

Developing public sociology through health impact assessment

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Abstract The renewed interest in ‘public sociology’ has sparked debate and discussion about forms of sociological work and their relationship to the State and civil society. Medical sociologists are accustomed to engaging with a range of publics and audiences inside and outside universities and are in a position to make an informed contribution to this debate. This paper describes how some of the debates about sociological work are played out through a ‘health impact assessment’ of a proposed housing renewal in a former coal mining community. We explore the dynamics of the health impact assessment process and relate it to wider debates, current in the social sciences, on the ‘new knowledge spaces’ within which contentious public issues are now being discussed, and the nature of different forms of expertise. The role of the ‘public sociologist’ in mediating the relationships between the accounts and interpretations of lay participants and the published ‘evidence’ is described as a process of mutual learning between publics, professionals and social scientists. It is argued that the continued existence and development of any meaningful ‘professional sociology’ requires an openness to a ‘public sociology’ which recognises and responds to new spaces of knowledge production.

Keywords: public sociology, civic intelligence, lay knowledge, health impact assessment

My brother isn’t allowed out because of the [broken] glass, and all the drugs that are going round. Not so long ago there was drugs in the boarded up shelters . . . needles (Young resident of a housing estate in a former coal-mining community).

Introduction

Sociology appears to be going through one of its periodic spasms of self-examination, at least in the USA. Sparked by a vote on a member resolution opposing the war in Iraq at a meeting of the American Sociological Association (ASA) in 2003, there has been a flurry of debate and discussion concerning the direction of sociology as a discipline and in particular its relationship to civil society and the public sphere. The 2004 President of the ASA, Michael Burawoy, has been at the heart of this debate, convening the annual ASA conference in San Francisco in 2004 with the theme of ‘Public Sociologies’. The re-printing of Burawoy’s ASA Presidential Address in the *British Journal of Sociology* (Burawoy 2005) followed subsequently by a number of enthusiastic, if critical, responses by sociologists from outside the USA, suggests a wider audience.

The discussion provoked by the ASA vote on the Iraq war led Burawoy to argue that sociologists can and should problematise their place in society by asking two questions concerning the sociological knowledge they produce: 'knowledge for whom?' and 'knowledge for what?' The first of these requires us to question our assumptions about the people to whom we should be talking: audiences of experts, the people in power, or the 'wider society', however defined. The second question asks us to reflect on what kind of knowledge we are producing. Burawoy divides these into 'instrumental knowledge' and 'reflexive knowledge', a division with a long history in sociology. These two questions are also explored in a similar way in a recent British sociological debate on the relationship between sociology, policy and politics (Johnson 2004, Lauder *et al.* 2004, Wiles 2004).

Using these two questions as his starting point Burawoy constructs a two-by-two table yielding 'four positions' into which different forms of sociological work can be categorised: professional sociology, policy sociology, critical sociology and public sociology. In relation to the question 'knowledge for what?' he identifies critical and public sociologies as producing forms of reflexive knowledge which concern the nature of the ends of society. Professional and policy sociologies, in contrast, deal with the production of forms of instrumental knowledge which concern the means to reach those (presupposed) ends. The 'accumulated bodies of knowledge' in professional sociology are primarily the substance of research programmes which are themselves progressed as they address their own 'defining puzzles'. Policy sociology, on the other hand, produces 'problem solving' knowledge or solutions where these are pre-defined by a client. As for the second question, 'knowledge for whom?' Burawoy views professional and critical sociologies as producing knowledge for academic audiences whereas public and policy sociologies focus on audiences external to academia (Burawoy 2005). Although one criticism of his typology is that he makes too much of categories as providing distinct forms of knowledge (Ericson 2005), Burawoy himself has been keen to point out that they are ideal types, with many overlaps and multiple fissures.

For sociologists who work with a wide range of publics, professionals and policy-makers, such classifications may appear to be an unhelpful artifice (Quah 2005). The sociology of health and illness is most certainly a discipline which requires its practitioners to work flexibly and critically with a range of audiences and collaborators, both inside and outside universities. To these sociological practitioners, Burawoy's argument is not new. Nonetheless, it seems to us that what Burawoy has proposed kick-starts a much needed general reflection on the ways in which sociology is conducted, the research relationships in which its practitioners become involved, the knowledge that is produced, and the audiences addressed.

