

## **Bridging formal research and informal approaches to enhance civic engagement processes**

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### **Abstract**

Enhancing civic involvement in decision making has become one of the dominant strategies for resolving sustainability issues. While a large literature has emerged identifying processes, strategies and criteria a few methodological concerns remain. Most pressingly is the apparent divide between formal, institutionalised engagement and the engaged citizenship which emerges through grass roots movements. Formal research on institutionalised engagement has been extensive, and a number of typologies have been put forward. Research on informal methods of engagement has not had the same attention however. In fact, due to distinct differences between inquiry methods and questions, formal research and ‘informal’ engagement are frequently viewed as adversaries. To help bridge these quite disparate approaches we note two areas which have been seemingly under-valued by present formal research but which are vital to gaining a more comprehensive understanding of engagement: 1) experiential aspects of participation in engagement processes and 2) a broad understanding of long-term success. Following an analysis of several potential research approaches and taking into consideration the possibilities of new online collaborative technologies, we suggest that a combination of phenomenological and backcasting tools may provide one possible bridge between the informal and formal aspects of engagement research and help to clarify these outstanding issues.

### **1 Introduction**

Enhancing civic engagement, debate and dialogue has become one of the dominant strategies for attempting to resolving sustainability issues. Including members of the public in formerly government agency dominated areas of the decision making process is claimed to have a range of benefits, from enhancing legitimacy to making better quality decisions (Fiorino 1990). A large number of mechanisms, processes, and instruments have been developed to

facilitate more effective participation, yet establishing what works and what doesn't remains something of a mystery (Rowe and Frewer 2005).

Civic engagement in sustainability issues arises in two fairly distinct ways. First, the bureaucratic source which has increasingly legislated participation to augment democratic aims. For example, environmental agencies across the world are increasingly mandated to conduct participatory exercises prior to the introduction of new policy. Secondly, the more ephemeral source which involves the emergence of collectives and pressure groups around issues of environmental and social justice. Interestingly, while the latter mechanism is probably where the former mechanism originates, it is the former source which has received much greater research attention.

One of the implications relates to the research questions asked and the frames used to respond to the inquiry. Irvin and Stansbury (2004) for example, ask "Is public participation worth the effort?" a question which they frame from an environmental agency perspective but could equally have been asked from a citizen perspective. Even apparently innocuous questions such as "How do we know if we are making improvements to engagement processes?" contain framing effects depending on who is asking the question and how they go about answering it. It is fairly obvious that 'we' applies less to general citizens than to public administration officials - consider whether a community group mobilised to block the siting of a new waste incinerator would ask such a question? Such groups are much more likely to be researching questions such as "Who else can support our cause?", "How do we get the agency to listen?" Associated with these different forms of inquiry and different problem framings, different knowledges emerge.

## 2 Formal approaches to engagement

Formal research methods exploring engagement emphasise structure and boundary setting, and seek to understand relationships between narrowly defined variables. Conceptually, most participation exercises follow a familiar procedure shown in Figure 1. Efforts begin with a decision being made to extend the network of individuals participating in a particular inquiry. Such a decision may be made for many different reasons (e.g. legislative mandate, ethical, instrumental benefits predicted etc...). Questions then arise relating to design of the participatory inquiry. What exactly do we mean by participation? Will participatory input be binding or simply in the form of advice? Who can be involved? Who should be involved? When? How much time, effort and resources can be used to implement the inquiry? How should we proceed? To respond to this final question, a range of criteria (or goals or objectives) are usually identified, setting the stage for the design of processes to facilitate desirable outcomes. Processes are then implemented and evaluation takes place. In this way, evaluation helps enhance the knowledge base for future participation.

