



“Can we agree on that”? Plurality, power and language in participatory research



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ARTICLE INFO

Keywords:

Participatory epidemiology
Participation
Translation
Interpreter
Public sphere
Consensus

ABSTRACT

Participatory epidemiology (PE) is a method that gathers data from groups through focus group interviews and participatory visual and scoring exercises. The method is often used in poor communities in low-income countries where it is hard to obtain conventional epidemiological data. This paper draws on research on the public sphere and democratic deliberation, along with research on language and interpretation, to suggest how PE research could be better equipped to account for diversity in local knowledge, include minority views and acknowledge power dynamics. These aspects are discussed under the three themes of ‘plurality’, ‘power’ and ‘language’. A review of highly-cited PE literature suggests that PE research engages with plurality and power to a very limited extent, and only marginally more so with language and translation. Examples are taken from the authors’ own PE research on African swine fever in —Uganda, classical swine fever in Germany, peste des petits ruminants (PPR) in Eastern Europe, and Ugandan pastoralists’ understanding of cattle disease to provide more detail as to why conventional PE studies might fail to record issues of plurality, power and language, and also to suggest how this can be addressed. With reference to the literature on the public sphere and democratic deliberation, and on language and interpretation, this paper concludes with some suggestions as to how to take plurality, power and language into greater consideration in PE studies in future, thus improving the validity and reliability of PE data.

1. Introduction

Participatory epidemiology (PE) is based on the assumption that people are knowledgeable about issues that are important to them, such as diseases affecting their animals (Mariner and Paskin, 2000; Dunkle et al., 2013). Thus, by collecting data through engaging with local communities, results can be obtained that are both more valid (in the sense of being closer to the local reality) and of greater local relevance than by using structured questionnaires for example (Chambers, 1994; Fischer et al., 2016). The methods that have developed as the core of PE can be grouped into semi-structured interviews, visualisation tools, and ranking and scoring tools (Etter et al., 2006; Jost et al., 2007; Dunkle et al., 2013). Central to PE is triangulation, drawing on multiple methods and sources, allowing people to confirm or refute what is being said in group discussions (Mariner and Paskin, 2000; Dunkle et al., 2013). Many of the tools employed are designed to achieve one consensual answer from the group as a whole (Dunkle et al., 2013).

Despite the centrality of groups in PE and in other participatory

research, there has been relatively little discussion in the literature as to how to compose groups or deal with group dynamics. Mention is sometimes made that it is important to have a ‘skilled’ or ‘trained’ facilitator to ensure everyone in a group speaks and to construct gender-homogenous groups for this purpose (Bedelian et al., 2007; Catley et al., 2012). Beyond that, little detail is generally provided on how to deal with the fact that people within a community are different (referred to in short in this paper as ‘plurality’), which means that attention also needs to be paid to different forms and expressions of power (within communities, and between researchers and the studied communities) (Chenais and Fischer, 2018). Likewise, mention is frequently made that names for diseases or syndromes should be collected using local terminology (Rufael et al., 2008; Catley et al., 2012), but a more in-depth theoretical or methodological interrogation of how to deal with language when performing research in cross-cultural and multi-linguistic situations is largely absent in key PE literature (Mariner and Roeder, 2003; Bedelian et al., 2007; Barasa et al., 2008; Rufael et al., 2008; Catley et al., 2012).

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<https://doi.org/10.1016/j.prevetmed.2020.104991>

Received 23 October 2019; Received in revised form 3 March 2020; Accepted 3 April 2020

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This paper aims to suggest ways of deepening the engagement in PE with the three interlinked aspects of plurality, power and language by drawing on insights from the field of deliberative democracy and the public sphere (Fraser, 1990; Habermas, 1991; Arendt, 1998; Hagendijk and Irwin, 2006) and on literature that critically reflects on the role of languages and translation in fieldwork (Borchgrevink, 2003). The twenty most cited texts on PE in the Web of Science were reviewed and the authors' own fieldwork experiences drawn on to discuss how plurality, power and language are given consideration in PE. A discussion then follows about how PE studies might engage methodologically with these aspects to a greater extent in future studies.

1.1. Theoretical framework – the ideal PE situation

This section starts with a description of the key tenets of participatory methodology in the tradition developed by Chambers et al. in the 1990s, commonly referred to as participatory rural appraisal (PRA) (Chambers, 1992; 1994; 1997), and pinpoints some of the basic assumptions and practical developments in PRA and PE. There is then an introduction of the authors' thinking on what theorising on the public sphere, public deliberation and language can do to assist in the development of a version of PE that more effectively represents the local diverse reality being studied.