This paper explores Burawoy's idea of public sociology by way of reflection on a 'health impact assessment' undertaken in a former coal mining community in south Wales (Elliott and Williams 2002). Commissioned by a government department, the study could be classified as a mix of professional and policy sociology in that its initial and explicit value was in the instrumental application of a body of legitimate methods, forms of knowledge and conceptual frameworks to address a specific set of problems identified by a particular client. The purpose of the commission was two-fold. First, the project was a pilot for the Welsh Assembly Government to test the approach of health impact assessment and to evaluate the use of a particular 'health technology' in policy development. Secondly, it was an evidence gathering exercise, collecting and synthesising a range of primary and secondary data for a Welsh local authority who wanted to know how decisions on the future of a housing estate might affect the health of current residents. Professional sociological labour was therefore bought and placed at the service of two clearly defined policy clients.

Securing a contract with a university-based school of social sciences provided the clients with the expertise they believed they required and a means of legitimation for future decisions.

We argue, however, that as this commissioned work unfolded the health impact assessment process itself created opportunities for more dialogical relationships between the researchers and other stakeholders, and this led the 'project' to develop into something closer to Burawoy's idea of public sociology. Using our work as a case-study we begin by describing what 'health impact assessment' means for different practitioners. We then describe how we applied a certain version of it in the particular project reported here, the processes that evolved, the 'evidence' that was produced and some of the impacts of the process itself. Finally, we link the discussion of public and other forms of sociology to the wider debate in the social sciences about the 'new knowledge spaces' within which contentious public issues are now being discussed, and the implications of these pluralistic epistemological environments for different forms of expertise, including medical sociology.

Health impact assessment

As a general approach to generating evidence for public policy, impact assessment first emerged in the field of environmental hazards, notably in the United States, where the *National Environmental Policy Act of 1969* provided the legislative framework for the US Environmental Protection Agency (EPA), set up in 1970, with a mission 'to protect human health and to safeguard the natural environment – air, water and land – upon which life depends' (<http://www.epa.gov/history>). The dominant ethos of the EPA was a quantitative approach to risk assessment based on the collation of toxicological, experimental and observational data. During the 1970s concern over the environmental impact of large engineering projects in developing countries became widespread and organisations such as the World Bank began to insist that such projects were preceded by an assessment of how natural and physical environments were likely to be affected. Such projects were often also associated with the massive disruption of human communities, and parallel disciplines of 'environmental impact assessment' (EIA) and 'social impact assessment' (SIA) developed alongside each other (Kemmm and Parry 2004a). Health impact assessment (HIA) has evolved from this as a process of generating information, informing policy development, and communicating risk relating specifically to possible effects on health, defined in some circumstances as specific diseases and in others as something like human wellbeing as a whole.

There are many definitions of HIA. The World Health Organisation's Gothenburg consensus provides one of the more concise and generic descriptions which has been widely used:

a combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population. (European Centre for Health Policy 1999: 4)

The purposes of HIA are first to raise awareness amongst decision-makers of the relationships between health and physical, social and economic environments; secondly, to help decision makers identify and assess possible health outcomes and optimise overall outcomes of any decision taken; and thirdly to help those affected by policies to participate in policy formation and contribute to decision making (Kemmm and Parry 2004b). A tension between the aims of improving scientific prediction and addressing the democratic deficit has been acknowledged (Parry and Wright 2003). However, this tension tends to be framed

in terms of an assumption, shared by many academics, policy makers and practitioners, that the participative imperative of HIA supports the empowerment of those who participate but makes little direct contribution to improving the quality of the scientific knowledge. Not surprisingly, therefore, when time and resources are scarce participation is regarded as an optional extra (Parry and Wright 2003). We would argue that a mean approach to participation in HIA not only disempowers the participants but undermines the quality of the knowledge produced.

There are two conflicting scientific frameworks operating in the current practice of HIA, sometimes referred to as 'broad' and 'tight' HIA (DH 2000). In the first, taking a lead from EIA, HIA operates firmly and unapologetically within the frame of positivism, with scientific experts making testable predictions upon which rational decisions and policies can be developed. While this approach may be more difficult to apply to the complex social processes which determine the health of populations, this view holds that even rough quantification is better than an apparently persuasive qualitative judgement. Rather than abandon quantitative approaches, '... the challenge is to develop epidemiological knowledge for HIA in the social fields' (McCarthy and Utley 2004: 69). There is, however, an increasingly strong social science presence in HIA whose proponents point out, for example, '... that the world of decisions is actually much more complicated than any simple model of "rational decision-making" assumes' (Lehto 2004: 54), and that the *perception* of a proposed decision and its anticipated consequences, by a range of different observers or stakeholders, is actually more important for those in a position to take decisions than the content of the decision and 'objectively' appraised consequences.

