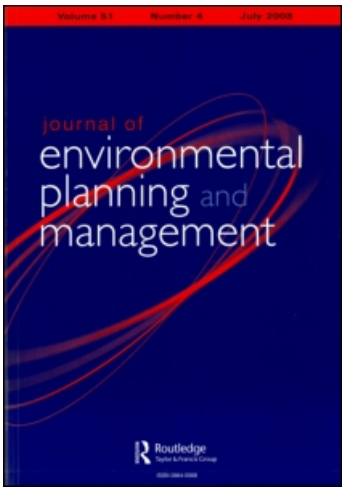

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Social learning from public engagement: dreaming the impossible?

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Social learning from public engagement: dreaming the impossible?

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Learning that transcends participation processes is critical if public engagement is to translate into a legacy of enhanced environmental citizenship. However, a lack of empirical evidence has limited discussion to date to largely 'aspirational' claims. This paper offers the first rigorous examination of whether public participation does generate beyond-process social learning. Initially we review the literature on public participation and environmental citizenship to identify the key dimensions of social learning. We then re-visit a well-worked case study of an innovative public engagement process on the Hampshire waste strategy from the 1990s. Approximately one third of the original participants have been interviewed to identify whether and how the experience had a lasting effect on them. Key methodological difficulties are discussed, not least the analytical difficulties of attributing learning to a process that happened ten years previously. However, we argue that there is evidence that both instrumental and communicative learning have taken place, and conclude by identifying key areas that require further research.

Keywords: social learning; public engagement; deliberation; waste management; environmental citizenship

1. Introduction

Social learning should be a strong component, as well as important outcome, of public participation, particularly forms of engagement based on deliberation (Wynne 1992, Webler *et al*. 1995, Daniels and Walker 1996, Petts, 2001, 2005, Tippett *et al*. 2005, Stagl 2006, Petts 2006, 2007). In this context the focus on learning is usually on the experience *within* the process. Indeed, a successful process of engagement is normally predicated on an ideal of dialogue as a means to ''induce reflection upon preferences in a non-coercive fashion'' (Dryzek 2000, p. 1), emphasising the importance of learning by drawing upon the knowledge of all members of a community (Healey 1992). The transformative power of effective dialogue should promote learning of new ideas, different people's views and their legitimacy, new heuristics and the difference that people (individually and collectively) can make (Forester 1999).

A key question remains as to whether this transformative power provides for ongoing, or long-term, '*beyond* process', learning. It is this form of social learning that holds the promise of translating public participation into a longer lasting legacy of enhanced environmental citizenship. However, a lack of empirical evidence has limited discussion to

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largely 'aspirational' claims (Owens 2000); the missing crucial links between participation and outcomes undermining speculation about process effectiveness (Burgess and Chilvers 2006). In many cases this is simply due to the limitations of time. Innovative public engagement processes are relatively recent products. Only now is sufficient time elapsing to legitimately interrogate the early cases to see if there is evidence of social learning that transcends the process itself.

One such case is Hampshire County Council's public engagement processes on its waste strategy (Petts 1994a, 1994b, 1995, Snary 2002). For the authors, enough time has elapsed but sufficient connections are still live to facilitate a viable investigation of the beyond process learning of the public participants. The early strategy development engagement process ran over 1993–1994, with the site-specific process relating to the proposed facilities commencing in 1998. So, at least seven years had passed since people had last been asked to discuss waste and some 12 years since the earlier process. Of course, defining 'sufficient' time in the context of identifying learning is difficult and it is not being suggested that there is an optimum time. Evaluation of engagement often focuses on talking to people immediately or soon after completion (within a few months). But arguably learning at this stage is still linked to the immediate discussion and the degree of satisfaction with the decision outcome. As time extends, memory of the process itself becomes hazy, the policy outcome is played out in the social context (not least in a dynamic policy area such as waste) and people have the opportunity to interrogate, operationalise (or ignore) and evolve their learning through their day-to-day lives. In Hampshire, the waste strategy implementation process was completed in 2004 in terms of the planning, development and opening of three energy-from-waste (EfW) facilities. Therefore, this seemed a particularly opportune time to interrogate people's learning.

This paper examines the current debates surrounding social learning and public participation and environmental citizenship. After outlining the case and research methodology (including the significant challenges), the discussion focuses on the findings from a set of interviews of participants in the Hampshire processes. Although the evidence is limited, it is sufficient to suggest that 'beyond process' social learning, that is learning that has a transformational dimension evidenced by a change in behaviour, is not an entirely impossible dream.