1.1.1. A critique of key tenets of participatory research

Groups are central to participatory methodology (Chambers, 1994; Mariner and Paskin, 2000; Dunkle et al., 2013). The advantages put forward for organising data collection in the form of group activity are that it is quicker than carrying out numerous individual interviews or surveys, and that the group dynamic allows on-site triangulation where people in the group can confirm or refute each others' statements (Chambers, 1992; Mariner and Paskin, 2000). For such triangulation to work, the group must be sufficiently homogenous so that everyone feels comfortable expressing their views and that there is one response that is agreeable for the whole group. While it is acknowledged as good practice to conduct separate focus group discussions (FGDs) e.g. based on gender to capture women's perspectives and ensure they also feel they are free to speak (Catley et al., 2012), other dimensions of social stratification are addressed more rarely. Researchers in both PRA and PE studies often spend limited time in the community, restricting full understanding of the dimensions of social structure. Thus, groups that appear relatively homogenous on the surface might not actually be that homogenous (Chambers, 1992; Mariner and Paskin, 2000), while group activities that focus on reaching one consensual answer might actually marginalise weaker and non-dominant perspectives (Campbell, 2002; Chenais and Fischer, 2018). Many of the tools used in PE are designed to result in one (often semi-quantitative or quantitative) answer per question per group (Catley et al., 2012). Historically, it has been argued that this is one of the strengths of the veterinary adoption of PE because it enables statistical analysis (Mariner et al., 2003; Bett et al., 2009). Handling semi-quantitative or quantitative data at group level, however, does not allow diverging opinions within the groups to be taken into account. If the intention is to understand how certain animal diseases or prevention and control measures might contribute to poverty reduction, for example, it is important to ensure that the voices of the poorest or most marginalised are also heard (Chenais and Fischer, 2018). This means that attention needs to be paid to social stratification beyond gender, allowing it to influence how groups are composed and ensuring that different people within the groups are heard. The above is referred to in this paper as aspects of plurality. In this regard it is important to point out that the establishment of majority perspectives is not always negative. Depending on the research question and objective of the study, understanding how most people, or the dominant group in a society, perceive or act in relation to a certain issue might be adequate. An excellent example of this is how drawing on pastoralist intelligence on animal disease through PE tools turned out to be key to

eradicating rinderpest (Mariner et al., 2012).

Early critiques of participatory research concerned the assumption that this would be a quick way of gathering data (Richards, 1995). Spending short periods in the field has been criticised for leading to insufficient understanding of the local social and cultural system, i.e. how people comprehend their world and relate to each other (Richards, 1995). A lack of understanding of the social context might lead to a failure to acknowledge local dimensions of power that affect the information given, as discussed above, and to misunderstandings and misinterpretations of the data. Time constraints have nevertheless remained a key motivation for many PRA and PE studies in practice (Bett et al., 2009; Grace et al., 2009; Goutard et al., 2015; Kimaro et al., 2017). Central to participatory methodology is also striving to 'hand over the stick' (Chambers, 1994, pp. 1254). This metaphor refers to the importance of listening to local people on their terms, facilitated through the use of tools with which local people feel comfortable, for example tools that do not require competence in reading and writing and are not pre-designed into categories assumed by external and powerful scientists and development workers (Chambers, 1992). The idea of 'handing over the stick' can partly be seen as a strategy to overcome the shortage of time. If the scientist or development worker truly takes a step back and lets local people lead data collection and organise findings in ways that make sense to them, this might improve access to local ways of knowing and acting. However, despite the idea of 'handing over the stick', in practice both PRA (Richards, 1995) and perhaps even more so PE (Chenais and Fischer, 2018) have become standardised into the use of particular techniques and tools that are sometimes even settled on beforehand, and box participants' answers into categories that make sense for science and are easy to publish (Chenais et al., 2017). Such PRA and PE work is likely to miss out on important local perspectives. It has been shown elsewhere how for PE this might lead to scientists failing to discover new diseases, for example, or to veterinary advice being given in such a way that it is completely incomprehensible to local animal owners or impossible for them to implement (Chenais and Fischer, 2018).

Related to this, the majority of PRA and PE work is performed in contexts that require an interpreter. While the role of interpreters remains practically invisible in key texts on PRA (e.g. Chambers, 1992; Pretty et al., 1995), in PE it is often emphasised that it is important in collecting information on diseases and syndromes in local terminology (Rufael et al., 2008; Catley et al., 2012). However, more in-depth discussion about the purpose of this, how to embrace other ways of understanding the world than those of the researcher or research team, or the relationship between language and power etc., is rare (Mariner and Roeder, 2003; Bedelian et al., 2007; Barasa et al., 2008; Rufael et al., 2008; Catley et al., 2012). As this paper will show, conducting PE and PRA studies with the help of an interpreter requires thorough theoretical and methodological interrogation to ensure good-quality data collection.

Considering the above key critiques of participatory research relating to plurality, power and language, these aspects might be better understood and their wider importance acknowledged by looking at academic debates about power and representation within the field of the public sphere and public deliberation. Curiously, as with the lack of discussion on language in the development and critique of PRA and PE, this debate has also been absent from the field of public deliberation (Triadafilopoulos, 1999). Given suggestions that thinking about language is essential for the development of better PE studies, there is an exploration of the limited published research that critically and constructively reflects on the use of interpreters in the field and the ensuing challenges.

1.1.2. A focus group as the public sphere

The 'public sphere' can be understood as the physical place and social situation in which people are able to speak freely on public matters (Fraser, 1990; Habermas, 1991; Dikeç, 2013). Adopting this

definition, a well-designed group activity in PRA or PE should function like a ‘public sphere’. Jürgen Habermas is one of the key thinkers on the public sphere. For him, it is characterised as an unrestricted rational discussion in which everyone is free to take part and where inequalities and social status should be temporarily bracketed to give everyone’s voice equal weight (Fraser, 1990; Habermas, 1991). Thus, in the public sphere, discussion should be free of any power differentials. Habermas’ idea of a public sphere is also based on the notion that the free deliberation of public matters will enable a resulting consensus about what the correct action on a certain issue would be (Canovan, 1983). The possibility of reaching consensus, or even the appropriateness of striving for it, has been questioned by scholars such as Fraser (1990) and Mouffe (2011), who point out that the consensus imagined by Habermas was only possible because the situation he studied was not in fact a situation of broad societal inclusion. Habermas’ development of the theory of a public sphere was based on the specific historical context of coffee houses in the Ottoman empire, which did not admit women or the working class, for example. In effect this was consensus through exclusion.

