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A theory of participation: what makes stakeholder and public engagement in environmental management work?

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Running head: A theory of participation

Summary

This paper differentiates between descriptive and explanatory factors to develop a typology and a theory of stakeholder and public engagement. The typology describes different types of public and stakeholder engagement, and the theory comprises four factors that explain much of the variation in outcomes (for the natural environment and/or for participants) between different types of engagement. First, we use a narrative literature search to develop a new typology of stakeholder and public engagement based on agency (who initiates and leads engagement) and mode of engagement (from communication to co-production). We then propose a theory to explain the variation in outcomes from different types of engagement: i) a number of socio-economic, cultural and institutional contextual factors influence the outcomes of engagement; ii) there are a number of process design factors that can increase the likelihood that engagement leads to desired outcomes, across a wide range of socio-cultural, political, economic and biophysical contexts; iii) the effectiveness of engagement is significantly influenced by power dynamics, the values of participants and their epistemologies i.e. the way they construct knowledge and which types of knowledge they consider valid; and iv) engagement processes work differently and can lead to different outcomes when they operate over different spatial and temporal scales. We use the theoretical framework to provide practical guidance for those designing engagement processes, arguing that a theoretically informed approach to stakeholder and public engagement has the potential to markedly improve the outcomes of environmental decision-making processes.

Keywords: knowledge exchange, impact, engagement, decision-making

Author contributions: MSR led the research and writing; SV, JSDC, RKN, JDV, EC, LF, HVD contributed to the literature review; SV, TH, DHR and LO contributed to the theoretical framework

Conceptual implications:

- The agency (who initiates/leads) and mode of engagement does not necessarily predict its outcomes
- Stakeholder and public engagement may not be appropriate where there have been unsuccessful previous attempts, are insufficient resources, or is no culture of participation
- Co-productive approaches to engagement that systematically represent stakeholders and/or publics are more likely to achieve beneficial outcomes
- Engagement outcomes are influenced by power dynamics, the values of participants and their epistemologies, and so may benefit from professional facilitation
- Length and frequency of engagement need to match the goals of the process, recognising that outcomes are highly scale-dependent over space and time

Introduction

There is increasing recognition that global environmental challenges, such as climate change and land degradation, cannot be tackled in isolation from each other, due to the complex interactions that occur between such processes (Reed & Stringer 2016). Complex and dynamic challenges require engagement with diverse, and often conflicting stakeholder and public priorities (Reed 2008). It has been claimed that more participatory approaches to tackling environmental challenges have the capacity to reduce conflict, build trust and facilitate learning amongst stakeholders and publics, who are then more likely to support project goals and implement decisions in the long term (e.g. Beierle 2002; Reed 2008; de Vente et al. 2016; Derak et al., this issue).

However, there are many examples of participatory approaches to environmental management failing to deliver desired beneficial environmental or social outcomes (e.g. Coglianesi 1997, Cook & Kothari 2001, Gerrits & Edelenbos 2004, Lane & Corbett, 2005; Scott 2011; Staddon et al., 2015). When stakeholder and public engagement fails to deliver expected outcomes, this can inflame latent conflicts, turning a conflict of interests into much deeper and more intractable issues, which may escalate into alienation and distrust (Emery et al. 2015). For example, Redpath et al. (2012:100) argue that a lack of engagement, or “tokenistic” approaches to engagement, “when conservationists assert their interests to the detriment of others”, is to blame for many conservation conflicts. This has contributed to an on-going debate criticising participatory processes, most notably Cooke & Kothari’s book *Participation: The New Tyranny* (2001), leading to a loss of faith in participation (Corathers & Brechenmacher, 2014) and calls for social co-operation that can make the voices of citizens heard, rather than just calling for “more voices” (Couldry, 2010). It is often unclear why different engagement processes lead to such different outcomes. Despite many local case studies of different approaches to engaging stakeholders and publics in environmental management (e.g. Kok and van Delden 2009; Stringer et al. 2014; Kochskämper et al. 2016), there have been few attempts to generalise from these experiences or develop theory that could explain how and why engagement sometimes works, and sometimes fails to achieve objectives or leads to unintended consequences.

The literature on public and stakeholder engagement presents a fractured and often contradictory picture. For every example of a participatory process that has led to tangible environmental and social benefits, there is an example of a process that failed to meet its goals or the expectations of those who participated, or led to unintended negative outcomes (Reed, 2008). In response to this, there have been a number of attempts over the years to create typologies of participation that encourage increasingly co-productive engagement with publics and stakeholders (e.g. Arnstein 1969; Pretty 1995). However, there are examples of highly co-productive processes that have gone wrong (e.g. Booth & Halseth, 2011). Equally, the UK’s Research Excellence Framework impact case study database (<http://impact.ref.ac.uk>) provides a number of examples of more consultative processes that have led to highly effective outcomes (e.g. consultation with policy, industry and third sector organisations during the development of a carbon calculator, which led to a top-rated impact preventing windfarms being built on peatlands; Smith et al., 2012). There is therefore an urgent need to develop a theory to explain why different types of public and stakeholder engagement work, and why.