This more nuanced sociological perspective also requires a different approach to the conduct of investigations; emphasising not only the perceptions of the actors involved, but their *interpretations* of events, processes and relationships, acknowledging that interpretation of events depends on complex contextual factors. Such a perspective allows the apparently 'irrational', 'hysterical' or 'unscientific' to be situated as *forms of knowledge* in particular social settings. In response, positivistically-driven critiques of the sociological drift in HIA, argue that too much current practice is based on a *mélange* of discussions with affected communities combined with some qualitative research evidence but little direct measurement of outcomes (Morrison *et al.* 2001). This perspective has led some to argue that we should 'de-couple' the technical, epidemiological or scientific aspects of HIA from the practical, dialogical and community-development processes within which real-life HIAs have to be applied. In this scenario, there would be a division of labour between the decentralised, particularistic activity of carrying out an HIA, and the centralised or generalisable activity of providing the evidence for it (Joffe and Mindell 2002). In other words, leave science to the scientists, and bring the scientific evidence and theory to the table to 'inform' the discussions by policy-makers, local community representatives and other lay people.

We argue that this perspective is misguided. First, at the simplest level, for most of the policies, programmes and projects that are discussed as possible candidates for HIA there is no robust, rigorous evidence available to inform the assessment. Secondly, the positivist approach threatens to disempower those who have a genuine interest in, concern about, and knowledge of the likely effects of the change in question on their lives and neighbourhoods. Thirdly, and most importantly, it reduces the definition of legitimate evidence to a very limited range of materials, based on forms of knowledge which are disconnected from the specific contexts in which people live. This undermines the potentially creative interplay between different forms of evidence and, equally importantly, those different frameworks of meaning without which the evidence is, quite simply, meaningless:

The conflict between incompatible meanings cannot be resolved simply by producing evidence, not because evidence is irrelevant, but because its relevance can only be determined by the meanings themselves . . . Annihilating the meanings of others in the interests of truth is a form of killing (Marris 1996: 31).

To some extent this alternative way of thinking about HIA is supported by those working within the positivist framework. What differentiates HIA from 'pure' epidemiology is that risk factors or exposures are not just taken as given, but are seen in the context of their own underlying causes, or what might be called 'the determinants of the determinants' (Joffe and Mindell 2002). If this is the case, and if it is in part what produces the 'complexity' of real-world HIA, what is required in HIA is something akin to what Brown and others refer to as 'popular epidemiology', the process whereby lay people themselves gather scientific data and other information and, where possible, collaborate with, and marshal the knowledge and other resources of, the 'experts'. What is important in this model is that:

. . . popular epidemiology is more than public participation in traditional epidemiology, since it emphasises social structural factors as part of the causal disease chain (Brown 1992: 269).

These social structural factors are 'the determinants of the determinants' which traditional epidemiology so often overlooks (Williams 2003), and provide the boundaries of the contexts in which frameworks of meaning are developed and sustained. Following the logic of this argument, therefore, 'popular' health impact assessment should be about more than having a few lay representatives around the table to discuss the scientific studies of epidemiologists and toxicologists. They themselves have to be actively and directly involved in the knowledge-generating process because of the embedded *verstehen* they bring to the context in which an HIA is to be undertaken (Williams 2004). It is in these debates about what health impact assessment is and what it is for that we can see the relevance of Burawoy's outline of the division of sociological labour. For Burawoy the 'promise and challenge of public sociology' is 'taking knowledge back to those from whom it came, making public issues out of private troubles' (Burawoy 2005: 266).

In what follows we describe a health impact assessment where local people were involved both as participants in the assessment process and as crucial sources of evidence in their own right. We argue that they were far more than simply the unconscious carriers of evidence for others to interpret. They were themselves bearers of considerable lay knowledge of their own lifeworlds (Williams and Popay 2001) and, through their own Schutzian 'stocks of knowledge at hand', were skilled interpreters and translators of the 'external' evidence provided by professional experts in dialogue with whom they could share in the decision making about what was to be done. This paper examines the processes led initially by the social scientists through which local people not only participated in the politics of the process, but contributed to a research process of knowledge production, a process which ' . . . serves both to broaden citizens' access to the information produced by scientists and to systematize their own local knowledge' (Fischer 2000: 151). The following is, in effect, a description of a piece of public sociology which emerged from and was sanctioned by a commissioned piece of social sciences policy research. This shift towards a more citizen-based policy-making process, that draws on 'lay knowledge' and 'popular epidemiology', provides the possibility for a public sociology which creates new spaces for the development of 'collective intelligence' (Brown and Lauder 2001), 'civic intelligence'

(Schuler 2001, Elliott *et al.* 2004, Elliott and Williams 2004) or 'civic epistemology' (Jasanoff 2005) that challenges a traditional demarcation between different forms of expertise.

