

# Participatory diagramming: deploying qualitative methods through an action research epistemology

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**Summary** *In the context of a pilot study on the role that gender relations play in the transmission of HIV in Zimbabwe, this paper explores participatory diagramming, an exciting qualitative research technique largely under-utilized by geographers. It argues for a deployment of the technique within an action research epistemology in order that it might facilitate the reflection and action of participants in praxis, not simply the production of nuanced multiple truths in text. Such an approach offers geographers embedded in an audit-oriented academy one means to political engagement while at the same time generating rigorous, 'publishable outputs'.*

## Introduction

This paper describes a number of participatory diagramming techniques<sup>1</sup> that I utilized in a 1998 pilot project that investigated gender relations and HIV transmission in rural Zimbabwe. At one level, like other recent contributions, this is a 'methods paper' that discusses another alternative qualitative research technique that can access and valorize previously neglected knowledges and provide more nuanced understandings of complex social phenomena (see Halfacree and Boyle 1993; Vandsemb 1995; Holbrook 1996; Dyck 1999; Valentine 1999). Given the discipline's growing interest in qualitative methods (see Area 1996; *Professional Geographer* 1999a; 1999b), its current willingness to deconstruct established alignments between epistemologies and methods, and its apparent imminent embrace of 'multi-method' approaches (see *Professional Geographer* 1995; 1999a), such a contribution to 'the geographer's toolbox' might be readily received. Issues of 'method' notwithstanding however, at another level, this paper addresses the political question raised so pertinently by a recent special edition of *Area* (1999): how can we pursue politically engaged and praxis-oriented research while at the

same time hitting the targets set by an increasingly audit-oriented academy? This paper proposes that the deployment of participatory diagramming techniques through an action research epistemology might be one means to combine these often conflicting goals.

There are three reasons why I feel it would be insufficient simply to write a 'methods paper' about participatory diagramming techniques. First, as Graham (1999) argues persuasively, there is little that can really be said about a particular technique independent of the theoretical framework within which it becomes a tool.<sup>2</sup> Methods have a polyvalent quality; techniques with the same formal properties can be deployed by different schools of thought in a variety of ways to produce quite different effects (Moss 1995; Greenhalgh 1997; McKendrick 1999; Graham 1999; Kesby 1998). Thus participatory diagrams could be deployed simply to collect qualitative data for academic assessment (see Katz 1991), or to co-opt communities into pre-designed NGO or state programmes, or they could be deployed in an attempt to facilitate participants empowerment and decision-making in their own lives and communities. Discussion of techniques must be theoretically embedded then.

Second, epistemological assumptions are but one discourse/practice in the unstable constellation of power/knowledges that produce and reproduce current research practice. They are themselves embedded in particular socio-academic contexts (McLafferty 1995; Moss 1995), the RAE (Research Assessment Exercise) for example. As Kitchin and Hubbard (1999) argue, while not all geographers share an epistemology that requires their objective distance from the phenomena of study, embeddedness in the contemporary mode of academic production means that even those who write of the need to unite theory with praxis and/or engage in activism 'in their own time', find it difficult to marry their research practice with political action. Indeed, with few exceptions (Routledge 1996; 1997; Chouinard 1997; 2000; Area 1999; Kitchin 1999; Kesby 1998) there has been an absence in geography of critical reflection on the interface between activism and the academy or the merits and limitations of action led or participatory research (Kitchin and Hubbard 1999). This paper attempts to explore one possible means of trying to re-configure current research practice in ways that ensure a central role for political praxis while at the same time generating 'audit worthy product'.