This paper therefore creates a clear distinction between descriptions (typology) and explanations (theory) of stakeholder and public engagement in environmental management: 1) the typology *describes* different types of public and stakeholder engagement; and 2) the

theory comprises factors that *explain* much of the variation in outcomes between different types of engagement in different contexts. First, the next section uses a narrative literature search (c.f. Baumeister & Leary, 1997; Green *et al.*, 2006) to develop a new typology of engagement based on agency (who initiates and leads engagement) and mode of engagement (from communication to co-production). Using this typology, we identify four broad types of engagement that are theoretically possible and provide examples of each type in practice. In contrast to previous typologies, we significantly expand upon what can be considered to be legitimate types of engagement. Second, we then propose a theory to explain the variation in outcomes from across these different types of engagement. Although this theory is developed in the context of ecological restoration and environmental management, it is proposed as a useful step towards a more generalizable theory that could guide the practice of stakeholder and public engagement across a range of different environmental, policy and other contexts.

The wheel of participation: a new typology to describe stakeholder and public engagement

We define participation after Reed (2008) as a process where public or stakeholder individuals, groups and/or organisations are involved in making decisions that affect them, whether passively via consultation or actively via two-way engagement, where publics are defined as groups of people who are not affected by or able to affect decisions but who engage with the issues to which decisions pertain through discussion (after Dewey 1927; Ikegami 2000) and stakeholders are defined as those who are affected by or can affect a decision (after Freeman 1984).

There are many ways of describing the different types of public and stakeholder engagement that are typically seen in environmental management. Many of these typologies are purely descriptive, but many also attempt to explain why engagement may or may not deliver desired outcomes in any given context. As a result, and given the paucity of theory in this area, these descriptive typologies are often used to classify engagement processes, but they lack explanatory power.

Existing typologies tend to characterise the mode of engagement in three ways:

- First, engagement may be characterised as bottom-up (initiated and/or led by citizen, public or special interest groups with limited formal decision-making power) or top-down (initiated and/or led by those with formal decision-making power who wish to empower interested parties with less power and diverse perspectives to make or contribute towards decisions) (Fraser *et al.*, 2006; Reed 2008).
- Second, types of engagement may be distinguished in relation to the different motivations and outcomes that drive engagement. For example, motives may be pragmatic (e.g. better decisions that are more likely to be implemented), normative (e.g. the democratic right or expectation that stakeholders and/or publics should participate in major decisions that affect them) (Reed 2008), or the motives may be to enhance trust in decision-making processes among publics and stakeholders (Rowe & Frewer 2004; Rowe *et al.* 2005). Different motives are typically linked to the pursuit of different outcomes from engagement. For example, pragmatic motives may be linked to the pursuit of outcomes relating to the decision or issue in which publics and/or stakeholders are engaged (such as environmental protection), whereas motives that are more normative or that seek to build trust and learning may be more

- likely to target benefits for participating individuals or groups (de Vente et al., 2016).
- Third and finally, different modes of engagement are possible, and typically lie along an information or knowledge exchange continuum, from approaches based more on one-way flows of information and knowledge to publics and stakeholders (communication mode) and seeking feedback from publics and stakeholders (consultation mode) to more two-way knowledge exchange and joint formulation of goals and outcomes (more deliberative and co-productive modes) (Rowe & Frewer 2004; Rowe et al. 2005).

These different ways of describing engagement have been historically and consistently described using the metaphor of a ladder, first described by Arnstein (1969). Although now widely considered out-dated (e.g. Collins & Ison 2006, Reed, 2008), many practitioners and decision-makers still use the ladder as their point of reference, and citations in the academic literature are increasing (according to Google Scholar, approximately 25% of the article's citations are from the last 2.5 years). Rather than simply describing different types of engagement, the 'ladder of participation' implicitly attempts to explain why lower levels of engagement will in theory lead to undesirable outcomes (because it is argued that they are typically associated with manipulation), suggesting that more deliberative and co-productive modes of engagement should be preferred (Arnstein 1967; Pretty 1995).

However, as we argue in the next section, there are many reasons why participatory processes at the top of the ladder can fail. Conversely, we build on work by Vella et al. (2015) to argue that for certain purposes and contexts (e.g. where there is little scope for delegation of decision-making power because a decision has already been made), communicative and consultative modes may be most appropriate, at least in the short term. Previous attempts have been made to dislodge the metaphor of Arnstein's ladder from popular imagination, for example focusing on directions of information flow, openness and representativeness, and delegation of power (e.g. Fung, 2006; Newig & Kvarda, 2012). However, like Arnstein's ladder, these conceptualisations combine typology and theory, trying to describe what is possible whilst trying to recommend ideal types based on what should in theory work. In contrast, our approach provides a comprehensive but purely descriptive typology. This descriptive approach then makes it possible (later in the paper) to identify theoretical principles that are generalizable across all types of engagement (rather than explaining how one type of engagement operates versus another).