Context and case

The study we discuss took place in Wales, and was funded by the Welsh Assembly Government. Since 1999 Wales has had its own Assembly with powers to modify and adapt legislation passed in the UK Parliament. Health is one policy area in which the new Assembly has had an opportunity to create an alternative future to that forged in Westminster and Whitehall in England. The Welsh Assembly Government has an established commitment to health improvement '... driven by clear recognition at the political level of the range of health determinants and of the need to address such factors as a key part of any strategy to improve people's health' (Breeze and Hall 2002). As part of this process the HIA has been endorsed as a 'tool' for local and national government and organisations within the statutory and voluntary sectors, to address inequalities in health and improve wellbeing (National Assembly for Wales 2000a). In order to develop this aspect of its policies and prior to the funding of a dedicated support Unit the Welsh Assembly Government commissioned a number of health impact assessments. These both informed decision makers of the potential health impact of their particular proposals and provided an opportunity to reflect on how the health impact assessment process operates in real settings.

One of these assessments examined the potential health impact of a proposed housing development on the health of residents living in the former mining village of Llangeinor situated in the Garw Valley north of Bridgend in south Wales. With a population of approximately 1,500 people the community is one of the 'top 100' most deprived of the 865 electoral wards in Wales as measured by the Welsh Index of Multiple Deprivation (National Assembly for Wales 2000b). It comes out particularly badly for child poverty (the proportion of children under 16 living in welfare dependent households), where it is one of the 25 most deprived in Wales. Like many former mining communities in Wales and elsewhere, the village is geographically isolated and poorly served by public transport, and 38 per cent of households have no access to a car. A complex set of factors have shaped the village's current housing state, which in turn has impacted on the physical and psychological well-being of its remaining residents.

The houses, largely owned by the local authority, consisted of a combination of traditional post-war semi-detached houses, and a high-density 1970s development which was of particular concern. Many of these were damp and cold and had been designed for coal heating, upon which they were still reliant. The design of the houses also created problems for occupants. Disadvantages included dark stairwells, up-side-down internal arrangements, bedrooms that abutted the public pathways, garages built underneath some of the houses and the lack of natural light in some rooms. Many of the properties were void and, over time, had become a target for vandalism and drug-taking of the kind referred to in the quote from a young resident with which we began this paper.

The officers involved in making decisions about the future of the housing were aware that current conditions were intolerable, but were unclear as to how they could ensure that decisions were in the best interest of the health and wellbeing of residents, as well as being effective in other ways. The local authority's concern for the wellbeing of residents prompted the Welsh Assembly Government to commission a health impact assessment from academic researchers based in a school of social sciences (Elliott and Williams 2002). The rationale was that it would provide council officers with an evidence-based resource to

inform their decisions, and the Welsh Assembly Government with a detailed local case study to create a better understanding of the processes involved in conducting an HIA and provide a case study of the potential interconnections between housing, neighbourhood renewal, and health and wellbeing.

Designing and conducting a health impact assessment

After being commissioned the researchers met the relevant local housing officers to agree, with the clients, the nature and scope of the HIA. It also provided an opportunity for the researchers to gain an initial understanding of the locality and any associated regeneration plans. Minutes of the meeting highlight mutual uncertainty about the status and ownership of the HIA, but eventually it was agreed that the researchers would explore the health needs of people living in the area and their possible relevance to housing options. It was also agreed that the researchers should contact local people as 'stakeholders' in the process. The housing officers offered to show the researchers around the area, which they declined. Instead, they decided to approach a local community development organisation and asked them to suggest local people playing an active role in the village that they might approach directly. Whilst an agreement at this meeting was to make regular contact with the housing services department to keep them informed, permission in effect had been granted to undertake the HIA independent of the control of the statutory authority.

A small number of people were suggested by the community development organisation as potential informants and participants. These were residents who had recently been elected by local residents to be on the committee of their local community centre. We had been told that a new committee had been formed and that people new to community activity were becoming interested in actions aimed at improving facilities for residents. Again, this historical event placed the researchers in a context where there was a possible 'readiness' for engagement in a process that could potentially make an important difference to local people's lives. Two of the suggested residents, a husband and wife, were contacted and a meeting was held in their house. Though definitions of health were never explicitly discussed at this point, mental ill-health and respiratory problems were mentioned when they talked about how a range of different aspects of their housing affected their own and their neighbours' lives. After speaking to them and being provided with a walking tour of the area, it soon became clear that the health impact assessment would be more than a piece of policy sociology. Field notes of this meeting, reinforced in subsequent interviews, indicated that there was considerable mistrust of public authorities as guardians of their wellbeing and, secondly, that local people had knowledge and experience which were central to understanding how housing changes were likely to impact on their lives.