1.1.3. Consensus versus conflict and plurality

Fraser (1990) has suggested that Habermas’ idea that differences can be left behind to achieve an inclusive discussion actually serves to hide inequality. In the same vein, Arendt (1998) emphasises that plurality, i.e. that we are all different, is an essential part of what it is to be human. Therefore the starting point for any theory on public deliberation must be to embrace these differences (Arendt, 1998). If the starting point is that we are different and have unequal possibilities, some guiding principles are required to enable discussions in which everyone is heard and where consensus through exclusion can be avoided. Drawing on theories on democracy and public deliberation, these guiding principles might be to have humility and accept that we are not always right, to listen to one other, to make ourselves understood, and to let everyone speak (Arendt, 1998; Roberts-Miller, 2005). As such, the guiding principles for a functional political dialogue in the public sphere are essentially the same as those advisable for a good FGD.

Other scholars, who like Arendt criticise the idea of consensus as the final outcome of successful deliberation, are less hopeful of a fruitful discussion being possible in a plural society (Fraser, 1990; Mouffe, 2011). Mouffe emphasises that democracy is about conflict. She advocates for a “*conflictual consensus*” (Mouffe, 2011, pp. 121) where participants in a democracy need not agree on the issues debated, but must agree on the format in which this is done. This is similar to the general guiding principles discussed above. Fraser (1990), who like Mouffe sees conflict as inherent in society, suggests that a solution to a more inclusive society, which has also been repeatedly observed empirically, is the development of what she refers to as ‘counter publics’. By this she means sub-groups within society that develop their own arenas in which they can deliberate together about “*their needs, objectives, and strategies*” and in doing so become better equipped at “*articulat[ing] and defend[ing] their interests in the comprehensive public sphere*” (Fraser, 1990, pp. 66). To facilitate this, Fraser (1990, pp. 64) says that it is important to “unbracket inequalities in the sense of explicitly thematising them”. If this suggestion does have a bearing on PRA and PE work, it emphasises the importance of trying to identify how the local communities studied are stratified (beyond gender) and then organising separate FGDs based on these stratifications.

1.1.4. Language and different ways of knowing the world

Much of what has been touched on in the above two sections relates to how people speak to one other, which warrants an engagement with language. Language shapes, and is shaped by, the cultural and ecological context, and different languages “*carve up reality in different ways*” (Borchgrevink, 2003, pp. 106). Language is also a factor that affects power dynamics in a group (Fraser, 1990). Despite this, social sciences

have largely shied away from talking about the role of language and the need for translation in cross-cultural and multi-linguistic research situations (Skjelsbæk, 2016; Gibb and Danero Iglesias, 2017). This is even the case in anthropology, where fieldwork in far-off countries and cultures is a key part of the discipline (Borchgrevink, 2003). A few studies are explored that have discussed the lack of reflection on language and interpretation in these disciplines and attempted to provide practical guidance based on experience (Borchgrevink, 2003; Bujra, 2006; Berreman, 2012; Gibb and Danero Iglesias, 2017).

Language can be used (intentionally or otherwise) to exclude particular groups of people from the public sphere if the language spoken is not accessible to everyone or if particular ways of phrasing and categorising issues are seen as more profound and simply ‘better’ than others (Fraser, 1990). In FGDs, this exclusion works in at least two ways. First, it can affect the dynamic within an insufficiently homogenous group, where those who are more articulate or have access to higher-status language might be heard in preference to others, possibly forging false consensus. The higher status that comes with the use of scientific language, for example, is shown to frequently obstruct full inclusion by non-scientists in public deliberation (e.g. Cook et al., 2004; Hagendijk and Irwin, 2006). Second, it is likely that, without reflection, research teams favour the more articulate or better-educated group members simply because the way they talk is more similar to that of the research team. An important way of countering this tendency is through the selection of facilitators and interpreters. It has been emphasised that the choice of an external expert as an interpreter or facilitator can lead to the reinforcement of the power relationship between the researcher and the interviewee, and more limited possibilities for the creation of a trusting and open environment in which local people will speak freely (Borchgrevink, 2003; Bujra, 2006). Even when selecting local interpreters, an interpreter’s caste, ethnicity, gender or social status can have important effects on how willing different people in a community are to speak to the researcher and what information is being accessed (Borchgrevink, 2003). Skjelsbæk (2016), interviewing rape victims, describes how paying attention to gender, ethnicity and personal characteristics was central in her selection of interpreters to ensure that they would be able to build trust, sensitivity and compassion. She also explains that at times the interpreters found the victims’ stories so emotionally upsetting that they (consciously or not) used other words, for example, such as ‘the event’ or ‘it’ when the interviewee had said ‘rape’ (which the researcher noted due to being familiar with some key words in the local language of relevance to her research topic). This example thus also points out the value of the researcher understanding key terms in local languages, even when relying on an interpreter. Berreman (2012) describes how the high-caste interpreter with whom he initially worked in India concealed practices that were deemed to show his culture in a less favourable light. This was only revealed when teaming up later with a low-caste interpreter, which gave him a more comprehensive understanding of the social organisation and conflicts than when working with the first interpreter alone (Berreman, 2012).