Thirdly, challenges arise from the nature of my research question itself; the final factor that influences choice and deployment of methods (Lawson 1995; Mattingly and Falconer-Al-Hindi 1995; Graham 1999). The ethical dilemmas for someone with my privileged positionality of building a career upon recounting the nuanced social detail of Africa's HIV pandemic are legion and concentrate the mind on the possibility of engaging in action research. In this research context it does not seem enough simply to employ (multi-)methods in order to uncover the manifold truths constituting phenomena (see Findlay and Li 1999) if it is only readers who will inspect these data. Another possible manifestation of 'post-structuralism as method' might involve facilitating participants' own reflection on existing knowledges and their production of provisional new ones (see Kesby 1998). The deployment of research techniques that facilitate communication about sexual health at the same time as studying it, would have great ethical value and practical utility in a country like Zimbabwe. Here gender inequality and poor communications between partners is impeding action to reduce the spread of HIV even though individuals' knowledge about the virus is steadily improving (Kesby 2000). In light of this and the other

problematics outlined above, let me begin then with epistemology and methodology rather than methods.<sup>3</sup>

### The action research epistemology of participatory inquiry

When I came upon the technique of participatory diagramming, it was deeply embedded in the epistemological and methodological frameworks of a group of action research approaches (predominantly designed and/or utilized in developing countries) collectively known as Participatory Rural Appraisal (PRA). In terms of the politics of fieldwork, representation and activism, there are sound reasons for retaining this embeddedness. Conventional research projects begin with an externally developed research design, proceed with the extraction of data from 'the field' and their transportation to distant research institutes for lengthy processing by professional scientists, and terminate in the presentation of results in scholarly journals, and occasionally, reports to policy makers. Usually projects produce few positive impacts in the researched communities themselves (see Edwards 1989; Patai 1991; Katz 1994; Goss and Leinback 1996; Hagey 1997). By comparison, PRA's politics of fieldwork is not simply to 'do no harm', nor does it gauge validity only in scientific terms. Rather, a project's success can also be measured by the extent to which the process of research itself develops the skills, knowledge and capacities of participants to use the results *themselves*.

Without this epistemology, participants' collective production and subsequent discussion of visual data in response to research questions, might be seen as an interesting variation on wholly discursive focus group interviewing (see Area 1996). However, when deployed through an action research framework, participatory diagramming approaches make explicit research objectives of the things that practitioners of focus groups report as the positive but minor side effects of detailed qualitative data collection (eg improved communication skills, transgression of discursive and behavioural norms and therapeutic sharing of experiences, see Gibson-Graham 1994; Goss and Leinback 1996; Longhurst 1996). The term 'participant' (rather than 'informant' or 'respondent'), is significant then and signals a particular epistemology: first, participants (often peasant/poor/marginal people) are regarded as 'knowers' and their knowledges and experiences are valorized. Second, researchers temper their own 'expert' status, and

while not dismissing their own specialist skills, do not presume to have a superior perspective. Third, the agency of participants is recognized and encouraged (participants are encouraged to recognize their own agency) and researchers and participants enter into a reciprocal relationship in the research process. The first two positions are similar to feminist standpoint theory and reflexive ethnography and the third has long been advocated by feminists and geographers (eg Oakley 1981; Pile 1991; McDowell 1992; Gilbert 1994). Finally, the external researcher becomes an 'activist' by creating a research environment in which participants can take greater control over the process of investigation and by facilitating their use and innovation of research techniques that enable them to define and analyse their own problems and to seek solutions appropriate to their lived realities (See Maguire 1987; Lather 1991; Reinhartz 1992; Chambers 1994a; 1994b; 1997; Cornwall and Jewkes 1995; Leurs 1996; IDS 1996; 1997a; 1997b; Hagey 1997). This epistemology does not transcend the power-relations of the research process but rather than getting hung up on the politics of representation in text, the focus of PRA is the production of knowledge for action 'in the field'.<sup>4</sup>

### **'Doing' participatory diagramming: the methodology**

In a developing world context diagrams are usually constructed on the ground from locally available materials such as seeds, bottle tops, pebbles, sticks, straw, household objects or representations drawn in the soil. In the developed world, paper and marker pens are more commonly used. Diagrams can incorporate words or be created entirely without written scripts (facilitating the contribution of non-literate people) as long as participants agree on the meanings of the symbols used. The advantage of loose materials is that participants have less inhibitions about changing and adapting the diagram as they go along. In my own work I utilized cards, marker pens and string and my Zimbabwean participants chose to write in English (although I was also assisted by a translator) (Plate 1). The exact nature of the materials used is less important than the fact that participants are familiar with those chosen and are happy to utilize them in any given exercise.