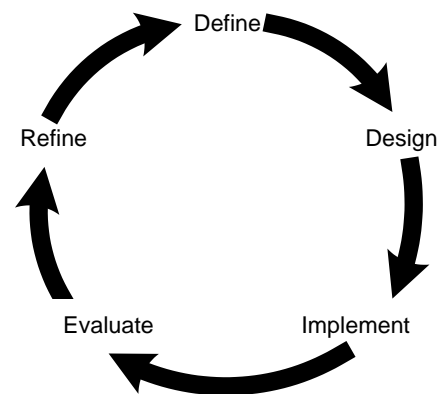
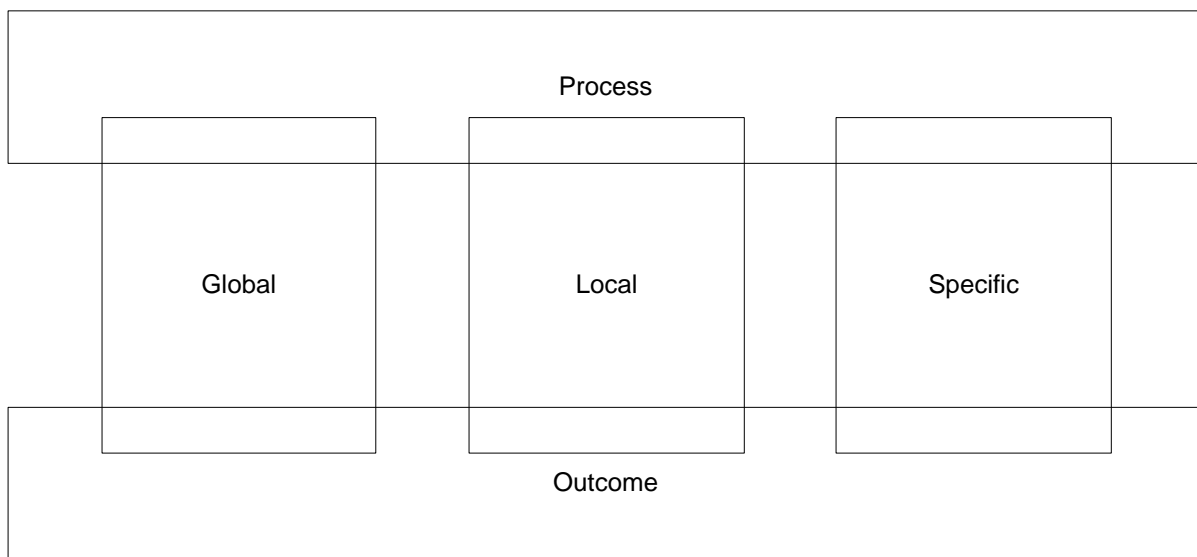


Figure 1. Cyclical process of public participation design and evaluation

Formal approaches are generally concerned primarily with the robust evaluation of participation exercises, to ascertain processes for effective engagement. While formal approaches generally proceed with definitional concerns (e.g. Rowe and Frewer 2005), the literature on engagement has paralleled other discourses by acknowledging the multifarious nature of ‘good’ or ‘successful’ engagement exercises. Instead of “defining” success, researchers have attempted to develop typologies to characterise success according to a range of attributes (e.g. Chess and Purcell 1999; Rowe and Frewer 2000; Rowe and Frewer 2004; Midgley, Foote et al. 2007). Most typologies offer distinctions according to the context or generalisability and means versus ends, as shown in Figure 2. We now explore this general framework more closely.



**Figure 2. Generic framework of “success” criteria from research into public participation (adapted from Chess and Purcell 1999; Rowe and Frewer 2000; Rowe and Frewer 2004; Midgley, Foote et al. 2007).**

Rowe and Frewer (2004) claim there have been three main approaches to defining attributes of public participation success which vary in terms of the scale of their applicability. The first entails a search for universal criteria, the second suggests universal criteria but related to a subset of participation exercises, and the third disputes the notion of universal criteria, instead prioritising contextual factors agreed upon by project participants. In line with Rowe and Frewer (2004), we refer to these as global, local, and specific criteria.

