their values in a group setting.
What opportunities for working through those challenges are highlighted?	Reframing; challenging assumptions; developing new metaphors; looking for win-wins; acknowledging losses and seeking compromises.	Bringing out issues of identity; building of trust and sense of common purpose.	Making explicit, classifying, measuring, and comparing worldviews, values, and knowledge systems.

4. RETHINKING THE OUTCOME OF VALUES, IDENTITY, AND INTEREST NEGOTIATION: FROM VALUE PRIORITISATION TO APPROPRIATENESS OF ACTIONS

Above, we have recognised the plurality of the values involved in most environmental controversies. We have also called into question the possibility of final, bottom-line accounts of optimal outcomes (Norton and Sanbeg, 2020), and shown how interest and identity negotiation offer alternative pathways of conflict management. Of course, information from natural sciences and social sciences will surface during negotiations and may affect viewpoints of participants: our point is that, while this information will be relevant and cited by participants as important aspects of the problem at hand, disparate knowledge cannot be amalgamated to identify a single right answer. Interest and identity negotiation are pathways for engaging the rhetoric and emotions underpinning conservation actions; however, we need new ways of integrating these aspects alongside the diverse values of nature grounded in aggregation and argumentation. Such attention will highlight the need for open and democratic processes (Reed et al., 2014; Norström et al., 2020) capable of making space for the diverse modes of argumentation – e.g. rhetorical, metaphorical, analytical - that must be engaged. In this section, we introduce the idea of 'appropriateness of actions' as a conceptual frame for conceiving of particularised outcomes that incorporate interests, identities and plural values.

Norton (2017) suggests that it is possible to bring some clarity and coherence to the assessment of human-nature relationships by viewing the evaluation landscape more situationally and with respect to a diversity of value judgements. Situational approaches allow for the subjective exploration and justification of actions in terms of their 'appropriateness' given existing relationships. A variety of information can be sought on what is appropriate to the policy question and societal challenge at hand, as in the case of ethnographic methodologies drawing on situational prompts to better understand how people relate to the environment in which they live (Klain et al., 2014; Gould et al., 2015; Gould and Lincoln, 2017). From this perspective, relational values are also situational: they reveal themselves in the metaphors and narratives people use when they discuss their values in relation to particular places and resources, and thus must be judged by empirical study (e.g. ethnography) of how people act and/or feel in key situations experienced in a place (Norton and Sanbeg, 2020).

In this light, appropriateness of actions are situational: they require understanding values in the context of specific places and the connections people develop with them. Appropriate decisions require due consideration of given sets of values, interests and identities with respect to a specific time and place (Table 2). On this approach, there will be room for inputs to the decision process from experts as well as interested parties; these inputs should empower participants without overwhelming them. Power relationships and disparities in belief systems can limit the search for appropriate actions; this implies that not all situations are ripe for resolution by negotiation.

Appropriateness of actions also require consideration of the interests and identities that underpin conservation conflicts. In our view, objective information can play a role in successful negotiations if we also pay attention to the more emotive and subjective feelings expressed in negotiations reflected in situations where differing interests and identities are shared (Table 2). These latter considerations will emerge if we respect the relationships that shape the feelings and emotions of participants. These relationships, in turn, are shaped by the metaphors and narratives that give meaning to people's lives. Given a relational understanding of environmental values, discussants will seek policies that are appropriate given the relationships they come to value as they experience their environment.

Table 2 Guiding questions for appropriateness of actions

	Appropriateness of actions
What do we see when we look through the lens?	What is deemed appropriate for the different groups and contexts involved i.e., at this place and time, given these sets of values, interests and identities, this is an appropriate decision.
What does decision-making entail?	Combining outputs from plural valuation processes, as well as outcomes from interest and identity negotiation.
What sorts of expertise / modes of engagement are called for?	The coalescence of objective arguments engaging values, rhetoric, and emotion in ways that different voices feel empowered by the decision-making process.
What challenges / obstacles to decision-making are highlighted?	Multiple forms of power and epistemological beliefs between individuals, groups and institutions inhibit or promote the expression of certain types of interests, identities and values.
What opportunities for working through those challenges are highlighted?	Making new forms of reflexivity possible within science and policy making to unearth implicit assumptions in value, interest, and identity formation and elicitation, resulting in the formation of new shared judgements of appropriateness.