Diagramming is conducted among people who know each other, not simply for convenience of organization or to enable triangulation of responses (see Holbrook 1996; Kong 1998), but to facilitate

post-exercise action among group members. Participants initially work in peer groups (eg a group for widows, one for older married men, another for young unmarried women, etc). These *exclusive* groupings enable participants to share experiences and develop ideas independently of those with different and/or competing positionalities. Within these groups, the visual and tactile nature of diagramming facilitates the contribution of less dominant personalities and helps them to express their 'voice' without necessarily requiring them to 'speak'. Significantly, participants can immediately see the results of the research. The researcher/facilitator can then encourage them to analyse and discuss these *themselves*. Thus participants, not merely researchers, can learn from the results, set new research objectives, adapt methods and, ultimately, attempt to act on the research findings. Given that the communities in which these exercises are conducted are invariably divided, *inclusive* plenary sessions are often instigated so that all participants can be exposed to the diagrams, and thence perspectives, of others. The bold diagrammatic representations produced in earlier sessions help marginal groups to voice their previously muted 'stand point' in ways that can disrupt the smooth reproduction of dominant discourses and practices. Plenaries can then become arenas in which the social re-negotiation of the phenomena under discussion can begin to take place. Thus, not only does the participatory methodology offer a means for reflexive researchers to negotiate self/other power relations, but provides 'others' with a means to do the same between themselves. Such action research can open spaces for the negotiation of meaning 'in the field', not merely in academic text (Kesby 1998).

Once the research project, process and aims have been agreed between researchers and participants, the nature of participatory diagramming explained, and the peer groups identified and convened, the following basic methodology can be pursued regardless of the type of diagram utilized: (i) a specific research question is generated (by the researchers in 'shallow' participatory research, or reciprocally with participants in 'deeper' programmes (see Cornwall and Jewkes 1995; Hagey 1997)); (ii) a diagrammatic tool is nominated and explained to, or invented and developed by, participants; (iii) the 'focus group' discusses possible responses to the question posed; (iv) they co-operate to produce a large diagram that visually represents their response to that question; (v) while participants are engaged in this activity the



**Plate 1** The HIV peer educators group working on a matrix diagram

researchers observe and record group dynamics and facilitate the process if difficulties arise; (vi) once 'completed' the diagram should be photographed and sketched; (vii) the researchers then 'interview the diagram', soliciting detailed explanations of its elements, interrogating its coherence, comparing it to other diagrams or other sources of data and pursuing the conflicts and consensus that arose during its creation; (viii) participants should be encouraged to respond to the facilitator's questions by analysing their own responses and fine-tuning their diagram; (ix) the participants record their final interpretation by transferring their data to a large poster which is their own copy and a resource for use in future group or inter-group sessions; (x) finally, participants and researchers decide what to do with the data generated (for example hold further diagramming sessions to explore particular points, elect delegates to present the data to other groups or influential decision makers and/or act on the data locally).

### **Participatory diagramming techniques in outline**

An abundance of diagram types exist and many are described in detail in the study packs available from the Institute of Development Studies at the University of Sussex (eg IDS 1996; 1997a; 1997b).

These manuals however, are only guides. One of the great attractions of diagramming is that it is wide open to context and topic specific innovations by researchers and participants alike. Many of the techniques will be familiar to geographers except that in this case it is participants themselves that generate the maps and transects that plot various social and/or physical aspects of their communities.<sup>5</sup> These diagrams can represent historical, contemporary or predicted future patterns ('Body mapping' is one exciting adaptation, see Cornwall 1992). Similarly, daily schedules and various types of time lines can be used to plot a wide range of activities or experiences and changes over time (and space). Geographers often use proportional diagrams such as pie charts and Venn diagrams in their own analysis, but these can also be used in the field to enable participants to express relative (rather than absolute) measurement of given phenomena. Less familiar are techniques such as wealth and well-being ranking by 'card sorting' through which participants generate both locally relevant criteria of socio-economic status and detailed quantitative data as they sort named families into these categories. Techniques can be used in sequence so that data and discussion from one leads naturally into another. Furthermore, participants and researchers can triangulate results by comparing: (i) the results of different group using the same diagrams, (ii) the results of a single group using

a range of diagrams and/or (iii) participatory diagrams with other types of data such as aerial photography, historical maps, censuses or social surveys.