A small steering group was set up to include a number of key representatives. One of the people initially contacted and another 'active' resident were on the steering group throughout, and another was involved in the initial stages but had to withdraw due to personal circumstances. Both residents had good contacts with people in all parts of the village and their role was not only one of 'representing' the community but also of providing advice on how to gain access to different 'groups' within the community. In addition, representatives from the local authority, the local health service, a local housing association and the local community development organisation were represented on the group. Four steering group meetings were held, the first to introduce and agree the scope of the HIA, the second to report on progress in collecting data and literature-based evidence, the third to discuss emerging 'findings' and to plan a community meeting to present and discuss the HIA

locally, and the final one to debrief and agree a process for the final report. All these took place in the village's community centre.

The first meeting was important for agreeing the way in which the HIA would be conducted, but it also provided an opportunity to come to an agreement about what was meant by 'health'. The way in which health and wellbeing are conceptualised and then operationalised in policy is rarely made explicit (Cameron *et al.* 2006). In the case of the HIA, it was felt to be important for conceptions of health to emerge through the data and not to be prescriptive. The term 'wellbeing', though often understood as integral to certain definitions of health, was added to guard against any preconceptions that the HIA was exclusively concerned with diseases or health services. In this first meeting, the Dahlgren and Whitehead (1991) model of the social determinants of health was used in the presentation to open up discussion about the relationship between residents' personal experiences and wider public issues. In addition, the use of the term 'wellbeing' ensured that positive aspects of health were seen to be relevant and helped to minimise any potential pathologisation of the community. For instance, residents would talk about the physical beauty of the area and the strength of community relationships. It was important that these positive descriptions of the village were seen as relevant and important considerations in discussions of housing change.

Data were collected from a number of sources including: existing local data sets on the health, social and economic status of the people in the village; research literature on the links between health and housing; and local perspectives on the health and wellbeing of people in the village and on how various scenarios might impact on residents. The literature review was iterative, broadening its scope as interviews with local people highlighted the complex links between health, housing and the broader determinants of health. The literature review was therefore part of, and a consequence of, on-going dialogue with local people in both the steering group meetings and interviews.

In-depth interviews were conducted with key informants who worked and/or lived in the village. In total, 15 individual interviews were conducted (though three of these involved another person for some or all of the time) and four group interviews. Interviews with people who worked in the area included those working within primary health care, education, the church, community regeneration and in leisure and youth services. The group interviews were with children aged 9–11 and young people aged 12–18, a group of older women who met on a weekly basis at the local Football Club, and a group of four primary health care workers. Following a draft report local people were given the opportunity to review and, if they wished, confirm or challenge the findings at a public meeting. The local steering group representatives helped to organise this meeting and were chief advisers on how the event should be planned and advertised to ensure maximum interest and participation of local people. The research team also provided funds for local people to provide refreshments and child care facilities. In the event about 50 people attended this meeting, a large number for a small village. Small group discussions at this meeting also provided people with the chance to explore the connections between local housing and their health and wellbeing and possible options to improve conditions in the village. Local officers and political representatives were also invited. With the researchers as facilitators this forged opportunities for dialogue between lay, professional and political stakeholders.

The delivery of a final report to the Local Authority and the Welsh Assembly Government was the end of a contractual relationship, in the sense that it provided the product expected of a competent piece of commissioned policy sociology. However, the relationship with the decision-making process continued to the extent that the researchers were invited to return

to the village in reporting decisions. One local representative also became a willing voice for public involvement in HIA, appearing, through invitation, in one Welsh and one international HIA conference, thereby entering the wider professional and academic arena on debates about this subject.

Local knowledge as evidence

In order to illustrate the contribution of local knowledge to the health impact assessment process, this paper focuses on a small number of narrative fragments (Williams 2004) drawn from interviews that illustrate the important contextual insights into the relationships between the physical and social aspects of bad housing as they affect health. These interviews cast light on the lived experiences of people in the here and now, and form the basis for hypothesising future scenarios. They also contribute to a body of understanding about the relationship between people, places and policies, drawing on sociological concepts which were themselves enriched, through the process of engagement with publics.