Choosing appropriate actions also necessitates drawing on new forms of reflexivity within science and policy making to better understand the role of the scientist in supporting or hindering certain types of values, interests and identities over others. Grappling with the complexity of such choices requires an integrative *process* (Hirsch et al., 2013; Raymond et al., 2019). Most processes grounded in the quest for 'optimal outcomes' assume that parties are rationally pursuing some goal, underpinned by maximising well-being, minimising costs and maximising public welfare. In the quest for an optimal solution, values inevitably need to be traded-off and substituted leading to winners and losers from a given process. In negotiated solutions, negotiators invite surfacing of identities and reframing of interests, often in isolation from deeply held values and knowledge. In contrast, processes embedded in the delivery of appropriate actions seek to identify what combinations of interests, identities and values are important to specific actions in specific contexts. The underlying assumption is that more appropriate actions for ecosystem management can be identified and agreed upon by parties when their varied values, interests and identity are surfaced. Such processes are likely to result in a kaleidoscope of appropriate actions that are salient to specific contexts comprising of different governance and geographic scales, in addition to given sets of values, interests and identities. As such, appropriate actions enable us to consider the different sets of values, interests and identities in parallel without assumptions of commensurability or convergence across all values and interests in the room.

In Figure 1, we graphically illustrate how the concept of appropriateness enables the weaving together of different threads of knowledge, values, interests, and identity through emphasising people-place relationships grounded in specific situations. In the following section, we provide an example to illustrate the concept of appropriateness and show how it can enable the weaving together of these disparate threads.

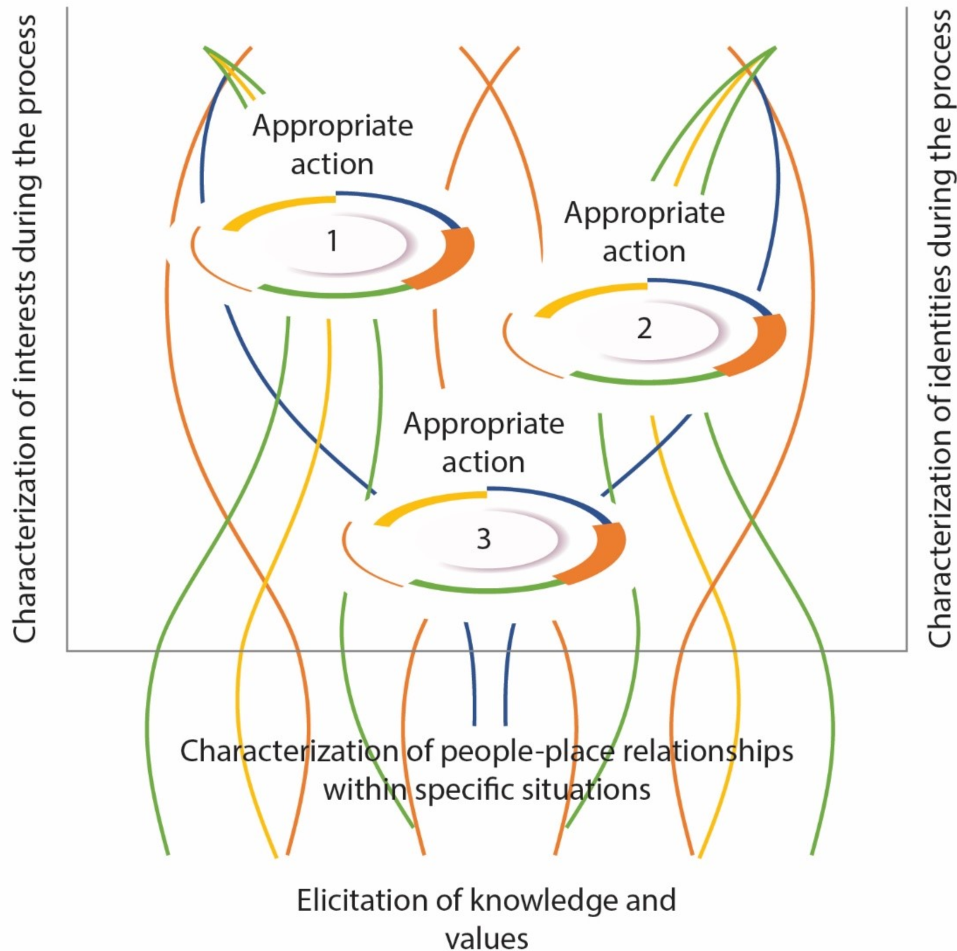

Figure 1 The weaving together of interests, identities, knowledge and values through appropriateness of actions