### My pilot of diagramming techniques

The in-depth interviews and other qualitative methods I had utilized in my PhD research provided me with an empirically detailed understanding of the gendered geographies of rural Zimbabwe (see Kesby 1994; 1996; 1999) but left me with some troubling ethical questions about future research directions. As academically interesting as my previous work may have been, I felt drawn to instigate future projects that would tackle themes, and do so in ways, that were of more practical relevance to the people I studied. It was this ethical crisis that simultaneously drew me to the issue of HIV and the methodologies of PRA. Thus in January 1998 I conducted a pilot study that explored the possibility of using 'participatory' methods and visual diagramming as a means to facilitate communication about issues of sexual health in Zimbabwe's gender divided rural communities where approximately 25 per cent of the sexually active population are HIV positive .

Specifically, I aimed to test whether: (i) results generated using diagramming would not only compare favourably with data collected using more conventional methods but would add new dimensions to it, (ii) rural women would be comfortable using the techniques and be prepared to use them to describe and discuss their sex lives, and (iii) whether the women would identify them as a useful means to improve communication about sexual issues at the domestic and community scales? Sampling was purposive: two groups of ten women were recruited by 'snow balling' from a key informant. One group consisted of members of an HIV peer education project connected to the NGO with whom I was collaborating, the other, in a community in which I had previously worked, comprised 'ordinary villagers' linked by bonds of kinship, friendship and mutual help. The location, background and results of the pilot are reported in detail elsewhere (Kesby 2000), and I will concentrate here on the techniques utilized. Before doing so, I should point out that my pilot was by no means an exemplification of the epistemology and methodology discussed above. My deployment of participatory diagramming was still very much within a conventional 'extractive' research methodology; I set and controlled the parameters, analysis by participants was underdevel-

oped, and although meetings took place over several days, the exercise was effectively a short lived one-off event. This then was 'shallow' participatory research (see Cornwall and Jewkes 1995; Hagey 1997).

There were other weaknesses in the research design. The two all-female focus groups were rather undifferentiated and included women of different ages, marital status and wealth. Furthermore, time constraints caused me to work only with women; my assumption being that women had most to gain from utilizing the technique. Subsequently, I realized that precisely because of existing gender division of sexual decision making, a crucial question is whether *men* are willing to utilize these methods to analyse their behaviour around HIV. Nevertheless, my research generated some fascinating provisional results that set challenges for future work.

### Participatory diagramming techniques in practice

My own experience of using participatory diagramming revolves mainly around two diagram techniques which I will now discuss in more detail.

#### *Matrixes, ranking and scoring*

At first sight matrixes appear to be rather abstract scientific devices. In fact they can provide a very simple and effective means for ordinary people to prioritize, compare, score and subsequently discuss, phenomena relevant to their everyday lives (see Table 1).<sup>6</sup> In response to a research question, such as 'what are the most serious health problems in this area', participants first discuss and generate a list of elements (in this case ailments) they consider important in answering the question, then place them on one axis of a matrix. Second, participants generate a list of criteria against which these elements can be judged, listing them on the remaining axis. Third, either the elements or (as in Table 1), the criteria are ranked. This task can be achieved either through discussion or systematically through 'pairwise ranking'. In the case discussed here this latter process involved placing the 'criteria for judging disease' on both the x and y axis of a separate matrix and then asking participants to compare each criteria with all the others eg; "which is worse, 'pain' or 'isolation', 'pain' or 'inability to work' . . . 'isolation' or 'inability to work' . . . ?" etc By counting the number of occurrences of each criteria within the second matrix