Global approaches aim to determine a universal set of criteria on which all successful participation exercises depend. They are essentially efforts to define a benchmark for comparison and may be grounded in theory or practice. For instance, Webler (1995) in a widely utilised adoption of the Habermassian notion of ideal speech, ascertains global criteria of fairness and competency. Rowe et al. (2000; 2004) in a comprehensive review of the literature define seven criteria which they claim to be universal: representativeness, independence, early involvement, influence, transparency, resource accessibility, task definition, structured decision making, and cost-effectiveness. A variety of other global criteria have been hypothesised, and perhaps unsurprisingly, it has been challenging to find practitioner consensus on a global approach.

Rather than attempting to define wholly universal principles, some researchers suggest criteria aimed at specific modes of public participation. These local success criteria acknowledge the influence of context on success. For instance, Baker et al. (2005) identify requirements for successful public hearings; McComas (2001) provide suggestions to improve public meetings. Empirical evidence from cross case analysis is normally used to support this form of generalisation.

Others argue that for both theoretical and practical reasons efforts to define success universally (even within a constrained problem space) are invariably flawed (Webler, Tuler et al. 2001; Webler and Tuler 2006; Midgley, Foote et al. 2007). For proponents of this perspective, authentic 'success' can only be defined by participants through a negotiated process, and is therefore case specific, for example, specific objectives such as the production of a document, a recommendation or the making of a decision. Context specific criteria may conflict with universal criteria, and decisions must be made about which criteria take priority when designing the process. This perspective thus acknowledges that differences in power and influence affect the very foundations of any public participation exercise.

In addition to success criteria characterised by their degree of universal relevance, researchers have also noted "outcome" and "process" distinctions (e.g. Chess and Purcell 1999). Outcome related attributes correspond to the "results" of participation, and presuppose an endpoint for participatory endeavours. Examples from the literature include "productive real change" (Daley 2007), "influence on decision making", "mutual learning" (Burgess and Clark 2006), "cost effectiveness" (Rowe and Frewer 2000; Beierle 2002). Process attributes are intended to define how interaction between participants should occur. Examples from the literature include "representation" (Abelson, Forest et al. 2003), "resource accessibility", "task definition", "structured decision making" (Rowe and Frewer 2000; Rowe, Marsh et al. 2004). Increasingly, a mixture of ends and means criteria have been advocated to evaluate success (Rauschmayer, Berghöfer et al. 2009).

Rigorous formal approaches not only stress the difficulties in defining formal criteria, they also note that determining how to determine criteria is problematic. Methodological questions such as "How does one determine success criteria?"; "How should evaluation take place?"; "Who determines what constitutes successful engagement?"; "When should evaluation occur?" remain significant challenges (Chess 2000).

Formal research approaches usually determine success criteria in one of two ways: through theoretical inquiry or by empirical means. Theoretical inquiries begin with commonly accepted principles (i.e. 'normative'), for example the central democratic tenets of liberty, justice, and equality (e.g. Fung 2007). From these overarching principles operational criteria are deduced (e.g. Webler's universal characteristics of fairness and competence). Theoretical inquiries are thus heavily tied to the global approach and are neither time-bound, nor context-dependent.

A second form of inquiry into success arises from the practice of environmental engagement and attempts to draw lessons from that practice. Evidence is most overwhelmingly derived

from two sources: scholarly case studies and practitioner reflection (NRC 2008). Practitioner reflection utilises the extensive experience of practitioners over often very different forms of engagement, and provides useful ‘rules of thumb’ or guidelines for attaining success (e.g. Creighton 2005). Several authors however stress that practitioner reflection carries systematic biases, thus should be triangulated with other forms of evidence (Romm 1996; Midgley, Foote et al. 2007; NRC 2008). Scholarly case studies usually consist of reflections from researchers combined with formal evaluations using input from some or all parties involved. They can be very useful for providing evidence for the existence of certain phenomena but are less useful in generating generalised recommendations (NRC 2008). To generalise across cases, multiple case analysis has been increasingly employed. Proponents suggest that by comparing and contrasting individual cases, universal attributes, principles, or recommendations may be derived (Beierle 2002). For instance, Beierle and Cayford (2002) compared 276 cases in an attempt to establish general attributes of successful participation. Other authors however caution this approach, highlighting the difficulties in comparing cases due to extensive contextual variability (Burgess and Chilvers 2006).