5. AN ILLUSTRATIVE EXAMPLE FOR SURFACING APPROPRIATE ACTIONS IN SETTINGS OF CONFLICT

In the United States, there is perhaps no more canonical example of an environmental conflict than that between environmentalists and loggers in the forests of the Pacific Northwest. As characterised by Susan Brown, an environmental lawyer who went from suing to halt logging in National Forests to becoming an empathetic advocate for loggers' jobs, "federal forest management has been characterised by acrimony, distrust, and 'othering' of stakeholders" (Brown, 2019). Yet a promising collaboration focusing on the management of recently burned landscapes, the Blue Mountain Forest Partnership, is flourishing in the midst of that acrimony (Butler and Schultz, 2019; Kristof, 2021) and in doing so exemplifies what we mean by the concept of appropriateness. Among other things, the outputs of Blue Mountain Partnership have included

support by environmentalists for the last lumber mill, and support by loggers of bird-friendly salvage methods. In the eyes of Nicholas Kristof, in an article for the New York Times, the process by which the Blue Mountain Partnership was developed "offers America a model of a process to sit down with antagonists, seek common ground, register progress (punctuated with eye rolls and moans) and knit this country back together" (Kristof, 2021, pp.1)

While we do not possess first-hand knowledge of the details of this case study, we can use the available information to illustrate what we mean when we say that a solution or pathway forward is "appropriate" for a given situation, along with the various threads such a solution or pathway is comprised of. We can then use that illustration to explore factors of success and ask questions – intended to guide further work – regarding what is entailed for a process that is generative of appropriate solutions to complex conflicts.

5.1 Values, Knowledge and Appropriateness

The threads of values and knowledge are those attended to in existing models of plural valuation. In recently burned landscapes, the value of trees can be characterised both as a fast-degrading source of revenue for surrounding communities, and as an important habitat for woodpeckers and other species of conservation concern. Since these values are clearly in tension with each other (trees sold for timber can't be homes for woodpeckers) a process of plural valuation would seek to balance or optimise these (and perhaps other) forms of value embedded in the landscape. In such a process, the role of knowledge is central. In the case of the recently burned landscapes of the Pacific Northwest, recent research has indicated that certain forms of logging can be beneficial for forest health in the context of increasing wildfires. This new knowledge, along with the availability of new mapping tools for close targeting of probable woodpecker habitat, opens new possibilities for shaping management options that achieve an optimal balance across economic and ecological categories of value (Blue Mountains Forest Partners, 2021a).

Nevertheless, given the acrimonious history, it was exceedingly unlikely that an achievable outcome would be identified by ecologists and economists working alone. Indeed, the success that Kristof points to was the result of a series of long-term collaborative efforts that included members of the timber industry, conservation groups, local elected officials, community members, scientists and Forest Service managers

(Blue Mountains Forest Partners, 2021b). The tangible outcome of these efforts was the identification of 'Zones of Agreement' - non-binding recommendations made by the Partnership to the Forest Service that represent intentional efforts to tailor recommendations to local ecological contexts and to the concerns of localised communities (Blue Mountains Forest Partners, 2021b).

Tellingly, the website of the Blue Mountain Forest Partnership uses the language of appropriateness in describing their work, and, further, does so in a way that clearly combines a subjective, place and people-based component with an objective grounding in the relevant science.

> Restoring the resilience and health of the forests in the Blue Mountains is more than an ecological issue. People are at the heart of the changing management practices to promote the long-term well-being of the forest. Without the social acceptance of **appropriate** forest management, little will change (Blue Mountains Forest Partners, 2021c).

While we cannot know what was in the mind of those who used the term, we can certainly conclude that what makes the Blue Mountain Forest Partners approach to management appropriate is not just a function of values and knowledge. The threads of interests and identities are an integral part of the fabric as well.

5.2 Interests, Identities, and Appropriateness

It is the careful attention given to the social dimensions of forest management, over and above the adoption of a generalised commitment to collaboration and an adaptive management framework, that make the efforts of the Blue Mountain Forest Partnership a working model. The social dimensions that the Partnership grapples with include diverse interests – foremost among those being those of loggers and environmentalists – across which new opportunities for successful negotiation may now be feasible due to a combination of scientific understanding and current ecological and economic realities.

The social dimensions also entail divergent identities that mirror patterns of increasing polarisation at the national scale. One of the counties in Eastern Oregon in which the Partnership operates voted to withdraw from the United Nations (Kristof, 2021); another county was the site in 2016 of an armed occupation by an anti-government militia demanding that the government turn over federally protected lands (Schultz and Butler, 2019). These perhaps extreme instances are driven by a steady decline of the timber industry,

drastically reduced harvests and the closing of sawmills and associated loss of jobs and income. People in the region are strongly identified with their jobs and their ways of life, and the incursion of environmentally oriented lawsuits and regulations is seen as a threat.