As indicated by the above, language is intertwined with culture and society, and therefore translation in cross-cultural contexts is much more than merely converting words from one language into another. Frequently there is not a 1:1 relationship between words in different languages. For example, Philipps (1960; in Borchgrevink, 2003, pp. 111) describes how over time he understood that there were six different Thai words to describe different ways of being angry, but that initially his interpreter only interpreted all these different words to him as ‘angry’, for want of other words. There is a balance (and to some extent a trade-off) between providing a literal translation and one that best conveys the meaning of what is said. As indicated by the above, in cross-cultural contexts it is often more useful to have a less literal and more meaningful translation (Borchgrevink, 2003; Bujra, 2006). This can be done by complementing the translation with explanations, e.g. by showing practically or using metaphors. Indeed, this is also what ‘handing over the stick’ and communicating with people on their own

terms, e.g. through the visual aids, charts etc. often used in participatory research and PE, is all about. Several researchers have suggested that in order to achieve this aim, it is better to choose an interpreter “whose background and social positioning vis-à-vis the given field setting will be compatible with that of the interviewee” (Skjelsbæk, 2016, pp. 514) rather than an external expert (which might be better language-wise). In conclusion, choosing interpreters with an understanding of the local context, and to whom people are willing to open up, and aiming to understand the local context and meaning of what is said rather than literal translations are key to good-quality research in cross-cultural and linguistic contexts.

2. Materials and methods

To obtain an overview of how plurality, power and language are addressed in PE literature, a search of the abstract, title and key words in publications in English was undertaken for the term “participatory epidemiology” in the Web of Science database on 21 February 2020. The search produced 182 hits. Of these, 24 references were manually excluded due to meeting least one of the following criteria: duplicate reference (one reference); not written in English language (one reference); did clearly not concern veterinary epidemiology or animal health based on reading abstract (22 references). Appendix A lists all 182 references indicating excluded references. Of the 158 remaining hits, the top 20 cited publications were analysed as an indicator of the norm for how PE studies should be performed (Mariner and Roeder, 2003; Catley et al., 2004; Mariner et al., 2005; Catley, 2006; Etter et al., 2006; Bedelian et al., 2007; Jost et al., 2007; Barasa et al., 2008; Rufael et al., 2008; Bett et al., 2009; Leo et al., 2011; Mariner et al., 2011; Rich and Perry, 2011; Catley et al., 2012; Mariner et al., 2012; Marcotty et al., 2013; Roeder et al., 2013; Coffin et al., 2015; Brugere et al., 2017; Chenais et al., 2017). These twenty publications were published between 2003 and 2017, and each was cited between 42 and 93 times¹. In total there were 106 different authors to these 20 papers, of which most only occur once. Eight authors occur more than once in the author lists and three authors stand out: Jeff Mariner with seven authorships, Andrew Catley with six authorships and Peter L. Roeder authoring five of the papers. The twenty publications were read in detail and all the parts of the text that addressed themes relating to plurality, power and language were noted.

The scientific publishing format rarely allows space to elaborate on the problems encountered during the research process, and negative results are usually difficult to publish. Therefore, after reviewing the twenty highly cited PE publications, some examples from the authors’ own research experiences in terms of failures to take plurality, power and language sufficiently into account are given, with reflections on why that was the case. This section aims to enrich understanding of why aspects of plurality, power and language are still addressed to such a limited extent in PE research.

3. Results

3.1. How do key texts in PE address plurality, power and language?

3.1.1. Plurality

Starting with the aspect of plurality (i.e. the fact that all people are different, with different preferences and opportunities), only five of twenty publications mentioned some aspect of this (Bedelian et al., 2007; Bett et al., 2009; Rich and Perry, 2011; Catley et al., 2012; Coffin et al., 2015). Rich and Perry (2011, pp. 135) state that “the response of different stakeholders to the disease will be contextualized in their unique circumstance and constraints”, but they do not elaborate on what this

might mean more specifically or how to address it methodologically. Three of the publications (Bett et al., 2009; Catley et al., 2012; Coffin et al., 2015) mention the importance of, and/or state that they in part or fully, performed gender-homogenous groups but do not elaborate further on the reasons for this, or other aspects of plurality. The study by Bedelian et al. (2007) stands out among the reviewed papers for its engagement with plurality. Here, FGDs were complemented with household interviews for the explicit purpose of capturing the voices of those community members who did not attend meetings. Despite this, the results were subsequently only presented as group means.

3.1.2. Power

With regard to power (here referring to the possibility of being heard, for example, or being able to steer outcomes to one’s own benefit (rather than someone else’s)) – of the twenty most cited PE papers, only Bedelian et al. (2007) and Catley et al. (2012) address this in any respect. The review by Catley et al. (2012) does so (only) by mentioning the importance of gender-homogenous groups to access women’s voices. Bedelian et al. (2007) present findings from a PE study of Kenyan Maasai people’s perception of malignant catarrhal fever (MCF). In that study, the authors acknowledge the risk of dominant individuals steering group conversations and therefore state that it is important to have skilled facilitators. However, they do not elaborate on what it means to have a skilled facilitator or what kind of strategies could be helpful for ensuring that everyone is heard.