In Figure 1, we use the metaphor of a wheel with an inner and outer dial that can be spun in either direction to create different combinations of agency (who initiates and leads the process) and mode of engagement (from one-way communication to co-production). The wheel metaphor was first proposed in the grey literature by Davidson (1998), but despite being highlighted by Reed (2008) as a more appropriate metaphor than the ladder of participation, without a rigorous theoretical basis it has seen limited use. In Figure 1, we provide the 'wheel of participation' as a more comprehensive, rigorous and useful alternative to the 'ladder of participation' to help select the appropriate type of engagement for a given context and purpose. In doing so, we seek to describe what happens in each type of engagement without attempting to explain why what happens works or not. By spinning the outer dials in Figure 1, it is possible to identify four broad types of engagement. We recognise that there is a gradient between top-down and bottom-up agency and each of the different modes of engagement, rather than these being hard boundaries, as depicted in the Figure. As a result, it is possible to envisage types of engagement that may lie in between each of the idealized types below (e.g. where there is a combination of top-down and bottom-up agency, discussed below). The four types of stakeholder and public engagement

are:

1. **Top-down one-way communication and/or consultation:** engagement is initiated and led from the top-down by an organisation with decision-making power, consulting publics and stakeholders (but retaining decision-making power) or simply communicating decisions to them. Although this type would not generally be considered 'participation' (e.g. see Rowe & Frewer, 2001), in common with most other typologies we include it to show the full range of options available. However, in contrast to most other typologies, we do not attach any value judgement to this type of engagement, providing it is best suited to the given purpose and context, for example where a decision has already been made and cannot be changed, but needs to be communicated to those affected
2. **Top-down deliberation and/or co-production:** engagement is initiated and led from the top-down by an organisation with decision-making power that engages publics and stakeholders in two-way discussion about the decision, enabling the decision-making body to better understand and explore suggestions with stakeholders prior to making their decision. A more co-productive approach would typically include deliberation, but the decision (and how it should be implemented) would be jointly developed and owned by both the agency and stakeholders/publics. Despite this, it would still be the responsibility of the environmental agency to implement the decision
3. **Bottom-up one-way communication and/or consultation:** engagement is initiated and led by stakeholders and/or publics, communicating with decision-making bodies, often via grassroots networks and social media, to persuade them to open their decision-making process to scrutiny and engagement. Alternatively, this type of engagement may occur when stakeholders or publics gain enough power, typically through mass mobilisation of public opinion or stakeholder groups, to overrule previous top-down decisions. Those leading the process may consult with publics and stakeholders to better understand and represent their views and demonstrate buy-in and support, and so increase their capacity to influence decision-makers or overturn decisions
4. **Bottom-up deliberation and/or co-production:** engagement is initiated and led by stakeholders and/or publics who engage in two-way discussion about the decision with other relevant publics and stakeholders to make a decision. The decision may be made and implemented by a single or a small group of stakeholders/publics based on knowledge gained through deliberation, or the decision may be co-produced, owned and implemented by the whole group

It is worth noting that there are few examples of genuinely bottom-up, deliberative and co-productive decision-making processes in the literature (see Box 1). In reality, many processes that claim to be bottom-up are in fact jointly initiated and/or led by groups with and without formal decision-making power, and so may in fact be closer to the second than the fourth type of engagement described above. Such processes are characterised by collaboration between those with formal power, derived from the roles, functions and responsibilities that are typically held by organisations, and those with informal power, derived from the knowledge, needs and moral rights of stakeholder and publics.

Box 1: Examples of different types of participation

Top-down one-way communication and/or consultation: Many decision-making bodies create social legitimacy by passively communicating the benefits of their actions to their customers and stakeholders. For example, Samkin and Schneider (2010) describe how the New Zealand Government's Department of Conservation legitimised its decision-making role in the face of negative publicity through the communication of public benefits in annual reports and related publicity. Similarly, Cormier et al. (2004) show how companies often seek to enhance their social legitimacy through selective reporting of environmental outcomes, based on their interactions with stakeholders. The EU Water Framework Directive provides one of the most far-reaching examples of top-down consultation with stakeholders and publics. EU Member States are required to encourage the active involvement of all interested parties in the implementation of the directive, with detailed rules given for public and stakeholder consultation during the production of the river basin management plans (cf. European Commission, 2002). Ultimate responsibility for drafting and implementing these plans lies with statutory bodies in each country.

Top-down deliberation and/or co-production: Leach et al. (2002) described the use of stakeholder partnerships in the United States to reach shared goals in watershed management, including ecological restoration. They described how it typically took four years of deliberation and joint action to achieve major milestones, such as formal agreements and implementation of restoration plans. Similarly, Risvoll et al (2014) describe how Norwegian National Parks were decentralized, with management delegated to locally elected politicians and elected Sámi representatives in Regional National Park Boards, and local stakeholders represented via Professional Advisory Committees. The goal was to facilitate two-way deliberation to ensure local knowledge and interests were represented and integrated in protected area management to improve park management and local development, although to date there is limited evidence of deliberation leading to the coproduction of knowledge or outcomes beneficial to those participating in the initiative.

Bottom-up one-way communication and/or consultation: there is a rapidly growing range of examples of bottom-up communication and/or consultation as environmental activist increasingly harness the power of social media to represent the views of distributed online communities and communicate these views to those with decision-making power, in an attempt to influence decisions (Ghai and Vivian, 2014). For example, Bevington (2012) describes how grassroots biodiversity groups built campaigns that influenced national US forest policy decisions, and protected populations of Northern Spotted Owls ancient redwood forests.

Bottom-up deliberation and/or co-production: although widespread, there are few examples of this type of participation in the published literature, as publics and stakeholders do not need to involve researchers or organisations with formal decision-making power to make progress towards their goals. A rich source of examples may however be found in the participatory action research literature (e.g. Austin, 2004; Ballard and Belsky, 2010).