2. Social learning background

Early proponents of social learning (Bandura and Walters 1969, Bandura 1977) argued that individuals learn through social interaction. Social learning theory has since been applied extensively to the understanding of psychological disorders, particularly in the context of behaviour modification. More recently, Lave and Wenger (1991) reinforced social interaction as a critical component of situated learning, whereby learners do not merely internalise knowledge at the individual level but become involved in a 'community of practice'.

Social learning is more than simply individuals learning in a social situation. *Cognitive enhancement* (that is moving beyond technical competence to an understanding of the implications of the acquisition of knowledge), and *moral development* (for example, enhancing how people make judgements about what is right and wrong) have been identified as critical components (Webler *et al.* 1995). Drawing on notions of a 'strong' democracy (Barber 1984), Webler *et al.* (1995, p. 444) claim that citizens working together in a deliberative context have the potential to ''mature into responsible democratic citizens''. Although this is in the context of the immediate engagement process and the

need to solve a shared decision problem, this concept of responsibility does seem to map closely with notions of environmental citizenship that emphasise social responsibilities and duties over and above individual rights (Saiz 2005). Therefore, this is not to seek to characterise individuals as either 'responsible' or 'irresponsible' members of society resulting from their learning during a single engagement process. Rather, it is to relate responsibility to a liberal notion of citizenship played out through the recognition that as a result of within process learning and development people might change their longer-term behaviour in order to have a beneficial impact on the environment and the common good (Bell 2005, Dobson and Bell 2006).

But social learning is not an automatic outcome of a participatory process (Tippett *et al.* 2005). There is a need for participants to recognise their interdependence and their differences and to learn to deal with these constructively. Tippett *et al.* (2005) argue that participation may be essential to encourage social learning, both in terms of content management and social involvement, and that the process can play a role in the generation of social capital and the development of new social practices.

Both Tippett *et al.* (2005) and Webler *et al.* (1995) confine their analysis to social learning that occurs (or not) within the live participative framework. However, if one is going to assert that the process can affect people as environmental citizens, then what happens to people, not just outside of, but also after the process, is critical. The question is whether or not through a process of public participation, people learn to see beyond their own agenda and pursue a collective one of responsible citizenship.

One way to consider this is to assess whether an individual involved in a process subsequently constructs or re-appropriates their experience and ultimately changes what they do. Mezirow (1994, 2003) argues that transformational learning is possible through the process of public participation. Both transformative and the social learning theories stress two interrelated components which map directly with the basis of deliberative engagement:

(1) *Instrumental* learning or cognitive enhancement through the acquisition of new skills or information and knowledge, and;
(2) *Communicative* learning in terms of how a person approaches a situation or point of view and learns how to cooperate with others in solving collective problems, including developing a sense of group solidarity. Importantly, communicative learning often involves values, intentions and feelings, which can be defined only in their contexts.

Debate continues as to the most effective way to inspire citizens to environmental action, and what that action would look like (Burgess *et al.* 1998, Blake 1999, Owens 2000, Gilg and Barr 2005). Actions may range from changed purchasing decisions, household behaviours (such as energy or water saving activities) and recycling, to more pronounced 'political activities' such as becoming a member of a green pressure group, lobbying Parliament or taking direct action such as engagement in anti-globalisation protests.

However, the growing debate on the nature of environmental or ecological citizenship (Dobson 2003, Bell, 2005, Luque 2005, Saiz 2005) still often polarises around citizen 'rights' versus 'responsibilities' (Saiz 2005). Governmental retraction, or at least weakening, of direct control is now supporting indirect means to activate individuals to take personal responsibility not only for the causes of environmental pollution and resource depletion but also for required improvements to the environment (e.g. Rose 1999). In this context environmental citizenship or responsibility has a causal component

as well as a sense of obligation. But this inevitably prompts questions about the legitimacy of concepts of 'the environmental citizen' compared to that of the 'average' citizen (Bell 2005). Are we all becoming environmental citizens or are these people still a minority, somehow different to the majority? Importantly, in the engagement context do people who come with prior environmental 'credentials' (knowledge and beliefs) respond (learn) differently to those who join a debate from a point of lower environmental alertness?

In order to identify 'beyond process' learning that potentially translates public participation into environmental citizenship, the challenge is to sift through the 'ordinary' words of 'ordinary' citizens and gain an appreciation of the impact that engagement has had on them. As Luque (2005, p. 214) reminds us: ''people are rarely kind enough to social scientists to identify their actions and words by using the labels social scientists do''. Key questions relate to whether an engagement process such as that in Hampshire, predicated upon deliberative ideals that should support learning, has led to an increased understanding of resource management issues and a greater appreciation of people's own environmental responsibilities. Of course, we also need to consider the extent to which this engagement impact has been supported, or even overtaken, by a changing political and social emphasis on environmental, including waste management, priorities in the wider world and on the potential contributions of individual citizens.