**Table 1 The HIV peer educators' free scored disease ranking matrix**

Criteria for judging disease	Total score allocated to each criteria	Disease				
		HIV	Malaria	TB	AIDS	Herpes
It pains	13	0	3	1	8	1
It isolates you	7	0	0	1	5	1
You can't work	4	0	1	1	1	1
Relatives hate you	3	0	0	1	1	1
It's shameful	3	0	0	1	1	1
It kills	1	0	0	0	1	0
	Total score for disease	0	4	5	17	5

Source: Kesby 2000, reproduced with kind permission, © Elsevier Science Ltd.

participants were able to rank the criteria on their original matrix in order of importance. The fourth step is to devise a system of scoring: (i) in 'free scoring' each criteria (or element) is given a number commensurate with its perceived importance, (ii) if 'closed scoring' is used, criteria can be given an arithmetic score according to their rank, or alternatively, a maximum score can be set for any one cell in the matrix (eg 10), or for the matrix as a whole (eg 100). In the case shown here, participants chose to 'free score' their matrix and produced a scale that gave much greater weight to some criteria (eg pain) than others (eg death). The fifth step involves participants distributing the scores across the grid while the sixth step, as in any diagramming exercise, requires the researcher to 'interview the diagram', and participants to analyse and fine-tune their own responses.

The matrix of health concerns (eg Table 1) and the subsequent discussion, identified a number of important and related issues. First, while AIDS emerged as a priority in the matrix, earlier discussions had identified TB as the worst health problem in the area. Through debate about this disjuncture, participants were able to identify that a veil of silence usually surrounds the discussion of HIV and AIDS in both public and private such that people will name the diseases manifested in AIDS related illness but not mention AIDS itself. Second, in a context where religious belief is robust but economic survival is fragile, participants emphasized impacts on the living/labouring/social body, rather than an illness' potential to result in fatality. As a consequence, participants' 'health concern' scores indicated a clear division between HIV, which is deadly but dormant in the body, and AIDS which actively impairs the

body. In a fully developed action research programme facilitators could ask participants whether local conceptions of illness mean that HIV is not taken sufficiently seriously given its intimate link with AIDS. Facilitators would however, also need to consider whether their exclusive HIV/AIDS focus sufficiently reflected the concerns of participants in this context of multiple chronic health problems and endemic poverty.

I also used a matrix diagram to explore the gendered nature of decision making in the context of *mutually negotiated sex* (Plate 2). Participants generated a list of decisions and ranked and 'free scored' them. These elements were judged according to two (two-part) criteria (eg one: 'who makes the decision, men or women?' two: 'who sees that it is carried out, men or women?'). Each element's score was initially distributed under the first two-part criteria, then the same scores were used to repeat the exercise under the second criteria. This diagram, and subsequent discussion, raised several important empirical and methodological issues. First, in their hierarchy of important decisions, women did not attribute the highest scores to factors that have a direct bearing on HIV transmission (eg condom use and conception). Second, the matrix included hypothetical elements (such as the use of female condoms), as well as substantive ones. Third, the exercise highlighted the importance of careful post-diagramming analysis. At first glance, the column totals suggested that men and women have similar sexual decision making power, however if the hypothetical elements and those not implicated in the transmission of HIV (eg hygiene, pleasure, non-barrier contraception) are removed, men's dominance over the decisions pertinent to HIV transmission (eg initiation of sex,

condom use and conception) is clear. Finally, when triangulated with subsequent diagrams (see below), mutually negotiated sex was shown to be less predominant than coercion in the sexual act, further reducing women's ability to make decisions about safe sex.

### *Network and flow diagrams*

Again, properly explained and introduced, the seemingly formal academic instrument of the flow diagram, can provide participants with an effective means of exploring and expressing interconnections between a range of related phenomena. Diagrams can be either: (i) 'free flow', giving participants scope to connect elements as they see fit, or (ii) structured, dividing strategies from their effects (eg 'tree diagrams'), or identifying goals and factors that will help or hinder participants achieving them (eg 'force field diagrams'). Elements can be scored to indicate their relative importance or frequency and connected in a variety of ways to indicate their interrelation.