Finally, it is important to note that not all examples fit neatly into this typology, and may sit between types. Most commonly, this occurs when participation is jointly initiated and led by stakeholders/publics and those with decision-making power. For example, Derak et al. (this issue), who propose a participatory framework for forest restoration in which researchers, forest managers and local communities were involved in all steps of the restoration decision-making and implementation process: identifying restoration priorities, assessing land use options, defining the restoration procedure, and participating in planting, evaluation, surveillance and monitoring. The result was that after two years, the plot remained undisturbed by vandalism or grazing, and was showing signs of improved ecosystem functioning. Similarly, van der Windt et al. (this issue) describe projects that were initiated jointly by provincial administrations, experimental organic farms, researchers, conservation NGOs and regional organizations of organic farmers and retailers.

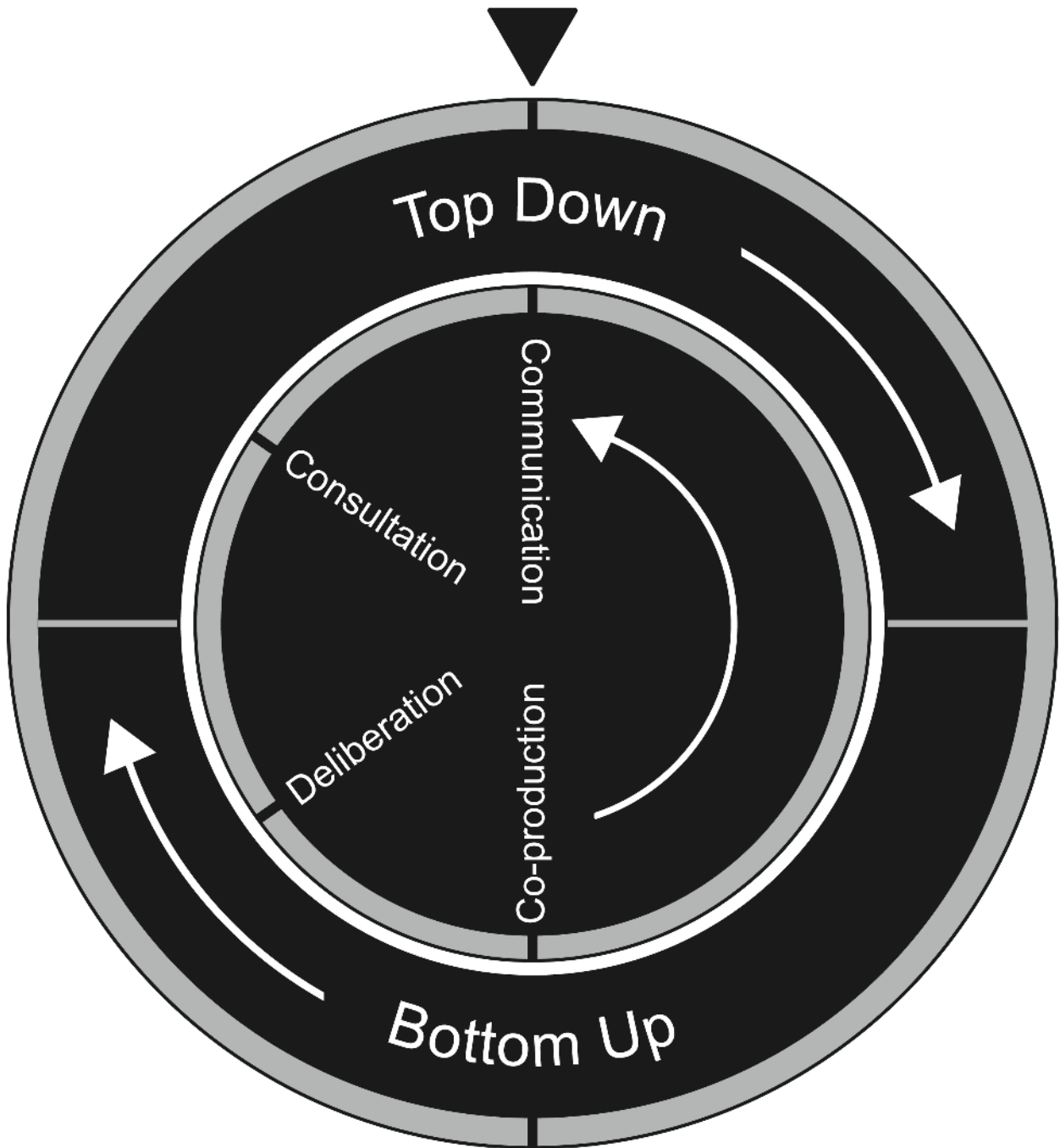


Figure 1: The wheel of participation is a typology that defines different types of stakeholder and public engagement. It combines four modes of engagement with either top-down or bottom-up agency. It consists of an inner and outer wheel that can be spun in different directions to create different combinations of agency (who initiates and leads the process) and mode of participation (from one-way communication to co-production). This identifies four types of engagement: top-down one-way communication and/or consultation; top-down deliberation and/or co-production; bottom-up one-way communication and/or consultation; and bottom-up deliberation and/or co-production. Rather than always aiming for bottom-up and co-productive types of engagement, the wheel of participation can be used to match the appropriate type of engagement to the purpose and context in which engagement is needed.