3. Learning context: Hampshire

In the early 1990s Hampshire was facing a waste crisis. Landfill capacity was rapidly decreasing (limited by the permeable geology of the county), higher regulatory standards were too demanding for the five existing incinerators and increasing waste quantities were placing an excessive burden on the existing infrastructure (Petts 1994b). In 1992, under contract to Hampshire County Council (HCC), Babcock submitted a planning application for a 400,000 tonne per annum EfW plant to handle municipal waste, to be built on the site of an old incinerator in Portsmouth. One year later the planning application was refused amidst significant public and political opposition. In the words of HCC's then head of waste management, their ''world had fallen apart!'' (Lisney 2003). Although the principle of EfW was supported, the planning committee refused the application on the grounds of unacceptable visual impact. The recommendation of the committee was for ''a series of smaller incinerators combined with the maximum use of recycling''. The failure of the application to attenuate local opposition has been attributed to a mixture of policy, institutional and procedural limitations (Ekins 1993, Petts 1994b, Lisney 2003). HCC could not afford to fail again and it was clear that nothing would be achieved without a radical rethink.

The County went back to the drawing board to engage the public in a discussion of an appropriate waste strategy to manage household waste in Hampshire. A highly innovative engagement process based on deliberative ideals was designed. This component of the much broader and standard consultation process (including exhibitions, questionnaires, roadshows, media broadcasts and so forth) involved three 'community advisory fora' (CAFs) which mapped with the County's regional groupings for waste management: in the North (around Basingstoke), Southeast (centred on Portsmouth) and Southwest (around Southampton). The CAFs were facilitated and administered by a team of engagement consultants knowledgeable in waste management, and were independently chaired.

The composition of the fora was critical; each consisted of 16–20 people from diverse backgrounds with broad interests (environmental, conservation, parish, business,

education, health, community) deemed to be representative of the general interests and experiences that existed in the community as a whole. The groups were not just made up of those already environmentally aware or those sympathetic to the proposals. People were not asked to represent particular interests.

Their purpose was to receive and debate information about Hampshire's waste problem, to discuss the available options and to submit a report to the County detailing their preferred option. Each CAF met six times on a monthly basis between November 1993 and April 1994. Beginning with an explanation of the process and the background to the waste strategy, the meetings progressed to considering available options for dealing with the waste crisis. Views were sought on whether and how to implement the waste 'hierarchy' (reduce, reuse, recycle, dispose) in the context of Hampshire. Discussions then moved on to consider implementation strategies and reviewed opportunities to involve and inform the wider public.

The CAFs were exposed to a significant amount of written information (indeed a library of material was maintained for each CAF) and they also went on site visits to example facilities (both in the UK and Europe). They received presentations from experts, could ask for any additional information at any point, and, in the case of some members, attended expert conferences (e.g. on dioxins). In all, the process represented an intensive and protracted process of exposure to expert knowledge and also the views of other members of the community. The process encouraged debate and opportunities to challenge and validate claims through small group and plenary discussions. Arguably as a largely effective deliberative process (Petts 2001) the CAFs provided an ideal basis for learning.

The outcome of the consultation process was an agreed waste strategy which was put out to tender for delivery. Onyx (now Veolia Environmental Services) won the contract and formed a novel partnership with the County (operating as Hampshire Waste Services (HWS) under the title Project Integra) to deliver three new, small (under 200,000 tonnes per annum) EfWs. Part of their contract required them to engage with each local community (around Chineham, Portsmouth and Marchwood) prior to submitting the planning applications.

To that end, three contact groups were convened (1998) to discuss the developing applications and associated Environmental Impact Assessments (EIAs), in order to "assist HWS in ensuring it understands and responds to the views of members of the local community" (HWS 1999). They recruited people on a similar basis to that used for the CAFs, but this time from the directly potentially affected communities. The discussion groups were chaired by an independent member of the community, but on this occasion were not facilitated by independent engagement consultants but by HWS staff. Discussion meetings and site visits allowed for the participants to question the proposals and elements of the EIA that were of concern, such as traffic, air quality and health, ecology, and, importantly, design. Indeed, the groups were able to have direct impact on the architect's designs for the three plants. However, deliberation in the true sense was more limited than in the previous CAF process, partly because the objectives were more focused on the proposed EfWs, but also not least due to time limitations the contact groups concluding their business in weeks rather than months.

Overall, the question is whether the CAFs and the later contact groups impacted to such an extent that learning within process has had a longer-term impact on individuals. The first issue was to consider the methodological difficulties in seeking relevant empirical evidence.

4. The research challenge

There are major methodological issues in attempting to identify the existence of 'beyond process' social learning among people who engaged in a public process up to a decade ago. These are both practical (i.e. are the people available) and conceptual (i.e. can learning be detected and attributed).