It was into this milieu that Susan Brown, an anti-logging environmental lawyer from the liberal mecca of Portland, was invited in 2003 by local leaders to spend three days with local loggers "visiting forests and arguing about whether trees should be cut" (Kristof, 2021). From this genesis, the Blue Mountain Forest Partnership was formed, symbolising a commitment by environmentalists and loggers to work together to develop forest management strategies that are restorative to forest ecosystems *and* community economic health. As it developed, the Partnership was eventually able to secure a 10-year commitment of funding from the Collaborative Forest Landscape Restoration Program (CFLRP). Initiated in 2009, the CFLRP is "a nationwide program that requires collaboration throughout the life of national forest restoration projects, joining agency partners and local stakeholder groups in a kind of decade-long restoration marriage" (Schultz and Butler 2019).

The apparent – and inevitably partial, contingent, and dynamic - success of this initiative should not be taken to imply that appropriate solutions always emerge. In many cases, the space between divergent identities or interests may be sufficiently large, or trust in science sufficiently small, that such outcomes are difficult or impossible to achieve. Indeed, Kristof's article speaks to the economic reality that the smaller logs targeted for harvesting in the interest of woodpecker protection are less profitable than larger ones, as well as the political reality that many environmentalists and loggers not only remain unwilling to work across social and political divides but also see those who do as sell-outs (Kristof, 2021). Nevertheless, even as such challenges persist, we can use this example, our own experiences, and emerging scholarship to point to what may be required to navigate conflicts like this when plural values, divergent interests, and conflicting identities are all involved. In the following section, we offer preliminary guidance facilitators can draw – and build on – in efforts to navigate different interests, identities, and values with the aim of finding appropriate solutions to complex conservation conflicts.

6. GUIDANCE FOR FACILITATORS

Drawing on the Blue Mountains Forest Partnership case and wider literature, here we offer steps which could help facilitators surface different interests, identities and values during conflict management processes. Importantly, we also offer some broader guidance that could help facilitators weave together interests, identities and values to help parties identify appropriate actions.

6.1 Understand context and identify key stakeholders

Clearly define the issue, intervention, project, or decision so that there is a clear boundary to the analysis (Raymond et al., 2010; Prell et al., 2009). Then identify individuals, groups, or organisations that are collectively viewed to be most interested, influential, or affected by the issue, intervention, project, or decision (Reed et al., 2014).

6.2 Surface a diversity of interests and build system-level trust

Discuss the nature and reasons for party interest, their influence, and the possible short or long-term impacts on them that may arise from the project. Discuss the various perspectives of supposed "beneficiaries", and how planned impacts may support, compromise or damage their interests (Reed and Rudman, 2022). Across the process, pay particular attention to the voice of parties through effective representation of interests of affected groups, including marginalised groups (ibid). As shown through the Blue Mountain partnership case, facilitators should pay attention to developing system-level- trust at this early stage of the process. i.e., trust based on relationships, procedures and practices not tied to specific individuals (who may or may not be around in the next iteration). It is with the development of system-level trust, furthermore, that collaborations can take on the most contentious issues, issues that if avoided make it unlikely that collaborative efforts will lead to adequately holistic and sustainable solutions (Stern and Coleman, 2019).

6.3 Surface and build empathy for different identities grounded in specific places

Identify key individuals and organisations with the ability to engage individual and group identities, and work to identify hard-to-reach groups that may require specific strategies and investment. Create spaces for listening, learning and discussing how identities can be reframed or power can be redistributed to achieve

meaningful and transformative change (building on Reed and Rudman, 2022). This can in part be achieved by paying attention to specific people, and individuals' relationships to specific places. As documented by Brown (2019) and in a documentary produced by Oregon Public Broadcasting (Scott and Swanson, 2020), what success the Blue Mountain Forest Partnership has had has been highly dependent on the diverse individuals having meals (and drinks) together, tramping through the woods together, and forming new friendships. This observation is consistent with recent research on inclusive conservation which further demonstrates that spending time together in and around the action context is critical to surfacing and managing conflicts that may otherwise seem intractable (Raymond et al., 2022).