Explaining engagement

The previous section identified four broad types of engagement. This section provides four explanations for why these different types of engagement might lead to different outcomes for the natural environment and those who participate. Based on the literature, it is possible to explain how different types of engagement work in terms of context, design, mediation or democracy. The next section will use these insights to build a new theory of stakeholder and public engagement.

Engagement as context

A number of studies have emphasised the role that local context can play in determining the outcomes of engagement processes (e.g. Stringer et al. 2007; Blicharska et al. 2011; Ingram, 2013). Most of this research has focused on the socio-economic, cultural and institutional contexts within which engagement is needed (Delli Carpini et al. 2004). For example, it is argued that bottom-up processes with significant power asymmetries are more likely to suppress the interests of weaker actors than more formalized, top-down processes in which power dynamics are perceived to be more effectively controlled, especially when these processes are organized by formal institutions who already have decision-making power (Larson & Lach, 2008; Zeitoun et al. 2011). These power dynamics may impact the nature of the decision that is made, as well as its acceptance, since those who feel disadvantaged by the process may choose to delay or prevent implementation of the decision, for example by taking legal action (de Vente et al. 2016).

This literature suggests that engagement is not a technical process that can be replicated independently of context. Rather, there is a growing awareness of the interplay between political society, state-society relations and civil society, and the roles that cultural norms, global factors and the prevailing political settlement play on civic engagement (Fox 2015). On the other hand other studies found little evidence that national context systematically influences project outcomes in participatory processes (Brooks et al., 2012; de Vente et al., 2016). Furthermore, led by Sen (1985), there has been a departure from a focus on participatory projects that target the material wellbeing of participants to a broad-based 'capability' approach to empowerment. For example, highly successful community-driven development initiatives (such as the self-employed women's association in India, the Orangi slum improvement project in Pakistan and the Iringa nutrition project in Tanzania) have provided important lessons for large donors, highlighting the need for engagement to be tailored to the socio-political context (Menocal, 2015).

Engagement as design

There is a growing body of literature that emphasises role of design in engagement processes. Perhaps most stark, is the claim by de Vente et al. (2016:online), based on quantitative and qualitative analysis of interviews with facilitators and stakeholders engaged in environmental management in 11 cases from Spain and Portugal and 13 international dryland sites:

"The limited amount of variation in outcomes that was observed across national contexts could be explained by a small number of contextual factors. We therefore conclude that well-designed engagement processes that consider the recommendations from this research, can lead to well-informed, durable, and flexible outcomes across a wide range of contexts. Moreover, through increased trust and ownership over problems and solutions, decisions taken in these processes are more likely to be accepted and implemented, helping to achieve environmental goals more effectively."

Although de Vente et al. (2016) explicitly state, “this is not to say that context had no effect on outcomes whatsoever”, they emphasise the relative importance of effective process design in determining the outcomes of engagement. This is consistent with Brookes et al.’s (2013) statistical analysis of 136 community-based conservation projects, showing project design was critical in delivering attitudinal, behavioral, ecological and economic outcomes. Although “some community characteristics” (e.g. tenure regimes and supportive cultural beliefs) were important for “some aspects of project success” they concluded that “surprisingly, there is less evidence that national context systematically influences project outcomes”. Newig et al. (2016) suggest that one of the reasons that process design plays such an important role in determining outcomes, is that stakeholder and public engagement provides more comprehensive information inputs that can underpin more robust decisions. Equally, poorly designed and facilitated engagement may also lead to biases in the decision-making process, for example if the outcomes reflect the information inputs of over-represented or dominant participants (Ansell & Gash, 2008).

- Another reason why well-designed engagement processes are more likely to help tackle environmental challenges may be because they engage those responsible for implementing decisions fully from the outset (e.g. Bulkeley & Mol 2003; Newig, 2007). By effectively representing key actors who can affect or who are likely to be affected by decisions arising from the engagement process, the decision is more likely to reflect the views of those who have to implement it (Reed et al. 2009; Reed and Curzon, 2015). This literature argues for strategic rather than complete representation of stakeholders based on their relative levels of interest, influence and benefit. There is evidence that engaging large numbers of stakeholders in complex decision-making processes can increase understanding of system complexity among participants, leading to consensus over broad, conceptual points but make it harder for decision-makers to choose between options (Büscher and de Beer, 2011; Gray et al., 2012).

Linked to this, a well-designed engagement process should in theory seek and value all perspectives in a decision-making process (de Vente et al. 2016). By enabling participants to listen to a wider range of perspectives, stakeholder and public engagement may enable learning to occur at a number of levels (Garmendia & Stagl, 2010). This may range from better understanding the conservation challenges on a cognitive level, to deeper learning that can enable participants to re-evaluate underlying assumptions and values, leading to changes in attitudes that may shift their positions, so that they are more in line with their values in relation to the environment (Fazey et al. 2006; de Vente et al. 2016). Sterling et al. (2017) analysed 82 case studies of participatory conservation projects and found a statistically significant correlations between attitudinal change and three design variables: i) integration of stakeholder knowledge and values in the decision-making process; ii) engagement with stakeholders throughout the project; and iii) transparency of the decision-making process (there was also a correlation between attitudinal change and trust building in the case studies they analysed).