Taking the practical challenges first, the people who had been participants had to be found. Fortunately, notes and files from the original study (Petts 1994b) and from observation of the later contact groups were available. Through the use of various internet sites, search engines and telephone calls, current contact details were found for 22 of the original ~60 CAF participants. Of the 22 approached, 18 agreed to be interviewed, including the three chairs from the CAF process Three people who had joined the contact groups at the pre-planning application stage, two from Marchwood and one from Chineham, were also identified and agreed to be interviewed.

It is worthy of note here that there was a remarkably positive response. Some of these people had had nothing directly to do with 'Hampshire's waste' for over 10 years, however, everyone was willing to give up time to reflect on their experience. The authors are mindful that the sample may be biased towards those participants who have a personal 'political' and/or social profile which means it is easier to find them (e.g. membership of an NGO or of a community/residents' group) and that this in itself may denote an inherent 'buy-in' to environmental or community issues. Nevertheless, it could be argued that the positive response rate is one significant indicator of the impact of the participation on individuals.

'Face-to face' interviews incorporating a semi-structured approach were deemed most appropriate, i.e. 'conversations with a purpose' (Mason 2004). Each interview lasted at least one hour and was conducted in a location convenient to the interviewee. The interviews were transcribed and analysed using an analytic inductive approach (Silverman 2001).

Aside from the practical difficulties of access, there are significant conceptual challenges, not least the difficulty of actually identifying what someone has learnt, both in an instrumental and communicative sense. Finally, it has only been possible to take what people say at face value. Although possible in theory, it was not practical to investigate whether someone really is the 'world's ace recycler' (quote from one interviewee) as they claim. In this instance a small degree of scepticism is required, although often it was the spirit in which the comment was made that was most significant.

Another challenge was the amount of time that has passed since their original engagement in the Hampshire process. During that time people will have been exposed to a plethora of social, political and cultural influences (information, media, personal experience, new waste management collection systems and so forth) that make isolating the influence of the engagement processes difficult. Society as a whole has moved on over the intervening period with regard to increased recycling activity and environmental awareness.

The waste hierarchy mantra of 'reduce, reuse, recycle' is now enshrined in government legislation and vernacular culture to the point that even the popular children's programme 'Bob the Builder' utilises the phrase. Hampshire County Council has continued to raise the profile of recycling and environmental considerations through the ongoing work of Project Integra and its 'Recycle for Hampshire' campaign (recently celebrating its first birthday) and also the Hampshire Natural Resources Initiative (HCC 2007). The County's own recycling rate has risen from ~8% in 1994 (when it was higher than the national average) to 34% in 2006 (average in England 27%), reflecting not least a significant investment in

infrastructure and kerb-side collection systems. Arguably therefore, even if people had not taken part in the engagement process, they will have become aware of a different approach to waste management in their own street as well as the broader discussions of resource depletion that underpin national debates around environmental change.

One interviewee highlighted this issue with regard to his own continued awareness of waste management issues. Speaking from within the ecclesiastical context of the Church of England he observed that: ''These issues are much more highlighted in church circles anyway. We have a part-time ecology officer, which wasn't the case 10 years ago''. However, he went on to highlight that ''I probably wouldn't be quite so interested if I hadn't been part of the consultation process''. Such reflections provide a good example of the significant difficulty in attributing cause and effect to the engagement process alone.

The interview transcripts were analysed with a view to uncovering both knowledge enhancement and new or adapted behavioural practices. The purpose was not to benchmark these participants (and inherently their learning) against that of non-participants. Rather, the purpose was to understand whether an individual had *changed* in relation to their own previous behaviour and knowledge. Similarly, the purpose was not to identify an empirical definition of good environmental citizenship, rather, to investigate whether a person has developed in their understanding of their personal role as a citizen as a result of being part of a participation exercise.

A final methodological issue is related to the fact that on the whole the people who contributed (not least to the CAFs) were, to varying degrees, civic minded: a GP, a vicar, a guide leader, a lecturer, a secretary of the Civic Society, member of the CPRE and a councillor, to name but a few. Isolating the influence of the groups on a sense of citizenship is therefore problematic, but not impossible. To that end, care has been taken to present examples of people who seem to demonstrate genuine learning and attribute a facet of their current behaviour or lifestyle to being at least in part a product of a process of public engagement.