3.1.3. Language

The issue of language is addressed to a greater extent than power and plurality. Nine of the twenty reviewed publications talk about language (Mariner and Roeder, 2003; Catley et al., 2004; Catley, 2006; Bedelian et al., 2007; Jost et al., 2007; Barasa et al., 2008; Rufael et al., 2008; Bett et al., 2009; Catley et al., 2012). All of these have collected, or emphasise the importance of collecting, names for diseases and syndromes in local languages. However, only Jost et al. (2007) engage more significantly with languages and different kinds of knowledge. These authors point out that studies must be designed to be flexible, adapting data collection for the sake of comprehending local priorities and ways of conceptualising and categorising the world. To achieve this, the importance of facilitators being good listeners is emphasised. At the same time the authors provide examples of when this approach to local communities has sometimes been difficult, due to a “tendency on the part of national governments to favour survey methods rather than embrace the investigatory approach that is at the heart of PDS [participatory disease surveillance]” (Jost et al., 2007, pp. 540). Jost et al. (2007) also highlight the importance of acknowledging that understanding and classification of diseases and vectors differ between communities: “A primary objective of PE is to gain an overview of the range of local disease terms and how farmers process and perceive information. For example, the Somalis have a very detailed grasp of disease vectors and have local names for most species important in disease transmission. Like the Somalis, the Karamojong of Uganda are pastoralists, but do not associate insects or arthropods with specific diseases. Understanding these factors is essential to carrying out disease investigations and designing control programmes that work” (Jost et al., 2007, 539).

3.1.4. Summary of the review

Overall, the literature review indicated that it is not the norm to address aspects of power and plurality in PE literature. Using local terminology is common practice, and emphasised as being important, but beyond that, language is also engaged with to a limited extent. For example, none of the studies reviewed here describes the process of translation, the potential lack of clear correspondence between local and English disease names or veterinary textbook descriptions, or potential variations in knowledge and terms used within local communities. Clearly there is limited space in an article to develop all these aspects, but the almost non-existent engagement with plurality and

¹ Of the remaining publications, hits 21–31 were cited between 15 and 10 times and hits 31–52 between 10 and 5 times. Hits 92–158 were never cited.

power, the limited engagement with language, and the associated common practice of reporting on means or majority (or “consensus”) perspectives still indicate that there is room for increased engagement with these issues within PE.

3.1.5. The authors' stories from the field

3.1.5.1. Plurality. Katja conducted a participatory field study with German hunters about the acceptability to them of different surveillance strategies for classical swine fever (CSF) in wild boar (Schulz et al., 2016, 2017). Some of the hunters lived in western Germany, others in eastern Germany. Prior to Germany's reunification, all hunting activities and disease control in eastern Germany were regulated by the state. For instance, ownership of a weapon and allocation of hunting grounds were controlled by the government. While this has now changed, historical differences were reflected in the manner of participation. Katja sensed that the hunters from eastern Germany felt more obliged to show their commitment and willingness to collaborate with the research institute where Katja worked than hunters in western Germany. At the same time, the hunters from eastern Germany expressed their feelings in general and any dissatisfaction during the participatory exercises to a lesser degree than the hunters from western Germany. This example indicates the importance of understanding historical and contextual differences between groups who seemingly share the same culture and language.

In a PE study on Basongora pastoralists' local priorities, perceptions and practices regarding cattle disease in Uganda, Klara and Erika aimed to take the diversity of voices and possibilities within communities into account (Chenais and Fischer, 2018). Effort was made to ensure sufficiently homogenous groups, for example by separating out women as well as herders (i.e. those working for others taking care of their animals). It was much harder to gather herders together than the other groups. Klara and Erika were continually being told that ‘the herders are out in the pastures’ even when they tried to start early or end late to make sure that the herders would be in the village. One FGD with herders was achieved and additional individual interviews were performed, meeting the herders in the grazing lands. In general, the herders were less eager to talk and it was harder to obtain their views than those of the animal owners. Clearly longer term field work would have facilitated the building of trust and a better understanding of the local context so as to be able to fully pick up this group's perspectives.

One strategy for ensuring that a diversity of perspectives was reached, not only with regard to gender but also taking account of locational and class aspects, was the undertaking of a participatory mapping and wealth ranking exercise (Chenais and Fischer, 2018). The exercise indicated that there was no notable difference in the distribution of the wealth ranks of households participating or not participating in the FGDs. However, one geographical area, where many widowed or divorced women lived, emerged as being under-represented. According to the key informants, these women did not feel comfortable with coming to a meeting and had therefore been left out. If the participatory mapping had not been done, this omission would not have been noticed during the short stay in the village.