Engagement as mediation

In recent times, top-down approaches to decision-making have received sustained criticism from a variety of sources. These include the Critical Legal Studies movement in the USA. Kennedy (1997) for example, taking inspiration from Marxist and feminist discourses, has drawn attention to the hidden motivations and power structures of law. This sustained critique of an overbearing and paternalistic approach has led to a re-conceptualisation of justice as something that emerges from the discourse of equals; a more bottom-up account of

justice where reasoned argument, synergies (at best) and compromise (at worst) are the hallmarks of a qualitatively distinct form of dialogue between parties. Recent studies in environmental governance show that cooperative approaches, e.g. co-production of knowledge and evidence have longer lasting effects on stakeholder relationships, social learning, and implementation of environmental legislation (Armitage et al. 2015).

When such conflicts arise, especially during decision-making processes with polycentric disputes, which feature multiple parties and multiple issues (as is usually the case during stakeholder participation exercises), alternate dispute or conflict resolution that follows the informal route (mediation), rather than the formal (arbitration) can be followed (Fuller 1971). This is because mediation is considered to be a non-hierarchical approach to conflict resolution (Menkel-Meadow 1993), enabling the solution to conflict to emerge from the dialogue and interaction of the participants, without the presence of an external authority (e.g. judge) to rule on the matter (Vella et al. 2015). We define mediation broadly as a method for intervening in conflicts that enables the parties to reach agreement through the facilitation of a neutral mediator, rather than having a decision imposed on the parties from above or outside. In mediation and engagement processes in general, the emphasis is typically on stakeholder-directed solutions, rather than having a solution imposed by an outside judge. A mediation aims for win-win solutions rather than win-lose as typically results from legal processes. A mediation process takes place in different phases. It starts with an information phase where participants are informed about the process of mediation, clarifying any questions and setting the scene for the following process. In the next step, the participants collect all relevant information pertaining to the mediation. All interests and reasons for the choice of these topics are discussed. Based on this background information and further discussion, potential solutions for the selected topics will be gathered and specified in an agreement (Bell et al., 2011).

One of the difficulties in assessing the outcomes of mediation in environmental decision-making processes is that there are no universally agreed criteria with which to assess mediation success (Bercovitch 2007). For example, whilst it is possible to measure the number of disputes that settle, many have argued that it is the 'quality of the settlement' that matters: is a mediation that narrows a significant range of issues a success, a partial success or a failure (Sidoli del Ceno 2013)? Is the mediation successful that enables every stakeholder had their right to say in the matter, or only if all stakeholders are satisfied with the decision?

Engagement as democracy

Linked to this, but typically at broader spatial and societal scales, there is also a growing body of literature on civic engagement and deliberative democracy (Boyte, 2005; Michels & de Graaf, 2010; Hysing, 2013). Based on empirical case studies, this body of literature has developed theory to explain how civic engagement evolves and plays out in democratic systems. This includes, for example, consideration of: i) the role of civic engagement in more or less representative governance systems; ii) the role of decentralisation and whether there are mechanisms for government accountability (either set up officially within the governance system or led by civic movements); and iii) the role of invited spaces for civic engagement (Leighninger 2014; Gaventa & Barrett 2012; Menocal & Taxell 2015).

This is echoed in the political science literature. Democratic systems can be direct, representative or deliberative, with varying degrees of decentralisation and multiple levels of governance (Piattoni, 2009; Faguet & Pöschl, 2015). Assuming values are made explicit, deliberation within engagement processes can alter contextual values (e.g. financial value

placed on ecosystem service benefits) over short timescales (e.g. a single workshop), but deeper-held, transcendental values (e.g. the non-utilitarian value of ecosystems due to their intrinsic value or the rights of future human generations and nonhumans) are likely to require engagement over much longer periods of time, potentially to generational timescales if societal values (cultures) are to be influenced (Ferreyra et al 2008; Everard et al., 2016). In attempt to engage publics and stakeholders in these longer-term, deeper processes of participatory change, Swart and Zevenberg (this issue) describe a “value game” approach that engages local people in communicative, discursive and reflective activities concerning the value of natural resources in order to mobilize nonutilitarian values.

The historic trajectory of a country or state towards democracy will reflect what kind of engagement will be possible (Gaventa & Barrett 2012), and what kind of spaces are available for deliberative democracy (Cornwall 2008). As a result, perceptions of successful stakeholder involvement can be very different, depending on historic trajectory and cultural values. For example, Derak et al. (this issue) describe how engagement forest management is a new and unfamiliar concept in North Africa, with local populations typically considered by decision-makers and as “subordinated beneficiaries rather than real partners”, despite recent moves towards stakeholder and public engagement in national forest strategies. In contrast to newer democracies, those with a long history of democracy can remain stuck in what Leighninger (2014:3) calls “fake democracy” that does not allow people to be heard, tending to frustrate both citizens and public officials alike (Conrad et al. 2011). This makes citizens “less receptive towards interacting with public institutions, and erodes their faith in democracy” (Leighninger 2014:4), because as Leighninger continues, “ironically, the ‘democracy’ they’ve experienced isn’t actually democracy at all” (ibid., p. 4).