5. Instrumental learning

> It's interesting, having this conversation now is the first time I've considered 'my learnings' from the process – and they are considerable. (CAF member)

Instrumental learning stresses the acquiring of new skills, information or knowledge (Mezirow 1994). In the previous qualitative component of a large evaluation involving CAF members (Petts 1994b), which was completed within a couple of months of the end of the process, the overwhelming evidence was that there had been immediate instrumental learning, and indeed everyone who took part in that evaluation said that they had learnt something. The following quotes from the 1994 evaluation involve four of the individuals re-interviewed in 2006:

> I have learnt a tremendous amount, which I would expect to apply in the future ... I have learnt how little I know.
>
> I see the merits of minimisation even more. But I have also learnt that there are limits to recycling and recovery. I am now prepared to sign-up to small-scale incineration.
>
> My local context understanding has increased significantly.
>
> I was totally environmentally un-alert and have learnt so much.

More than a decade on and re-reflecting on their participation, interviewees re-confirmed their learning using similar phrases like ''I learnt ever such a lot''; ''it was educational''; ''it

certainly taught me a lot''. This is important because they had not lost sight of the impact of the process. They were not suggesting that they had learnt more since – perhaps from other sources and as part of being a local resident. For them the participation process had had a strong, lasting and direct impact on knowledge.

One of the most frequent comments was that the issue of waste management became interesting, for example:

> I was quite surprised that waste could be that interesting. I got quite caught up in it. EfW and the new technology was explained very well, it was great actually. (Chineham Contact Group member)

A local environmental consultant admitted feeling ''quite expert about it by the time you'd been through all the presentations and hearing the debates and other people's viewpoints''. An environmental science college lecturer from the same CAF, agreed: ''It certainly taught me a lot about the practice of waste management''. Obviously such people are arguably capable and receptive to learning. But being environmentally aware is not a disqualifier for continued environmental learning – relative to where these people had been, they have moved forward in their own knowledge and could attribute that knowledge (at least in part) to participating in the Hampshire process.

Interestingly, in the 1994 evaluation people spoke most frequently about learning about the different technologies they had heard about for the first time – landfill, incineration, anaerobic digestion and so forth. By 2006 it was recycling that they pinpointed as being important in terms of learning, ''Oh God, I'm the world's ace recycler I think'' was the reaction of one member of the Chineham contact group. The woman went on to say ''I irritate everyone about it. It really did raise awareness because I found out what would happen if it wasn't recycled. I was maybe composting before, but it did make me much more aware''. It is true that in 1994 learning about the technologies was important to people because they were discussing waste in the immediate context of an issue around the role of EfW in the waste strategy. It is also true that in 1994 recycling was not an embedded social activity supported by an extensive collection infrastructure (note the meagre 8% recycling rate for Hampshire). But for the members of the CAFs it was an aspiration as they sought to minimise the need for large-scale disposal facilities. Certainly the Chineham participant did make the connection between her experience in the community group and her behaviour now: the issues were 'drummed' into her. She admitted that she is not as naturally 'green' as some of her friends, but because of the process she had been involved in she still recycles avidly.

What impacted a lot of people was not just being exposed to different ideas and perspectives around the table, but actually seeing waste management facilities. This enabled participants not only to understand what a modern EfW looked like, but also to appreciate the physical realities of recycling. Someone who visited the Portsmouth recycling facility admitted his eyes were opened watching the materials come in and realising that people actually stood by conveyor belts sorting everything.

For someone else the experience stayed with them even when they moved house as they tried to carry on with the principles they had learnt in Hampshire. The chair of the North CAF, a lecturer who is now Principal of an agricultural college in Yorkshire had this to say:

> I learnt an awful lot from which I've taken with me, and certainly here, the principles I adapt and modify, so we do a lot of recycling things here, do them at home too, for instance, Hampshire was pretty switched on, East Yorkshire where I live is not. But it's now an engrained behaviour that we recycle bottles, paper and glass.

Not all were so animated in presenting their opinions. Some being asked what kind of impact the process had on their personal lives would not have dreamt of proclaiming themselves as the 'world's ace recycler'. They were far more cautious, more circumspect in their replies: "I'm aware of the importance of recycling at least" and "it certainly broadened my outlook on recycling". For one respondent who had some criticisms of the process there was still evidence of impact: "The only thing I changed was being more careful in putting things in the recycling bin".

A great deal of thought, time and money goes into understanding how to motivate people to change behaviour, for example, to engage in recycling. Local authorities employ recycling managers and engage in significant practical and information support to households. Yet this respondent almost dismissed the importance of his recycling – "the *only* thing I've changed (our emphasis)", as if it is insignificant or superficial. Indeed, Blake (1999, pp. 262–263) categorises recycling as a 'basic environmental action', suggesting that few people make more fundamental changes to their whole lifestyle and consumption patterns. However, we must not forget that despite the significant increase in recycling rates nationally and particularly in Hampshire, the UK has yet to attain some of the very high rates (over 50%) that have been common in parts of Europe for over a decade. Hampshire itself has a target of 50% recycling by 2010 and is currently running a large public campaign to try and improve performance further.