In 2019, Erika led a PE study of peste de petits ruminants (PPR) in an eastern European country. The aim was to investigate temporal and geographical distribution, herd prevalence and case fatality rates in affected herds. The study also aimed to contribute knowledge about local sheep and goat management, drawing some conclusions on how management factors might affect the local epidemiology. The research partner at central administration level prepared all the logistics and did the practical planning of the fieldwork. The selection of participants had been delegated to district veterinary officers. Erika was told that it would be difficult to recruit women-. This was justified by comments such as “the women don't want to/aren't able to come to public meetings”, “these are traditional communities and those women stay at home”, and “it's the men who are involved in the small ruminant business”. The people mobilising participants were all men. This probably aggravated the

reluctance to involve the women and the women's reluctance to attend meetings. In the end, many of the FGDs were mixed male/female, often consisting of family members, with an obvious patriarchal hierarchy in place. In these cases, the facilitator had to be constantly reminded not to reinforce these structures, to make sure that the seating was arranged to engage the women, that speaking times were equally allocated, and that the women were specifically asked to lead the discussion using the PE tools. Another observation was that after insisting on it throughout the fieldwork, towards the end more female participants were included, even though the majority were still male. However, if Erika and her colleague had accepted the excuses for why the initial representation of women was so low despite the instructions given for recruitment, very few women would have been included.

3.1.5.2. Power. In Katja's study with German hunters, the fact that she was a young woman of no perceived authority or threat to the hunters, and that she expressed a genuine interest in these hunters' perspectives, helped build trust and overcome their historical resistance to government authorities, indicating the importance of choosing a facilitator with whom interviewees are comfortable and willing to speak freely. Katja drew on some PE tools designed to collect one group response, thus requiring the group to achieve consensus. A hierarchical structure could be observed in each group. There was always one person who was the most dominant and insisted on his opinion being heard. Katja, facilitating the exercise, could ensure in such instances that those who had less of a chance to express their views were also heard. These discussions leading up to the final consensus statement were noted down, as were the disagreements, and were considered in the descriptive analysis.

In Klara's and Erika's study with Basongora pastoralists in Uganda, the local research team consisted of a facilitator and a note-taker who were both male veterinarians, and a male translator who was not a veterinarian but who had previously worked with other researchers in the region. Klara and Erika made conscious efforts to ensure free discussion and that everyone was heard during FGDs, but they had to continuously remind the facilitator to allow marginal voices to be heard and not to forge consensus. Despite such reminders, the facilitator habitually paid more attention to those more articulate in the group. One possible reason for this is that the high status and education of the veterinarian-facilitator made him unused to embrace what to him were seemingly uneducated responses.

In the Basongora study, exactly the same number of all-female and all-male FGDs were achieved, and an attempt made at least to tackle power relations such as wealth, but there was still a failure to fully account for other power relations. For example, it turned out that all the participants in one all-female FGD were related, consisting of a mother/mother-in-law and her daughters/daughters-in-law. In this group the gender balance was what was aspired to, but power relations such as age, family status, experience and family ties still hindered an open discussion.

Erika and her colleagues conducted a study on the knowledge, attitudes and practices (KAP) concerning ASF among smallholder pig-owners in Uganda (Chenais et al., 2015). Data were collected in FGDs using PE tools such as seasonal calendars, proportional piling, listing and rankings, facilitated by a local veterinarian trained in PE. Answers were collected at group level. Using the participatory tools, one person would start proportional piling, for example, and the group would discuss and often change the position of the beans used as markers until the facilitator perceived that the group had reached consensus. In some cases, this consensus was clearly forged, with the stronger voices being the ones heard and noted as the group's final answer. In other cases, the facilitator managed to navigate situations when one or a few persons dominated and ensure that everyone was heard and included in the discussion. Other tools, such as listing, allowed all the individual answers to be noted down, but more dominant participants still influenced the voices of the less dominant. In an analysis of the results, only the

quantitative and semi-quantitative/qualitative results were used and the group was the reporting unit for the statistical testing.

3.1.5.3. Language. Uganda has more than forty recognised languages, with English and Swahili given status as national languages. All schooling is in English. In Erika's study on ASF in Uganda, the FGDs were conducted in the local language (Luo), with notes written down in English by a note-taker. The facilitator and the note-taker were native Luo speakers, but had been educated in English from nursery to university. Luo is rarely used in writing or for talking about more technical and scientific matters, making some words difficult to translate directly from English into Luo. During the research Erika also noted that there were some false friends² between the British English she spoke and the Ugandan English spoken by the facilitator and note-taker. Former British colonies that have English as their official language have continued to develop their own version of English since independence (Isingoma, 2014). For example, with regard to family relations, the terms Erika used for brothers, sister and cousins were not the ones used in Ugandan English. Another false friend is "hotel", which in Ugandan English means what in British English is referred to as "restaurant". This is important because restaurant swill is a potential transmission route of ASF.

In their PE study with Basongora pastoralists in Uganda, the fact that the country has so many co-existing languages again came up as a relevant methodological issue. In this study, the pastoralists spoke Rusongora, whereas the local research team (the translator, facilitator and note-taker) spoke the related language Rutoro, the language of one of the dominant ethnic groups in the region. That the facilitator and translator did not speak the same language as the pastoralists was only made known to Klara and Erika at the beginning of field work, as this was not seen as relevant information to communicate by the local partners. Rutoro and Rusongora share many words and people speaking Rutoro and Rusongora live next to each other and are used to speaking together. Rutoro is more commonly spoken by local government authorities, including by the local veterinarian. As a result, the pastoralists were used to hearing animal disease names in Rutoro. Nevertheless, the fact that the local research team did not speak Rusongora, the native tongue of the pastoralists, would have limited the nuances that could be grasped in the research. This was addressed by including two of the Basongora key informants as translators and facilitators during some of the later FGDs and by discussing disease names with them.