In my research, flow diagrams proved an extremely useful research tool. Early 'free flow diagrams' indicated that participants (even the 'ordinary women') had a fairly good understanding of the mechanics of HIV transmission and related, contextually specific, socio-medical phenomena (such as poverty, high rates of sexually transmitted disease and frequent unprotected sex with multiple partners). Subsequent 'free flow diagrams' (Plate 3) further elaborated the impact of unequal gender relations on the transmission of HIV in this context. Through their diagrams and comments, participants suggested that coercion in the sexual act was extremely common within marriage. This negated both the discussion of risk due to extramarital sexual activity and the negotiation of safe sexual practice. Coercion was also said to result in dissatisfaction and infidelity by both partners. A further 'tree diagram' (Figure 1) expressed the existing strategies that participants employed in their attempts to change their husbands' sexual behaviour. These, often traditional, strategies were rather passive and indirect and their success rate was somewhat limited.

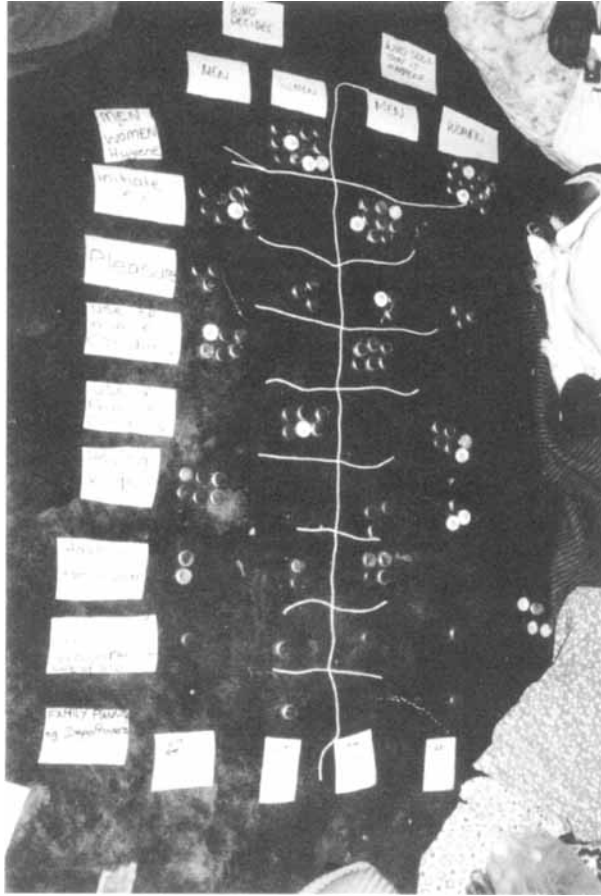
While rather provisional, the data generated by my pilot points to some important conclusions for both research and action in this context: (i) the present focus on levels of knowledge about HIV and the tendency of research and intervention programmes to target women (by design or default), fails to address both the key issues and agents of sexual decision making, (ii) gender relations and communi-

cation around sex are a vital area for research and intervention, (iii) if participatory diagrams are deployed through an action research framework, and if they mobilize both women and men, then they hold the potential not only to augment data generated by more established methodologies, but also help participants tackle the central issue of poor communication themselves. Subsequent to my pilot the NGO ActionAid and local Zimbabwean partners began a fully participatory HIV education programme called 'Stepping Stones' that uses both diagramming and dramatization as a means to facilitate public and couple communication about sex and HIV. Collaborative fieldwork to be conducted in the summer of 2001 will seek to explore and evaluate the efficacy of these approaches in the communities in which they are running.