In identifying claims of instrumental learning it is essential to acknowledge the significant national and local waste policy context development around waste recycling since 1994. The importance of recycling has become commonplace public discourse, the means and opportunity to recycle have extended significantly (recycling centres, kerbside collections, recyclable products, etc). Therefore, it must be expected that it is possible to identify attitude change regardless of engagement. Certainly, people were not saying that they had only learnt about recycling through the processes. What is important is that people could still single out the role of the learning opportunities afforded to them through the CAFs and contact groups.

If 'all' that happened through a public participation exercise was that people changed their behaviour and recycled more, and continued to do so 10 years on, one cannot help but feel that this would be seen as a positive outcome. But the hope must be that behaviour change does not just end with recycling. The question must be how personal actions beyond this are supported.

5.1. Communicative learning

Although seldom amenable to direct testing, communicative learning refers to a process involving values, intentions and feelings (Mezirow 1994). The local lecturer who had chaired the Hampshire North CAF considered his own learning had been "considerable" and his personal recycling actions had now become "engrained behaviour". However, he went further reflecting upon how his engagement had affected his whole professional life as well. Now acting as chair of his college's environmental committee, he considered how the CAF experience had changed his role as an academic and as a consultant for DEFRA. He had learnt from being chair of the North CAF:

> when I tell the farmers they're responsible for a clean up bill of £200 million for the drinking water ... they're sparky but I say they are the facts, so it's a responsible attitude, stating the facts and allowing the facts to dictate, and having everybody there. It's probably something I've learnt from that role and have carried with me.

Here was someone who already had considerable technical knowledge (certainly compared with other participants) but even so, found himself in a position of learning – re-constructing his own values and changing his actions. In fact, in discussing the idea that people might not have learnt anything he contested that:

> I learnt ... and I think everyone else would have learnt from the process. Those that had a pretty jaundiced standpoint did moderate it, talking to people during the process I think people got more balanced, more objective.

The key here appears to be the learning method (i.e. deliberative). He went on to say:

> In terms of the inter-personal and the dialogue, the process of trying to resolve conflict and more to consensual positions ... from that perspective, me, an arrogant old academic, I learnt quite a bit.

The benefits of the participatory process were not simply gained through the presentation and assimilation of information, but in the opportunity for discussion, debate and questioning of issues with a broad range of people. Whilst there is evidence of learning new 'facts' about waste and recycling, the way he learnt and the process he witnessed has affected the way he now undertakes his role as a consultant.

People 'starting to do more' was one of the goals of the Hampshire process. Participants were not completely representative of the general public. Rather, they were classed as generally 'environmentally alert' (if not necessarily knowledgeable) and ''biased towards the higher socio-economic groups'' (Petts 1995, p. 527). But in being selected to be part of these groups they were potential 'connectors' (Gladwell 2000) or 'gatekeepers' (Petts 2007), that is people with contacts throughout their community such that they might serve as a conduit for information and influence (both into, and out from, the process). Certainly, the hope had been that the information and ideas discussed in the groups would filter out beyond the formal meetings, through participants' social networks and into their communities. Indeed, some asked for information packs to help them to do this – the local guide group leader for example.

The secretary of a local Civic Society is a case in point. The Society has over 1000 members; if the engagement process could positively impact on such a key person then its overall impact on communicative learning and (potentially) environmental citizenship could be beneficial. More than 10 years on the secretary admitted:

> I've tried to keep the disposal of waste, and waste as a topic, not on the backburner, but never off the backburner since I was on the forum [CAF]. I try and pick up the most palatable bits from the newsletter, or I've phoned up Hampshire for information and I include it in our society newsletter.

So here is someone apparently learning (like the college lecturer) how different values and beliefs might be built upon or even informed and changed, and positively and proactively using her own contacts with the County gained and encouraged from the original engagement. She has learnt how to optimise her mode of communication not just what to communicate. Furthermore, as secretary of the Society she reviews local planning applications. She noted that when she reviews these ''I pay attention to the waste facilities, i.e. where are the bins going to go? You're going to have 16 bins, where are you going to put them?''

Obviously, her position in the Civic Society suggests someone with an inherent, underlying sense of civic duty, but at the same time her discussion revealed an enhanced sense of citizenship, at the very least incorporating extra knowledge and interactions learnt through the CAFs into her role. There is now a better understanding of the issues of resource management and how she can use her influence to positively affect her community and environment. Indeed, in 1996 she had been approached by HCC to speak about her experiences on the CAF at an Institute of Waste Management conference (1996). She admitted this had been a real and quite daunting challenge but there is little doubt that the learning experience – instrumental and communicative – had placed her in a strong position to be able to engage with waste professionals and local government officials as a 'mere member of the public'.