But contextual variability is just one reason for questioning the empirical approach. A more significant problem occurs where data which may be crucial to understanding success is omitted, either due to common research impracticalities or through research design. One example of this relates to the evaluation of long-term engagement success, important for inquiries into sustainability. While engagement exercises are believed to have long-term benefits, for example better long-term outcomes, improvements in social cohesion etc..., gathering data is impractical and analysis challenging (How does one define social cohesion? How does one distinguish between effects related to engagement and other factors?). Furthermore, most analyses are not designed to explore long term success. Commonly, evaluations are performed immediately after engagement processes have ended, generally for accountability purposes only (Chess 2000). Consequently long-term evaluation data is missing which renders cross case comparison invalid.

In addition to relatively narrow methods of data collection and theorising in the formal approach, another rather ironic methodological issue is apparent. It is interesting that while exhorting the benefits of participation, most formal research exploring engagement is rarely undertaken in any way similar to the principles it purports. Theoretical research, literally by definition, lacks any kind of institutional participatory mechanism. Empirical research on the other hand does have considerable scope for participant involvement yet this is rarely utilised beyond canvassing of opinions or values during the data collection phase. For example, Webler and Tuler (2006) in their identification of differing expectations for ‘good’ process involve participants in only two phases the research – participant selection and data collection (see Figure 3). Rowe et al. (2004) evaluate a consensus conference in a comparable manner and similarly offer little justification for the lack of participant involvement. Justification for opening up the research to wider participation is well documented – it can make outcomes more relevant and legitimate, counter researcher biases, and may be more enjoyable overall (Wadsworth 1998). Comparing current research with research which includes stronger participant input may generate some interesting results.



**Figure 3. Research method of Webler and Tuler (2006). White depicts participant involvement.**

### **3 Informal approaches to engagement**

In contrast to formal research into engagement, informal approaches tend to be heavily action oriented, unconstrained and creative; learning occurs by doing. These approaches usually carry no ‘research strategy’ as such. Nevertheless they can be immensely successful, as demonstrated by the phenomenal success of Wikipedia and the open source movement. Community level global engagement strategies ‘Transition Towns’ and ‘Pachamama Alliance’ are also an example of this relatively unconstrained process (Atkinson 2010).

Instead of beginning with formalised problem framing or boundary definition, informal approaches tend to be interest initiated. In contrast to the instrumental questions offered by formal research approaches, informal research usually begins with a participant focus. Rheingold (2002) for example, begins by asking potential participants “What interests you? What do you care about? What issues get you interested?” Informal approaches are frequently concerned with long-term factors of success. In fact, long-term aspirations of ‘a better world’ are often the primary catalyst for engagement. From this point self-motivational behaviours tend to reinforce participation, since participants play a direct role in exploring and resolving their own questions. Thus engagement begins with rather different motives and uses quite different methods.

Informal approaches appear to recognize that engagement is an emotional process, something that more formalized methods fail to take into consideration. Brown and Pickerill (2009) for example suggest that sustaining long-term activism requires deep emotional connections which reinforce common goals between participants. To contrast, Harvey (2009) contends that the formal approaches treat participants as “mere instruments”, “to get a job done as well as possible and according to predetermined and objective criteria”. Framed in this manner misses the importance experiential aspects of participation and the drama and emotion which drive genuine engagement.