### **The experience of participatory diagramming**

The 'sensitive attitudes and behaviours' crucial to successful PRA type work (Chambers 1994a; 1994b; 1997) were not really new to me, given my previous experience of in-depth interviewing (Kesby 1994). The discovery that participants could 'do [so] much of the research work themselves' was however. Participants proved to be perfectly capable of constructing the diagrams with only occasional interventions from me. This was despite my disregard of the manuals' advice and my immediate use of 'more complicated' diagrams. Where difficulties arose they were usually down to my own insufficient preparation or poor explanation of the techniques.

I have always enjoyed qualitative interviewing and my respondents have sometimes reported that they found the experience therapeutic. Moreover, despite my (white, male, middle class, European, etc) positionality I have, in the past, found it possible to discuss quite sensitive gender issues with African women by building up trust through repeated in-depth interviews.<sup>7</sup> The experience of diagramming, even at the shallow level of participation possible in my pilot, was remarkable by comparison. Despite the gravity of the topics under discussion, the afternoons and evenings we spent diagramming on the floors of clinics and private homes were very social occasions, punctuated by loud voices, laughter and sometimes (after refreshments provided courtesy of my research grant), singing. What was striking about diagramming was the ease, speed and depth with which even very sensitive topics could be



**Plate 2** The ‘ordinary villagers’ free scored matrix of gendered decision making in the context of mutually negotiated sex

addressed. The ‘back-seat’ position I adopted after introducing each research question and technique, together with the tactile and physically engaging nature of the exercises seems to have been key to this (indeed participants became so absorbed that it was sometimes difficult for me to break in to clarify developments). Moreover, once the diagrams were complete and sensitive issues were already (*visibly*) out in the open, it became much easier for me to pursue them and for participants to discuss them.

Notwithstanding this, like most qualitative research, participatory diagramming is no ‘easy option’. First, while the technique is little different to other approaches in that the data it generates is not transparent but must be carefully interpreted within a culturally specific context, this is particularly intellectually demanding (and stimulating) where so much

more analysis takes place face-to-face with participants in the field. Second, considerable forward planning is required to ensure that sessions ‘run smoothly’ and even then sessions will always be relatively lengthy and demanding. My own experience was particularly strenuous because limited resources necessitated that, bar translation, I undertook all the research roles simultaneously (ie observer, facilitator, interviewer, data recorder and ‘anti-saboteur’—for example, distracting disruptive toddlers). These jobs would be better shared. Finally, in a longer, more fully participatory action research project researchers/facilitators would have additional preparations to make and roles to play as they worked with a number of different peer groups, facilitated whole community plenaries and began, with participants, to address the issue of action, not



merely data collection, directly. Moreover, it is only in such programmes that the moments of enjoyment experienced by participants might be translated into sustainable empowerment in the spaces of their everyday lives (Kesby 1998).

### The scientific validity of participatory diagramming

While I have stressed the epistemological framework that might guide deployment of these techniques, their 'scientific validity' should also be emphasized, not least because few geographers embedded in an audit-oriented academy will feel able to adopt action research approaches unless they also generate publishable outputs. While there is insufficient space here to engage with all the arguments, I think participatory diagramming could satisfy many of the evaluative criteria proposed in recent debates about the need for quality audits on qualitative methods (eg Baxter and Eyles 1997; 1999a; 1999b; Bailey *et al* 1999).<sup>8</sup>

First, participatory diagramming is well placed to provide a full and open audit of the 'natural history' of a research project because *process* (the level and quality of participant contribution) is central to its concerns and therefore should be meticulously recorded. Second, diagramming can also produce 'credible accounts' that actors themselves can recognize because triangulation and 'member checking' (at both low and high analytical levels), are built in. Participants do not simply provide individual/primary data for researchers to interpret, they are actively involved in the generation of group/secondary level data and categories (although 'group views' must be problematized—see Kesby 1998). Subsequently, participants are asked to analyse and refine these data and to triangulate them with earlier diagrams. In larger projects, participants are confronted with the categories and representations of other peer groups and are invited to synthesize and/or identify the dissidence between them. Throughout this process participants are greatly assisted by the immediate availability and visual nature of the field results and by having their own copy of them. Therefore, the final textual account incorporates participants' analysis, recognizes the multiplicity of accounts and builds a narrative 'between' the perspectives of participants and those of researchers. This is a form of positioned and reflexive objectivity increasingly favoured by feminists (Amadiume 1993; Katz 1994; McLafferty 1995; Moss 1995; Townsend 1995). Scientific rigour

aside however, it seems to me that the greatest potential of the approach is its ability to facilitate *in practice* participants' own deconstruction/reconstruction of the categories and meanings that structure their lives.