People's lived experiences of poor housing design can be complex and wide ranging. As we indicated earlier, lay knowledge is not just technical knowledge that has been learned and applied by lay people, it is also a framework within which different forms of knowledge and evidence are brought together into a meaningful understanding, driven by strongly personal and community concerns. Factors that may not be seen from the outside to be particularly significant are transformed into meaningful episodes through this interaction between lay *verstehen* and external evidence and information. A single 'fault' can be experienced as a total personal violation. One resident described the experience of living in a house with thin walls:

In the evening I can hear [my neighbour] going into the kitchen and putting the kettle on. I can hear her actually running the tap . . . In the night she can hear me flush my toilet and I can hear her flush hers . . . I got home late in the weekend and I hadn't washed all my daughter's school uniform. I thought I can't put it on now because they'd hear it in both flats . . . I have to show consideration so once it gets to a certain hour, unless it's a real emergency, I don't wash. It's stupid because you should be able to do what you want when you want to.

This account provides a vivid description of the pathways through which the thin walls of her house impacted on her life and, consequently, her wellbeing. The thinness of the walls subjected her to the noises of the people living next door. In this case it was not the loudness of the noise that was troubling her. The noise thrust her into her neighbour's affairs and created an implicit, and unwanted, intimacy between them. Awareness of her neighbour's noise made her morbidly sensitive to the existence of her own noise and therefore a violation of her own privacy and ultimately her sense of personal autonomy. This had an impact, as the quote demonstrates, on both the practicalities of getting things done and on her ability to be able to feel at ease in her own home.

What this account provides is a fine-grained knowledge of conditions that would not emerge from more traditional 'robust' methods of data gathering. It is an attempt to disclose both the meaning of the determinants, and their impact on the daily practical routines in her life. In providing this, she is not only giving us her opinion, she is providing knowledge about the dynamics of the impact of housing on health. A decision not to change the housing conditions for local people would have perpetuated this situation.

The process of implementing change, however, can have as important an effect on health as change itself. This is particularly the case with housing investment since it impinges on people's personal and social space, their sense of who they are, and their future orientations and plans. Allen (2000) suggests that the experiences that people have of housing change will depend on the degree of control that they wish to have, and manage to exert, over the process. Interviews suggested that effective communication links would be a necessary condition to establish the basis of that control. A key concern within the village was the 'talk' around the future of the houses in question. Although the local council did send out letters to explain what decisions were and were not taking place with regard to the housing, people were still unsure about what was going to happen:

We've been told we're going to move, 'Yes, you're moving this month, you're moving next month', and that's people around here. You just want to know where you are . . .

It depresses me for a start. I mean this living room could do with being decorated but . . . what are they going to do? They're not telling us . . . I don't know if they are going to knock them down, if we're going to move.

These two excerpts tell us a number of things. To begin with they reinforce the link between being in control over important life processes and people's sense of emotional wellbeing. A sense of 'knowing where you are' is clearly a profound health need, and is a condition for making small but important decisions such as whether a room should be decorated. When, in the case of many residents, a room is mouldy, cold and damp, this inability, coupled with the lack of resources to act effectively, can be deeply upsetting and can have direct emotional and physical effects. The lack of income for many of the people living in the village meant that deciding to decorate was only possible if it made financial sense in the long term, and at the time of the study a long-term perspective was what people felt they did not have.

Interpretation of these quotes also reveals important 'truths' about the specific social context in which these concerns were voiced. The village, like other ex-mining villages, is fairly isolated geographically and is composed of people who are either related to each other or have known each other well for a long time. Information through 'word-of-mouth' or 'gossip' is a key mode of communication. In a small local community where views are exchanged at the school gate, over a game of bingo, on the street or at the local pub, rumours about housing decisions proliferated. As the first quote suggests, information about what is likely to happen comes from the people 'around here'. This presented an important challenge to the local council whose main route for communication had been by post. Where important decisions on the future of the housing were going to be made, local officers would clearly have to find ways of communicating with people who could challenge, or perhaps build on, word-of-mouth contact. It also highlights the complexity of what defines information and the interrelationship between the formal and informal processes by which people feel that they are informed.

Finally, perhaps the greatest concern for local people was the effect that any decisions might have on their connections to the village and the people who lived there. Within the 'lay normativity' (Sayer 2004) expressed in interviews with people in this community, belonging, embeddedness and supportive social relationships were the things that mattered, and made their lives worth living. If people feel that they belong to a community it is likely that they have strong feelings of attachment, not only to the locality as a whole but to a wide range of people who live there. Those relationships can foster feelings of mutual

responsibility and care, which then translate into actions of support and reciprocity. In terms of health it has been argued over many years that social support can be an important means of promoting and protecting health as well as being a buffer during times of stress (Cohen and Syme 1985). Social support also refers to the everyday activities of practical help that can help to prevent or reduce some of the stresses of everyday life. Within the village the role of the extended family was important to people and, indeed, there were a small number of families with aunts, uncles, cousins, second cousins, and so on, who lived in the village. Not only were people sentimentally attached to the village, in that they had a deep awareness of their roots and a sense of belonging, but their day-to-day activities depended on support from others.