A theory of participation

The previous section showed how engagement processes may be explained in terms of context, design, mediation or democracy. Built on insights from the literature (in the previous section), this section develops a new theory for stakeholder and public engagement processes that can explain why the different types of engagement defined in the typology above may lead to different outcomes for participants and for the natural environment. Synthesising the key explanations from the previous section, the theoretical framework in Figure 2 comprises four groups of factors that explain what makes different types of engagement more likely to lead to beneficial environmental and social outcomes: context, design, power and scalar fit. Each of these factors maps directly or indirectly onto the literature reviewed in the previous section:

- Contextual and design factors map directly onto the context and design literature in the previous section
- Power is an explanatory factor that explicitly runs through the literature on mediation and “horizontal justice” (where dialogue and cooperation between parties provides more equitable and lasting outcomes than more hierarchical and adversarial approaches), and deliberative democracy (where civil society is empowered to engage directly in the democratic process via two-way dialogue, as opposed to representative democracy via parliament or direct democracy such as referenda)
- Scalar fit is an explanatory factor that implicitly links the literature on mediation and deliberative democracy. Both literatures are based on the principle of two-way dialogue as the basis for decision-making, but mediation processes typically take place between a small number of parties at the scale of interpersonal, typically local networks over relatively short timescales. On the other hand, deliberative democracy

process typically takes place at the scale of societal, typically national scales, over longer timescales. The fact that there are two separate literatures and traditions surrounding stakeholder and public engagement at these two different spatial and temporal scales, illustrates the importance of adapting engagement to the relevant scale, and highlights scale as a fourth factor that can help explain why engagement processes succeed or fail (Newig et al., 2016).

To describe the theory in greater detail, the remaining text accompanies Figure 2, describing how each factor explains why public and stakeholder engagement does or does not “work” for the different actors who engage in the process. It draws on (rather than citing again) the concepts described in the literature in the previous section.

Context

The literature reviewed in the previous section under “context” shows how the outcomes of stakeholder and public engagement are affected by (mainly local) socio-economic, cultural and institutional contexts within which it is enacted. Examples of specific contextual factors that may significantly affect the success of an engagement process include the existence of a participatory culture and former experiences of engagement (whether successful or unsuccessful) and available resources. For these reasons, it is necessary to take time to fully understand the local context in which engagement is to be enacted, to determine what type of engagement approach is appropriate, and enable the design of any process to be effectively adapted to the context.

Design

The literature reviewed in the previous section under “design” shows how a number of process design factors can increase the likelihood that engagement leads to desired outcomes, across a wide range of socio-cultural, political, economic and biophysical contexts. In particular, engagement processes that systematically represent relevant public and stakeholder interests and provide transparent opportunities to influence outcomes based on multiple knowledge sources are more likely to deliver beneficial environmental and social outcomes, across a wide range of contexts. Reasons for this are that: engagement can facilitate learning and changes in attitudes and values amongst participants that make acceptance of outcomes more likely; engagement can lead to better informed decisions due to a wider range of information inputs and knowledge exchange; and engagement can increase the likelihood that decisions are implemented, because the decision is more relevant to stakeholder needs and priorities and the decision is more likely to reflect the views of those who have to implement it. Ideally all affected parties should be represented somehow, to develop shared goals and co-produce outcomes based on the most relevant sources of knowledge, but for all parties to be involved in dialogue may not always be feasible.