### Conclusions

I would like to join a growing group of geographers in calling for a 'turn to praxis' at the millennium and offer this discussion as a contribution to the debate about how the condition of 'within and betweenness' might practically be achieved (see Routledge 1996; 1997; Chouinard 1997; 2000; Area 1999; Kitchin and Hubbard 1999; Kitchin 1999). The problem for those wishing to make such a 'turn from within' is how to become actively engaged with the phenomena they study while at the same time meeting the criteria which their embeddedness in an audit-oriented academy dictates. Participatory diagramming offers the possibility of appeasing these two conflicting goals. Not only does it generate rich, nuanced data and 'RAE worthy' outputs, but, if deployed through an action research epistemology, it can also open spaces in which researchers can facilitate participants' own reflection and action in the fieldwork arena itself. Moreover, given that, as Castree (1999) suggests, success 'out there' will depend in part on engagement 'in here', perhaps participatory diagramming, within self-reflexive departmental action research projects, might even be one way for geographers to address/analyse and begin to transgress/reconstruct the parameters of their own situatedness within the audit-oriented academy.

Participatory diagramming is certainly not the only means to praxis, nor, as recent debates on feminists' deployment of quantitative methods illustrates (*Professional Geographer* 1995), is it the only 'method' that can facilitate political engagement. Certainly the approach is not unproblematic. While participation holds the potential to radically alter the politics of fieldwork it does not dissolve all power relations between researcher and researched, nor is it free from ethical dilemmas. Indeed, many difficult issues arise and will be the subject of a forthcoming paper (see Kesby 1998). There is clearly a need to engage theoretically with participatory approaches as well as experimenting with them practically for as Halfacree suggests, '[action] doesn't work unless you think about it' (1999, 209). Nevertheless the challenge is to ensure that this necessary intellectual work

complements, rather than substitutes for engagement in praxis (Katz 1994; Halfacree 1999).

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### Notes

- 1 In brief (because they are discussed fully in the text), these techniques involve participants responding to research questions by co-operatively generating matrixes, flow diagrams and sketch maps (similar to those commonly used by researchers themselves) which they are then invited to discuss and analyse in conjunction with the researcher. Diagramming thus generates both visual and discursive qualitative data.
- 2 Graham's (1999) claim is itself epistemological, but is more robust than any claim that methods have a value in the production of knowledge independent of 'theoretical bias'.
- 3 Just for clarity: *method* = technique for gathering evidence, *methodology* = a theory of how research should proceed and *epistemology* = a theory of knowledge defining its source, limits and criteria for evaluation, and the strategies used to justify these claims (Harding, 1986).
- 4 While it is dangerous to imply a text-field binary, since we are always 'in the field' (Katz, 1994), the delineation is a useful one if it concentrates researchers minds on praxis, ethics and the possibilities of producing knowledge that is not only of benefit to the researcher.
- 5 Thus Binns *et al's* (1997, p. 5) assertion that 'geographers were doing PRA long before it became fashionable' is based only on a similarity of *techniques* not any tradition of participatory *methodology* or *epistemology* in geography.
- 6 In this paper I have included both photographs of the original diagrams and formalized reproductions in order to give readers a sense both of their appearance in the field and an idea of how they might appear in formal academic publications.
- 7 The building of trust between research and researched is a complex phenomena highly influenced by 'approach'

and personality and cannot be calculate simply from an assessment of both parties 'positionality' (Mercy Dikito-Wachtmeister, personal communication 9 September 1999)

- 8 I am thinking here more about what could be achieved and do not propose my own very provisional pilot as any kind of model.

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