I don't want to move from this village. My family live in this village . . . my family have always lived in this village. But not only that, if I had to be somewhere else . . . I mean they're care providers for my child. And I've only used one babysitter in my entire life. You know . . . its family first.

This extract, illuminates a local history of social connectedness and belonging, emphasising the importance of the extended family in this particular village. This woman, a lone parent, had never required formal child-care provision because there was always someone, usually family, who could and would look after her child. One particular fear that she had with regard to housing decisions was whether she would be relocated, or 'decanted', should the local authority decide to demolish her house. Even temporary accommodation created concerns about the dislocation from known and trusted sources of support and friendship. This reveals crucial insights, into both the emotional effects of even short-term dislocation from one's community as well as practical effects such as lack of child care and other forms of support that could have further impacts on the local economy. Policies fail when the generalisability of their provisions is designed without attention to the particularities of people and places:

. . . policies for promoting economic growth, for providing jobs or housing, have to take into account the web of attachments which typically bind people to particular places, in particular configurations of relationship, and without which they may suffer great distress (Marris 1996: 46).

In sum, the use of in-depth qualitative data, the findings of which were reinforced in steering group meetings and in the public meeting, provided a better understanding of how the determinants of health interrelate and impinge in the real and meaningful conditions in which people find themselves. It is because these data are contextual that they provide evidence that improves our understanding of the human condition.

Building new public spaces for knowledge and action

This research was not simply extracting data from local people. Residents were *actively* involved in a complex task of interpreting and synthesising different forms of evidence and knowledge. They worked through their representatives on the steering group, directly with the researchers during their regular visits to the village, and collectively in the public meeting. They were the 'sense makers' who, as Jasanoff (2005) observes of the citizen scientist, came to be seen as the experts at 'making room for the unknown along

with the known' (2005: 254), grounding 'the science' and the newly collected qualitative data in the particularity of their own collective experience. The HIA provided an arena whereby the credibility of both the science and possible local government actions could be tested. The social scientist's role in this case was in universalising the particular, grounding the local in globalised theories of human experience, and encouraging the private experiences of local residents to be seen in terms of matters of public significance. As a result, the HIA facilitated the potential development of new forms of understanding, skill and modes of communication between professionals, politicians and residents.

Community participation can appear to be an intangible and aspirational ideal; good in theory but unworkable in practice. In addition, some research confirms that there is a deep-rooted belief that involving local people is a barrier to an effective policy-making process rather than a mechanism that can improve the appropriateness and sustainability of policies (Pickin *et al.* 2002). Although any process can be used as a mechanism for reinforcing rather than equalising power relationships, the health impact assessment process represents a potential space for democratic experimentalism (Unger 1998) or civic republicanism (Marquand 1997), enabling people within troubled places to 'author' or co-author the transformations to their local social, economic and cultural worlds. Burawoy (2005) draws attention to pathologies embedded in each type of sociological labour. Within public sociology, there is the danger of pandering to or flattering publics in an uncritical privileging of lay perspectives. In this case, however, the HIA forged a virtuous alliance between professional and public sociology, by drawing on, testing and reassessing, established sociological conceptual frameworks and forms of knowledge through dialogue between residents, sociologists, politicians and policy makers. The social researcher operating as a 'public sociologist' has to find ways of connecting the issues revealed in such studies back to sociology itself for, as Burawoy contends, 'professional sociology depends for its vitality upon the continual challenge of public issues through the vehicle of public sociology' (2005: 275).

The HIA process also had some unexpected local impacts. First, officers and the local government cabinet minister responsible for health convened a follow-up community meeting, with one of the researchers attending, in which the housing plans were announced and their relationship to the HIA was discussed. Secondly, residents attending the community meeting made the decision to set up a tenants and residents association, and local authority officers stated that they would support this development. Thirdly, an important potential impact was that it set up the basis for further community-based regeneration partnerships. The village had recently been identified as a *Communities First* area¹, which depends on cross community and multi-agency partnerships. The health impact assessment process provided a valuable foundation upon which to build this. In a wider sense it could be seen as a step towards revitalising the citizen's relationship with the state and its local institutions. The researchers' role in the HIA consisted of putting the case for this politically (through the engagement of local government officers and politicians), procedurally (in the production of a formal report) and intellectually (in academic papers).