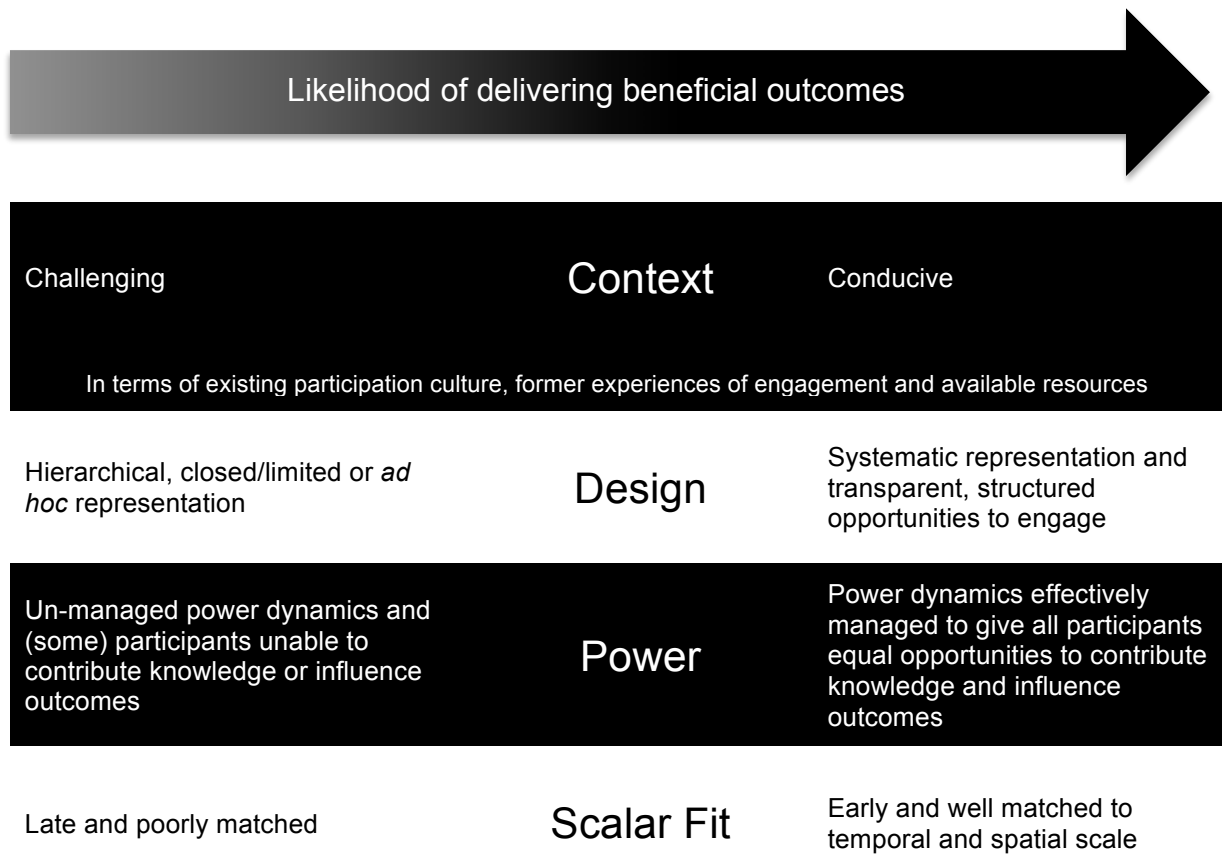


Figure 2: A theory of participation that explains how the outcomes of stakeholder and public engagement in environmental management are explained by context, process design, the management of power dynamics and scalar fit.

Power

The effectiveness of engagement is significantly influenced by power dynamics, the values of participants and their epistemologies i.e. the way they construct knowledge and which types of knowledge they consider valid. Poor management of power dynamics is one of the major reasons for engagement failing to deliver outcomes. Professional facilitation and mediation can significantly reduce the likelihood of conflict and where conflicts have already started, can help reduce or resolve conflicts through engagement with and management of power dynamics between participants. It is necessary to implement the design in a way that ensures power dynamics are effectively managed, so that the value of every participant's contribution is recognised and everyone is given an equal opportunity to contribute.

Scalar fit

Outcomes from engagement are highly scale-dependent over space and time. Contextual values, such as preferences for one option or another, may change over short timescales, but the extent to which engagement (via deliberation) shapes the values of participants is highly dependent on the temporal scales over which engagement occurs. It is therefore necessary to match the length and frequency of engagement to the goals of the process, recognising that changes in deeply held values (that may be at the root of a conflict) are likely to take longer than changes in preferences, which may be influenced over shorter timescales through

deliberation. The extent to which engagement leads to desired outcomes also depends upon matching engagement to the spatial scales at which decisions are being made. Stakeholder and public engagement must be organised and conducted at a spatial scale that is relevant to the issue, and the jurisdictions of authorities or institutions that can tackle it. Also, ecological scales, spatial or temporal, need to be addressed appropriately. Some ecological processes can take a very long time and concern multiple generations, but very few people overall. Other ecological processes may concern a significant number of people, but the ecological process might be altered in a very short time. For engagement to deliver desired outcomes, representation of stakeholder interests and decision-making power needs to match a spatial scale relevant to the scale of the issues being considered. In this way, those with national interests and decision-making power will be involved in national decisions but local actors will be empowered to engage in issues at scales more relevant to their interests.

Conclusion

In this paper, we distinguish between the description of different types of stakeholder and public engagement and the factors that explain why in theory engagement works. This helps explain why engagement in the form of top-down communication can in some contexts achieve its goals successfully, while more bottom-up, co-productive processes sometimes fail to achieve their goals. The type of engagement, in terms of its agency and mode, does not necessarily predict the outcomes of engagement. In this light, we reject normative assertions that engagement should always aim to be “as far up the ladder as possible”, to use Arnstein’s (1969) ladder analogy, in which more top-down and communicative forms of engagement are assumed to represent “tokenism”, “therapy” and “manipulation”. By repurposing the analogy of a “wheel of participation”, we argue that all types of engagement should be available for use, but their selection and application should be based on a theoretical understanding of “what works”, in terms of desired outcomes from engagement.

Understanding why stakeholder and public engagement is likely to work or not, in theory, is essential to select the most relevant type of engagement for a given purposes and context, from the wheel of options in Figure 1. The theoretical framework in Figure 2 helps explain why these different types of engagement may lead to different outcomes. Applying this theory, we make the following recommendations for practice:

- Take time to fully understand local context to determine the appropriate type of engagement approach and adapt its design to the context
- Get all affected parties involved in dialogue as soon as possible, to develop shared goals and co-produce outcomes based on the most relevant sources of knowledge
- Manage power dynamics, so every participant’s contribution is valued and all have an equal opportunity to contribute
- Match the length and frequency of engagement to the goals of the process, recognising that changes in deeply held values (that may be at the root of a conflict) are likely to take longer than changes in preferences
- Match the representation of stakeholder interests and decision-making power to the spatial scale of the issues being considered

Whether success means achieving beneficial environmental outcomes or whether it simply leads to an increase in trust and more positive working relationships, a theoretically informed approach to stakeholder and public engagement has the potential to markedly improve the outcomes of decision-making processes.

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