The local research team had a strong urge to find and use the "correct" names of the diseases and force participants' descriptions of syndromes into scientifically accepted disease nomenclature. For example, participants described three different syndromes of "fever": fever, tick-borne fever and East Coast Fever (ECF). There was insufficient thoroughness when discussing how to translate the diseases with the local research team, and it was for example not discussed beforehand how to allow in translation for an openness about there possibly not being a one-to-one relationship between local and formal, as well as between Rusongora and English disease names and meanings. As ECF in Rusongora is translated as high fever, it is likely that this term groups together several reasons for a high fever, and thus that some of what was reported as ECF might in fact have been other forms of high fever in cattle. There was also a syndrome translated as "ECF in calves", which might equally have been translated as "high fever in calves" and might actually be the same disease as another syndrome translated as "diarrhoea (and fever) in calves". Awareness of this discrepancy between

²The term "false friends", when used in linguistics, refers to pairs of words from different languages or dialects that sound or look the same but that have different meanings. For example, Norwegian and Swedish languages are so similar that people speaking either language can often understand each other well. However, the term "rolig" means calm in Norwegian but funny in Swedish, which frequently causes confusion.

English and Rusongora terms for ECF came in the fieldwork, and then a more thorough discussion was held of what the different disease names in Rusongora meant and the signs with which they were correlated, without connecting them initially to an English term.

In the 2019 PPR study, Erika found out at the first meeting with the research team that the team members trained in PE could not join the field work due to other engagements, and that a replacement facilitator, who had never worked with PE before and was not fully proficient in English, had been selected. She subsequently found out that not all the participants spoke the national language because some were originally from a neighbouring country and spoke the language of that country. None of the research team (including the translator) spoke the neighbouring country's language. One FGD consisted only of women originating from the neighbouring country who did not speak the national language. The research team had to deal with this spontaneously on site and used one member of the community to act as a translator. It proved to be impossible to have the translator translate without answering himself when he knew the answer or adding to or deducing from the answers. In one village, the team wanted to reach more women as they were underrepresented, but none of these women spoke the national language and the spontaneously recruited translator was a man, which seemed to hinder free and open communication. It became obvious that in order to acquire some useful data from these women, a different translator would have been needed to allow for freer communication, and a longer stay in the community would have been useful to gain trust and enable direct observations for triangulating the data.

Katja's study with German hunters stands out amongst the examples presented here. No translation was needed as both the research team and all the hunters spoke German. This meant misunderstandings due to language and translation biases could be avoided. It also enabled Katja to pick up the different emotions and read between the lines. A few chats during the meetings and shared jokes certainly helped break the ice and create a pleasant environment for the participants.

4. Discussion

The engagement with research on democratic deliberation and the public sphere (Fraser, 1990; Hagendijk and Irwin, 2006) in this article has helped provide a theoretical grounding and deeper understanding of why it is important to give consideration to the organisation of participatory research. The work of Fraser (1990) on counter publics can offer an understanding of the relevance of dividing groups so that they are less heterogeneous with regard to different aspects of social stratification (beyond gender alone). One way of identifying such counter publics can be to perform participatory wealth rankings, where all households in a community are ranked according to their relative poverty or wealth, based on local definitions as identified in FGDs (Jacobson, 2013). This works well in some communities, but not in others, depending on the varying sensitivity of discussing this issue across cultures. Another strategy can be to actively target individuals and households that do not show up or are particularly quiet at group meetings, and arrange separate, individual or group interviews with them (Bedelian et al., 2007; Chenais and Fischer, 2018).

However, even when organising more homogenous groups, groups will never represent one voice alone. For example, it can be expected that a group might agree on a list of all the problems related to cattle rearing in the community, but there is more individual variation regarding the relative importance of the diseases. We would suggest that it might be relevant to think beyond consensus in FGDs and to note and analyse minority views as well. This is possible when using traditionally consensus-oriented PE tools. As shown by Katja's example with German hunters, there is nothing to prevent the researcher noting down minority perspectives, for example while performing a proportional piling exercise, and then including this data in the analysis. However, this requires the researcher to be able to catch nuances in group discussions. This was clearly easier for Katja as she spoke the same language and

came from the same culture as the participating German hunters.