Conclusion: from lay knowledge to civic intelligence

Although some argue that the concept of 'lay expert' is oxymoronic (Collins and Evans 2002, Prior 2003), there are proliferating situations in which lay people themselves have

become 'experts', and this expertise is based partly on the acquisition of technical or professional knowledge. 'Popular epidemiology' in response to lay concerns about toxic waste is a good example of this (Brown 1992). In addition, in applying their understanding or *verstehen* to problems affecting their own life situations, problems about which they care deeply and personally, lay people develop an integrative, synthetic and, one might almost say, 'joined up' approach to knowledge, in contrast to the reductive and analytic approaches of most scientific research (Brown 1992, Popay and Williams 1996). It is, if you like, knowledge in a social context, knowledge that matters in terms of people's understanding of and responses to the problems they face in their everyday lives.

It is important to recognise that we are arguing not simply that 'subjective opinions' need to be placed alongside 'scientific evidence', or that the subjective views of lay people express forms of expertise equivalent to scientific knowledge, but rather that lay people who attend to matters of concern relating to their health or the environment are engaged in a process of *verstehende* theorising which, when placed in the context of dissent, discussion and dialogue with other kinds of experts, creates 'new knowledge spaces' for civic epistemology (Jasanoff 2005). These ethno-epistemic assemblages of lay and expert (Irwin and Michael 2003) are often to be found in areas where policy makers have interests, where decisions need to be made, and where issues of value, knowledge and power come together in disagreement and conflict. These new spaces are ones in which more sophisticated forms of empirically-grounded rationality can emerge; rationality that is not only about providing evidence for policy, but rationality that is both *zweckrational* and *wertrational*: spaces in which technical and practical-experiential knowledge come together in a context where effective contributions can be made to policy, politics and the vitality of the public sphere.

This paper has explored the role of local people in a situation of health impact assessment. Health impact assessment creates a context in which a number of different shapes and sizes of evidence, varying perspectives, and various forms of scientific and lay knowledge are brought together. In this case study, we have illustrated the importance of lay people's views for the process of doing health impact assessment and the quality of the understanding gained. The interviews and the participation of local people in the health impact assessment revealed a civic intelligence at work in making sense of the factors that impinge on people in their lived communities (Elliott *et al.* 2004, Elliott and Williams 2004). The evidence produced was local knowledge that carried the weight of the history and the social realities of the people concerned. Involvement of this kind in health impact assessment can transform the vertical and hierarchical relationships that define relationships to the local authority and its agencies into horizontal relationships where the players share a common arena for collective deliberation. Statutory sector representatives on the steering committee were, literally and metaphorically, deliberating outside the professional terrain and having to apply their knowledge to lived contexts. This process required both professional experts and lay people to acknowledge the complex questions of evidence and value involved in health impact assessment.

Through this case study we have argued that the particularism of lay knowledge that exists within the everyday understandings of people in communities is a form of legitimate expertise which, combined with working alongside the perspectives of social scientists and other professional experts, can become the basis for a powerful form of knowledge production or civic intelligence as a form of 'participatory praxis' (Fischer 2000). The co-creation of citizen and scientific expertise is not just a more inclusive and democratic form of science, but a more reliable, valid and effective science linked to a richer conception of knowledge, and able to inform social action (Forrester *et al.* 2002).

In this discussion we have also shown that Burawoy's typology of sociologies is churned up in interesting and complex ways in particular situations. In our case study, what appeared at the start to be a simple piece of policy sociology or policy-driven social research developed into a challenging example of public sociology that tested our own sociological assumptions and the expectations of the makers and implementers of policy. We have described the possibility of a sociology which participates fully in the policy process and brings sociological expertise into an environment of public argument and deliberation; a process in which evidence, interpretations, opinions and evaluations – scientific and value rationality – come together to inform decisions about social action in a real world of power and value. Unless professional sociology recognises and responds to the new spaces for diverse forms of expertise and knowledge production, it will become truly irrelevant to anyone outside professional associations of sociologists, and Burawoy's (2005) vision of a 'critical social science . . . responsive to public issues while at the same time committed to professional excellence' will remain a chimera.

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Acknowledgements

We are grateful to the Public Health Strategy Division in the Welsh Assembly Government for funding the health impact assessment on which this article is based. We would also like to thank Councillor Margie Ing and the housing officers in Bridgend County Borough Council for their support and guidance; and the residents of Llangeinor for their time, expertise and commitment.

Note

1 This is a flagship regeneration programme targeted at the most deprived communities in Wales.

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