6.4 Elicit diverse values and seek to understand their links to worldviews and knowledge systems

Provide a space and opportunity for people to identify values that they may find difficult to articulate. Draw upon mixed methods to first comprehensively elicit values, and then understand what those values mean to people, why particular values are held (Kenter et al., 2014), and how they can be integrated to inform a given decision (IPBES, 2022). Provide space for important moral and ethical issues to be debated in conflict situations and recognise that some values cannot be traded off without deliberation (Kenter et al., 2019), or indeed some knowledge systems / ethical perspectives may resist direct comparison or trading off across different values (Anderson et al., 2022).

Facilitators also can help parties identify sources of conflict by helping people unpack the relationships between values, worldviews, and systems of knowledge and/or power. Hirsch et al. (2013) offer an integrative framework for navigating "complex trade-offs" that focuses discussion on diverse values, on the processes through which they are articulated and negotiated, and on the power relationships that shape who gets to frame problems and therefore to define what may or may not be appropriate solutions. The inclusive values typology within the IPBES Values Assessment (IPBES, 2022) illustrates how worldviews and knowledge systems inform environmental values in specific decision-contexts, pointing to the need to consider the interplay between worldviews, knowledge systems and values in conflict management processes. Raymond et al. (under review) argue that attention to the vertical interactions within the IPBES typology (e.g.., relationships between worldviews, knowledge and specific values) in negotiation processes can help parties identify the

source of conflicts, and attention to horizontal interactions within the typology (overlap of values within a given layer) can help identify points of common ground when previously no shared perspectives were visible. Further, Ainsworth et al. (2020) provide an iterative framework for realising knowledge integration in situations where stakeholders hold different values, knowledge systems and worldviews. They demonstrate how providing opportunities for individuals and organisations to share their values and knowledge can provide the foundation for social learning, trust building and mutual prioritisation of future collaborative projects.

6.5 Seek out appropriate actions:

Seeking out appropriate actions requires the creation of functional spaces with professional facilitation for open dialogue about values, interests, and identity (collated in steps 1-3) with respect to the place in question. Shapiro (2017) describes such a space as a learning environment that enables individuals and groups to “embrace controversy, take personal risks and reconsider perspectives” (p. 154). While the previous steps sought to identify existing interests and identities, processes for seeking appropriate actions are future-oriented. They require facilitators to place disciplines and practices into new configurations, and encourage parties to find solutions through discovery of options rather than linear and rote deduction of an answer (Klein, 2017). Facilitation activities aim to connect the identity of other groups in terms of their cultural, spiritual or social beliefs, including meaningful rituals and spiritual practices (6.3), their allegiances to friends, families and allies (6.1), their broad and specific values for nature (6.4), and meaningful memories experienced in specific places (Shapiro et al., 2019).

Facilitators have a key role in surfacing fears and in securities related to identity (Shapiro et al., 2019), as well as capturing underlying interests and making explicit parties’ needs and reasons for certain actions (Fisher and Ury, 1991), requiring activities for connecting results from 6.2 and 6.3. In issues characterised by conflicting values, diverging interests, and diverse identities, particularly in cases where explicit and/or implicit power dynamics are at play, each thread may require quite different modes of engagement on the part of facilitators. Hirsch, building on earlier work on navigating complex trade-offs, is working to refine a “palette” of modes of engagement for facilitative work in service of appropriateness, so that facilitators can

take a step back and ask what sorts of actions and activities would be supportive at a given phase of a complex problem situation (see Hirsch 2015 for an early version).

Seeking out appropriate actions calls for not only surfacing and repositioning of interests and identities, but also mutual recognition that multiple pathways exist for achieving a given action, each grounded in a place-based understanding of values, interests, and identities. Facilitators can also help multiple 'action sub-cultures' to develop among complementary communities of researchers and stakeholders, enabling communities to work together on appropriate actions as they build trust and connection and attend to each other's interests, identities and values (building on Reed and Fazey, 2021).

7. CONCLUSIONS

In this paper, we made the case for institutionalising processes for negotiating interests, identities and values underpinning conservation conflicts, and viewing the outputs and outcomes of such processes through embedding a relational language of appropriateness of actions. Appropriateness of actions allows for the joint consideration of values, interests and identity in "ordinary language" by scientists and stakeholders alike. Appropriate actions are situated, and the decision-making process entails combining outputs from plural valuation processes, as well as outcomes from interest and identity negotiation salient to specific people and places. The relationality of appropriateness necessitates a shift from an argumentative and rational approach to valuation to situated approaches grounded in dialogue and structured consideration of rhetoric. Combining interests, identity and values may challenge the 'objectivity' of decision-making but creating an environment of conflict management necessarily involves bringing together rational and moral value, interest, and identity judgements.

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