Rather than placing barriers in the way of participation, informal approaches harness the power of self-organising networks. The most successful informal approaches foster an environment which embraces conflict, ensures rapid and effective feedback and encourages self-reflection. Informal engagement recognises the primary importance of process to ensure that conditions are created for genuine collaboration to emerge.

### **4 Ways to bridge formal and informal approaches**

At first sight, formal and informal approaches to understanding and improving engagement appear rather different. Informal approaches appear largely unstructured and emergent. Bridging the formal and the informal requires closer recognition of the experiential nature of engagement and creating stronger linkages between the researcher and the research subject.

To explore experiential aspects of participation, closer attention needs to be paid to the complexities of conversation and the dynamics of interaction (Harvey 2009).

In this regard, observational studies offer bridge between the experience of participation and more rigorous interpretations of success. Discourse analysis for instance can provide insight into otherwise invisible power dynamics and the ways in which problems are framed and reframed during discussion. For example Govern (2003) identifies an interesting instance of subtle facilitator imposition on process during a consensus conference in New Zealand. When inquiring into the question: How are the values of Maori going to be considered and integrated in the use of plant biotechnology in New Zealand? One [Maori] speaker argued the question needed to be reconsidered since many ethical issues applied much more broadly. The speaker suggested an alternative set of questions: “Will plant technology bring long-term benefits to Aotearoa New Zealand? Will it reduce food prices enabling more people to afford healthy nutritious food? Will it enable small farmers to continue to farm? Will it improve soil quality, decrease soil erosion, water pollution? Will it improve understandings of the functions of forests—not only as plantations for the timber industry but also as a vital source of food and medicines and recreation?” Govern (2003) noted that rather than responding to these questions, the facilitator kept participants “on track” by directing them back to the original inquiry. Further observational studies may be useful for enhancing knowledge of power dynamics.

Observational studies have certain limitations however. Ascertaining long-term effects of engagement is likely to prove challenging, Davies et al. (2005) note that long-term studies are time and resource intensive, their evaluation of a Citizens Council took two years and cost £126,000. Furthermore, observational studies are by their very nature descriptive, applying insights into the development of novel processes may be difficult. Moreover, observational studies attempt to distance the researcher from participants, thus creating a barrier for participant engagement in the research process. Observational studies may prove useful for exploring the power dynamics of short engagement events, but other methods will be required to supplement inferences.

Phenomenological investigations offer an alternative set of methods for comparing and contrasting participant experiences. One specific research approach could be to obtain data through personal reflective journals or analysis from engagement participants themselves (Peshkin 1988). Purdue (1999) for instance wrote about his experience as a consensus conference audience member in the form of a play (dramaturgical analysis). Comparing and contrasting the perceptions (or plays) of other participants would have allowed deeper insight into perceived process dynamics than Purdue was able to do on his own. At the time of writing, we have been unable to find any instances of this research being undertaken on engagement processes even though broad application of journal like processes through online blogs is becoming increasingly common. Further exploration is likely to yield useful insight.

While phenomenological techniques offer opportunities to explore participant experiences, they do little to enhance participation in the research process itself. Participants remain ‘data sources’, whose views are analysed and exploited by third party researchers. To offer genuine

insight and to avoid translational misinterpretation, including participants in the co-creation of knowledge seems imperative. Again, emerging online technologies such as Google Docs, online forums and Wikis facilitate collaboration and knowledge sharing and represent a fundamental paradigm change in the way that research may be conducted.

To consider the long-term effects of engagement exercises demanding practical questions need to be answered. For example, “How can data on long-term impacts derived from participation exercises be obtained?” “How can participation be meaningfully incorporated within the research process over such long time periods?” “How can long-term studies be feasibly conducted?” Additionally, theoretical problems are evident, such as “How can we separate long-term impacts of participation process with other experiential factors (account for halo effects)?”