Another person who recounted stories of change was the vicar who had chaired the South East CAF. At first he was muted about the wider effects of this. He spoke of teaching on waste and sustainability, and in the first (1994) evaluation had identified that he had given a sermon on the subject, but a decade later he would not make a direct link to the CAF process in terms of its learning impact. However, upon further reflection he identified waste-related work through his congregation: ''I look after another church and in cooperation with a local contractor we've organised some paper recycling bins ... It's small scale but it's a start''.

On the other hand, the GP was almost evangelical about encouraging recycling: ''People at work throw out boxes and I say, give them to me. I do bang on at my colleagues about it all. I give my patients letters to the hospital on the back of recycled paper''.

This response mirrored that of another member of the North CAF recounting how his experience had filtered out to his neighbours:

> Oh yes, I've got several people that know I was on it and asked me different things at different times. A friend over the road likes to come over and look at the magazine that comes every quarter and everybody round here is very good at recycling.

It would seem that the original hopes of the process might have been achieved at a small scale within local communities. Information and learning was not contained but rather spread into the community through 'gatekeepers'. There is little doubt that in order to do this the individuals required the facts and figures gained. However, they also benefited from communicative learning, helping them as a minimum to recognise (if not fully understand) the different responses to waste management that arise in any community, from the downright suspicious of the notion of the role and responsibilities of the individual to the outright protagonist and enlightened environmental citizen.

5.2. *Learning: small steps versus giant leaps?*

These positive stories should not mask the fact that there are potential barriers to social learning. Practical and logistical issues will affect the quality of learning. Infrastructure, time and resources are important to any engagement process (Tippett *et al*. 2005). Beyond this is the potential barrier of suspicion. Lack of trust in the organisers and the belief that the process will have little impact on decisions are potentially significant problems (Webler *et al*. 1995, Tippett *et al*. 2005). Facilitating the process of learning is a highly skilled balancing act (Petts 2006), requiring careful management of the framing effects that can privilege expert knowledge while ensuring that public interests and concerns are tensioned against what is practicably achievable. Ensuring co-construction of an issue, including a

clear positioning of community priorities alongside important technical needs, is important if learning is to be achieved.

However, this research identified another important requirement, and that is the personal decision to be open to learning if behaviour is to change. While the initial evaluation (Petts 1994a, 1995) clearly elicited claims of instrumental learning and the evidence above is also of embedded communicative learning, it is also true that some interviews revealed what at first sight seems a less positive response. One member of the Southeast CAF admitted he was very enthusiastic about waste management at the time, "but it's not something I think about now". An active member of CPRE (Council for the Protection of Rural England) similarly felt it did not have "any impact". A member of the North CAF asked whether his lifestyle had been affected emphatically replied: "I can say without hesitation that the meetings didn't affect my behaviour".

However, these latter two people both stressed that they had been involved in environmental issues from an early age: "Ever since I was a child at school ... I've always been an environmentalist, and actually quite a dark green one, I may not seem so, but that is my instinct". Describing his current activities as almost obsessive interest the member of the North CAF reported that:

> Water is recycled, everything that can possibly be recycled or reused is – plastic bags are used for putting sandwiches in, there isn't anything you can possibly think of that has a possible re-use that we don't do.

In these cases we could almost be led to believe that pre-existing environmental knowledge might be a barrier to learning. However, that would be far too simplistic a conclusion. Certainly it would be unlikely that these individuals have every box ticked in the 'pro environmental behaviour' checklist. Knowledge is not a barrier to learning, but attitude is. Mezirow (1994) argues that a key condition for rational discourse leading to transformative learning is being open to alternative points of view. Learning cannot be legislated or prescribed. Learning is a matter of choice.

A critical dimension of the argument here is that social learning is a relative process. It is neither possible, nor desirable to attempt to benchmark learning or environmental citizenship. To borrow a famous analogy, one person's small environmental step is another's giant leap. The research shows that some have taken the experience of Hampshire and allowed it to transform the way they do their job and live their daily lives. For others it may be no less profound or significant that they have managed to keep up recycling because gnawing away at the back of their mind is something someone said in a meeting 10 years ago.

For some, participation has gone on to affect their social networks, colleagues and neighbourhoods. Be that through the numbers of people they are in contact with (in excess of 1000 in the case of the secretary of the Civic Society), or the *type* of people, for example, the principal of the agricultural college who is in a position to influence other teachers. This research could not trace this complex web of connections and certainly could not verify the impact. However, it is clear that the influence of the participatory process has gone beyond the people who sat around the deliberative table each week.