While Katja's case with the German hunters shows the importance of being able to read between the lines for the facilitator to allow minority voices to be heard, this is difficult when the researcher does not speak the same language as the study participants and places high demands on the facilitator (Bedelian et al., 2007). Theories on democracy and public deliberation (Arendt, 1998; Roberts-Miller, 2005), as well as the authors' own experiences presented here, indicate that some guiding principles for facilitators might be the ability to listen, create an open discussion climate, invite participants to share their knowledge, show interest and not lecture, as well as be sensitive and reactive to group dynamics and balance the discussion between participants. The authors' own experiences, and those of others (Berreman, 2012), indicate that facilitators sharing a culture with participants is no guarantee that these guiding principles are better adhered to; neither does it guarantee the collection of more valid and relevant data. Well-educated facilitators, for example, might judge local knowledge as irrelevant since it comes from people perceived to be uneducated or who for other reasons are judged not to contribute relevant information on the topic. In Erika and Klara's study with Basongora pastoralists, for example, the local research partner had only included animal owners, and not herders who spend a considerable time with the animals, in the initial FGDs. During FGDs the facilitator clearly prioritised formal textbook knowledge over statements considered as uneducated. Likewise, local gender relations can result in preconceived ideas about women's engagement in and knowledge of animal husbandry (Petitt, 2016). Thus, Erika's PPR study indicates for example that the local research partners did not see any reason to include women in the study. If researchers in such cases follow local recommendations to exclude women, their research might serve to cement existing cultural practices of devaluing women's work with animals and prioritise the animals traditionally seen as "men's", while ignoring species more commonly associated with women. Local people might also be uncomfortable with being completely honest with local facilitators about practices that they know are advised against by veterinarians. Likewise facilitators might want to exclude more problematic or embarrassing local practices from information given to the research team (Borchgrevink, 2003). Therefore, while it is important to choose facilitators and translators who can act as brokers with the local culture, it is essential to be observant of any negative effects on data collection from the dynamics between the facilitator and participants. It is wise to work with more than one facilitator in order to be able to triangulate the data gathered through different facilitators, and to select facilitators with whom each group of participants is comfortable talking to, e.g. based on local class and gender dynamics (Borchgrevink, 2003; Bujra, 2006; Skjelsbæk, 2016). The literature review indicates that the basis for selection of facilitators is rarely discussed. The authors' own experiences indicate that veterinary PE studies frequently prioritise linguistic and veterinary competence over communication and cultural skills for both facilitators and translators. From her KAP study on ASF in Uganda, Erika described how the facilitator was a local veterinarian and thus a local figure of authority. He spoke the same language as the local participants (Luo), but viewed from a different perspective he spoke the formal disease language of veterinarians and not the situated disease language of the participants. Since Erika was only able to observe the discussions without being able to speak the local language herself, she had limited opportunities to intervene. Despite this experience teaching her to be aware of the difficulty of obtaining good data on local peoples' views when using people in authority as facilitators, it still proved difficult to recruit facilitators who were familiar with and sensitive to the perspectives of the local community in subsequent studies. A key reason for this was that local partners saw expert competence as essential. Similar experiences are highlighted by Jost et al. (2007). In the authors' experience, local partners who mobilise participants for FGDs are often men and veterinarians, which frequently seems to encourage prioritisation of people known by the mobiliser (i.e. those who have the

means to call a veterinarian when needed, for example) and the exclusion of people who the mobiliser does not think have the relevant competence to discuss the disease studied. People of perceived lower status or education, such as women and herders, are frequently excluded. In Erika's case on PPR, these groups were indeed initially excluded by the mobiliser, despite Erika specifically asking to meet them. This could be referred to as 'mobiliser bias' in PE, similar to how Chambers (1997, pp. 13) has talked about 'roadside bias', both having to do with only accessing those who are easiest to reach.

While writing this paper, it was surprising to find that language is discussed to such a limited extent in the reviewed social science and traditional PRA literature, despite reporting on research where a translator has obviously been needed. PE is a child of older participatory research, which in turn is inspired by anthropology. As shown here, anthropology has hardly engaged at all theoretically or methodologically with the multilingual empirical situations in which it is frequently performed (Borchgrevink, 2003). Despite this, the review indicated that PE takes language into account to a greater extent than traditional PRA does. However, this frequently stopped at pointing out the importance of collecting names of diseases and syndromes in local languages. In line with Borchgrevink (2003); Skjelsbæk (2016); Gibb and Danero Iglesias (2017) and others, the authors' view is that this needs to change – not only in PE but, it seems, in the vast majority of research performed in multilingual contexts. With regard to PE in particular, it is important that translators are sensitive to local ways of linguistically constructing the world, and that they are able to convey this to the researcher to ensure that local disease or symptom descriptions are not falsely forged into formal nomenclature (Queenan et al., 2017). Many of the aspects raised in this paper are easier to consider if more time is spent in the field, thus providing greater insight into the local culture, however it is expected that most PE studies will continue to face time constraints. It is therefore crucial to endeavour to include minorities and local perspectives also when working within limited time frames. Some strategies for doing so have been suggested in this paper.

5. Conclusions

In conclusion, the methodological development of PRA and PE would benefit from engaging with work undertaken on the public sphere, public deliberation of science and language studies. In summarising what these bodies of literature suggest, it is clear that striving for consensus frequently leads to weaker voices being marginalised in favour of a 'consensus of the privileged'. In this regard there needs to be awareness of the trade-off between forging consensus and understanding the perspectives of the most marginalised. One strategy to address this is to have separate FGDs based not only on gender, but on other forms of social stratification as well, noting nevertheless that the groups constructed cannot be expected to be completely free of power and plurality. Moreover, attention needs to be paid to the role of researchers here and how they perceive their own knowledge in relation to that of others. Facilitators and interpreters need to be carefully selected and there is a requirement for ongoing dialogue with them about the research situation and translation, and about the importance of trying to see the world from the study subjects' perspective.

Acknowledgements

Klara's and Erika's time for writing this article was financed by the Swedish Research Council through the project "Improved disease control by community participation – The case of African swine fever in northern Uganda" (VR2017-05518).

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the

online version, at doi:<https://doi.org/10.1016/j.prevetmed.2020.104991>.

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