At first sight these questions appear intractable. Long-term case studies are unlikely to be feasible due to difficulties in obtaining long-term participant input. Retrospective analysis offers another alternative, however effects of attentional biases are well-known and difficult to avoid (NRC 2008). Furthermore, participants heavily involved in unsuccessful programs may be unwilling to contribute for fear of being “dragged through the mud again” by other participants, or may be unwilling to “reopen old wounds”. Moreover, due to post-hoc rationalisations, retrospective data may be significantly different to experiential data yielding invalid conclusions (Bennett and Gibson 2006). While retrospective analysis may offer significant insight into the long-term effects of engagement, unavoidable biases mean that distinguishing factors associated with engagement from other unrelated experiences will be difficult.

But is there any way to remove or control the effects of peripheral experiences from long-term studies? Clearly it is impossible, human lives are simply too complicated. How then, can a rigorous exploration of long-term success in participatory environmental decision making be performed? While retrospective analysis provides one potentially useful method for inspecting past cases from different perspectives and learning from the experience, it is dependent on the original engagement processes. Unfortunately (or fortunately) engagement processes change rapidly. The introduction of new regulations, new technologies (especially online) and new processes which facilitate engagement render assessing the long term effects of historic processes largely an exercise in futility. More adaptable learning methods which incorporate present knowledge and explore the influence of peripheral factors are desirable.

## **5 Toward a research method exploring long-term success in participatory environmental decision-making**

To form a bridge between informal and formal methods of engagement requires de-emphasising constraints and status quo biases. Thus it requires forward-looking, transformative or emancipatory methods of discovery (Freire 1970). An increasingly employed strategic planning technique involves exploring desirable futures, then investigating where leverage points exist to achieve that future system state. This process of



backward-looking analysis of the future has been coined backcasting. As explained by John Robinson, one of backcasting's principal theorists:

*“The major distinguishing characteristic of backcasting analysis is a concern, not with what futures are likely to happen, but with how desirable futures can be attained. It is thus explicitly normative, involving working backwards from a particular desirable future end-point to the present in order to determine the physical feasibility of that future and what policy measures would be required to reach that point.” (Robinson 1990).*

The method of backcasting begins by developing a future vision, in this instance a definition of long-term success in environmental decision making. While future visions have been developed from principles (e.g. Holmberg and Robert 2000), in view of the contested nature of success as identified earlier in this article, participatory approaches (e.g. Quist and Vergragt 2006; Frame 2008) would appear to be a more appropriate.

From the future vision, backcasting employs backward-chain analysis where necessary preceding steps are identified. Traditionally backcasting has neglected experiential aspects, however we believe that attempts to include more personal elements of analysis may prove fruitful. Asking participants questions which prompt phenomenological inquiry, for example “What do you need to feel in order for [the previous point (e.g. completion)] to occur? What do you need to do? What do you need to see? / What needs to happen? What do you need to hear? What do you need to think?” may generate novel pathways to success.

The efficacy of this approach is yet to be tested. We do note that experimental studies such as this have their own limitations. Workshops may create a context for decision making quite different from that of participation processes in practical settings. This altered context may in turn alter the ways in which participants interact and make decisions (Fischhoff 1996). Nevertheless we believe the backcasting/phenomenological method outlined above presents one possibility for a rigorous exploration of long-term success factors and seems to satisfy Webler and Tuler's (2002) call for innovate methods to develop meaningful theory.

## **6 Conclusion**

Following a review of formal methods for defining, determining, and measuring successful participatory decision making we have identified several research areas which appear to have been neglected. Firstly, there appears to be a lack of experiential analysis of participation in action, consequently emotional and dramatic elements of participation seem to have been overlooked. Furthermore, the use of participatory processes for engagement research is severely lacking but we note that new online technologies provide efficient means for widespread collaboration and are likely to provide excellent conduits for exploration. Finally, long-term effects of successful engagement do not appear to have been considered in a rigorous manner. To combat these perceived deficiencies we offer a conceptual framework for a novel approach to participatory inquiry, using backcasting and phenomenological concepts to explore different pathways to long term success.

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