People who claimed the process had little or no effect were on the whole, already motivated and highly environmentally aware individuals. It might be argued that the process of learning would have been better served if the participants had been those who knew little with regard to resource management issues. However, while the earlier evaluation had identified that participants were largely environmentally alert, this is not to confuse being alert to, or concerned about, the environment with being knowledgeable

about waste and resource management. Furthermore, being environmentally alert is arguably a precondition for someone agreeing to participate in an extensive and often exhausting discussion process.

Indeed, such was the concern that a broader mix of interests should be engaged that following the completion of the CAFs, Hampshire had run some lunchtime discussion groups with people from lower socio-economic groups. However, to have run the deliberative CAFs entirely on this basis would have been to undermine the potential to use environmentally interested and well-connected individuals as gatekeepers of community knowledge that was fed into the process and as conveyers of ideas back out. Any deliberative participatory process that sets out simply to educate the uneducated will fail to meet the core ideals of communicative learning.

Effective transformational learning and knowledge transfer happens through ongoing social interaction between groups of individuals, rather than one-off encounters (Nonaka 1994, Wenger and Snyder 2000). One can only speculate how much more effective the beyond process learning might have been if there had been ongoing feedback or social interaction, for example, the CAFs re-connecting annually to share perspectives on progress made.

It is appropriate at this point to reflect on the usefulness of the concept of communicative learning, mainly because it is such a large one, encompassing, at one level, how a person conceives of a problem relative to others and comes to understand different values and interests, and, at another, how they learn to cooperate with others to solve collective problems. The latter arguably involves moral learning in terms of setting aside individual interests to act for the good of all. Notions of environmental citizenship certainly seem to denote a high or strong moral position. However, the interviews did not set out to explore such moral positions in-depth and the interviewees certainly did not speak in such terms. For most of them, the environment was a concern and their engagement had played a part in enhancing their recognition of the importance of the need for action at the individual level. In small ways people had responded to their learning to achieve change as individuals and where possible had taken the opportunity to influence others. Of course, increasingly over the last decade, being an environmental citizen has been understood in terms of lifestyle choices around notions of sustainable consumption or 'doing your bit' (Seyfang 2005, Berglund and Matti 2006). Therefore, to define a direct causal link between the engagement processes and environmental citizenship would be wrong. But this is certainly not to negate the value of such processes in illuminating social contexts where action is required and promoting confidence in individuals in terms of their own role and capacity to act .

6. Conclusions: dreaming the impossible?

Engaging with participants in one of the most innovative public engagement processes of its time, the authors have sought to find evidence, or at least clues, of 'beyond process' social learning. The key question has been whether participants of deliberative processes stop learning when the facilitator and information providers walk out of the door, or whether a more complicated process is set in motion that has the capacity to change hearts and minds resulting in a greater sense of environmental citizenship.

In spite of the practical and conceptual limitations of attempting to measure the impact of a participatory process more than a decade later, it is evident that social learning is not confined to within process. In a significant number of cases the experience of the Hampshire process has shifted people's understanding of resource management issues,

directly affected their behaviour and in many cases, the behaviour of people they came into contact with.

One of the key instigators of the Hampshire process said he was interested to find out from the members of the CAFs, "how much of their experience of being involved in all of this has actually changed their behaviour". Without resorting to studying personal behaviour it is necessary to listen to how people construct their knowledge and experience. So while this exercise has been limited to an attempt to detect evidence or signs of learning, there seems no doubt that the signs are there, importantly of both instrumental and communicative learning.

But we see with a lamp dimly at the moment, this is after all just one case. Further research is needed. For example, a distinctive characteristic of public participation is the interface between lay and expert conceptualisations of knowledge (Fiorino 1990, Wynne 1996, Burgess *et al*. 1998, Blake 1999). Significant questions about expert learning within and beyond engagement processes remain. Expert learning is essential if we are to achieve the appropriate fusion of techno-rational and deliberative models of knowledge production and transfer to respond to the technical, economic and social complexities of resource management (Davoudi 2006).

Further research into the role of 'gatekeepers' is necessary to appreciate how an individual commitment to greater environmental citizenship translates into societal learning and citizenship as well as how existing environmental values impact on process learning. Finally, learning did not stop for the instigators of the Hampshire CAF process after the consultants left. Hampshire County Council, Project Integra has continued to pursue an ambitious resource management strategy. We have yet to understand the nature of the social, institutional and political factors that aid or detract from the wider social learning agenda.

These questions underpin the positive role that public participation can play in engendering environmental citizenship. Understanding how social learning takes place is essential if processes of public participation are to translate into broader shifts in social values and behaviour. Certainly such understanding constitutes a most pressing task in the face of current policy rhetoric urging the public to take individual action and responsibility to tackle the causes of global environmental change.

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