Multi-Layered Reflexivity in Participative Research on Mining in Indonesia

Positionality, Preconceptions and Roles

Kristina Großmann

Abstract: Drawing on my involvement as a researcher in mining conflicts on customary land in Central Kalimantan, I reflect on my positionality, assumptions, roles, expectations and impacts on social change. Constant re-thinking of my own biases was necessary in order to grasp the nuanced and complex nature of villagers' attitudes towards mining, and their entangled relations with the mining companies. My attempt to act as a process facilitator, by persuading an indigenous rights organisation to support villagers in their dispute over land rights with the mining company, was unsuccessful. I conclude that a constant reassessment of expectations and aims is needed in order to achieve the co-production of knowledge that is relevant for social change and for the attempt to enhance villagers' participation in decision making.

Keywords: engaged anthropology, indigenous people, Indonesia, Kalimantan, land conflicts, mining, participation, reflexivity

I was sitting with a group of villagers in front of the house of the village head, Pak[1] Winto, and discussing a conflict that had arisen over mining on customary *adat*[2] land. The village, Tumbang Batubara,[3] located in the north of Central Kalimantan, Indonesia, has about 700 inhabitants, and is surrounded by large-scale coal mining. This area is the new frontier for coal extraction in Indonesia, with vast coal fields yet to be exploited in the course of an ongoing mega-mining project comprising 350,000 hectares. The mining sites overlap with land used by villagers. Accordingly, access and rights to land are increasingly contested. I visited this village in my role as leader of the participative and transdisciplinary research project 'FuturEN: Governance, Identities and Future along Categories of Differentiation. The Case of Coal Mining in Central Kalimantan, Indonesia'. The project, which lasted from 2017 until 2020, explored power constellations, conflicts and visions for the future of coal mining in the area. Most villagers subsume themselves under the indigenous ethnic group known as Dayak Murung. Dayak identity and the concept of indigenous land rights underpin the land management programme initiated by one Dayak organisation in Central Kalimantan with the aim of securing Dayak rights over *adat* land. In 2015, representatives of this organisation helped a group of villagers under the leadership of Pak Ignas, the head of the villagers' representative body (*Badan Permusyawaratan Desa*, BPD), to mark out a 2,500-hectare area of *adat* land to which villagers claimed right of access. The explicit aim was to secure access to the land, as a line of defence against possible expropriation by mining companies that are active in that region.[4]

Villagers who participated in this action placed great hopes in the land management programme. However, 50 hectares of the designated *adat* land overlaps with a mining concession. A first setback

occurred in 2018, when the mining company concerned started to extract coal in the contested area. The village head Pak Winto sent a letter to the mining company, in which he explained the villagers' claim over the land and asked for a meeting to settle the conflict. However, the company did not reply to the letter.[5] Pak Ignas contacted the Dayak organisation and asked for their support. The representative was reluctant to come to the village and replied that the village authorities should visit him in the provincial capital to discuss the problem. As I knew some members of the Dayak organisation, Pak Ignas and I decided that I could ask them about the problem and try to persuade them to lend their support. The events leading up to this decision and the outcome of my attempted intervention on behalf of the villages form the focus of this article, in which I reflect on my involvement, as a researcher, in the mining conflict. I critically evaluate both my own assumptions about my role and the expectations in this regard of people with whom I interacted in the course of my research. In so doing, I discuss the ways in which my positionality, assumptions, preconceptions and involvement interfered with my ability to do research. I also elaborate on the ways in which the reflection on my assumptions and roles might help to improve the research process and enhance its contribution to social change.

Participative Anthropology and Transdisciplinarity

Many researchers, including anthropologists, hope to contribute to societal and political change in response to environmental degradation and democratic dysfunctionality (Low and Merry 2010; Rylko-Bauer and Singer 2006; Speed 2006). To this end, they try to make research accessible and of practical value to the people and communities with whom they work, drawing on work by proponents of action research, that seeks to enhance the devolution of power to communities, often in combination with the promotion of rights (Chambers 1994; Kemmis et al. 2014). More recently, sustainability scientists have embraced transdisciplinarity as a means of contributing to the solution of 'real-world problems' (Jahn et al. 2012; Padmanabhan 2018). Transdisciplinary research seeks to create and maintain a '"space" … where science and society address real-world problems, generate knowledge, formulate solutions and pilot actions for a more sustainable future' (Wittmayer and Schäpke 2014: 485). Thus, both participative anthropology and transdisciplinarity aim to integrate non-academic actors and engage in 'knowledge translation' between academic and non-academic discourse. These approaches emphasise the need for strong (self-)reflexivity throughout research process, explicit recognition of the positionality of the researchers and the obligation of researchers to uphold social responsibility and to engage in problem transformation.

Multi-Layered Reflexivity in my Involvement in the Mining Conflict

The project FuturEN applied a participative research approach that combined theories from anthropology and sustainability science. I aimed to mitigate conflicts, enhance participation in decision making, and induce social change in collaboration with non-academic actors. To this end, between 2017 and 2020, in the course of ethnographic field work in several mining villages, I conducted participative futures workshops with villagers, local government employees, and representatives of the mining company and civil society organisations in order to explore contrasting visions for the future of coal mining in the area and to identify solutions applicable to different scenarios (Großmann et al. 2019). Participatory methods are often implicitly associated with good ethical conduct as they aim to empower people who are affected by structural inequality. Transnational institutions, development organisations and researchers working with participative approaches tend to assume that participation is an equitable deliberative process and that participatory methods are a means to reduce conflicts (Mohan 2001: 159). However, critical accounts stress that participatory methods may risk reproducing existing power relations and strengthening elites. Russell Bishop (2005) goes even further and asserts that outsiders should not induce empowerment and participation. Rather, these should emerge from a 'participatory mode of consciousness' (2005: 121). Reflexivity and critical (self-)evaluation are considered essential in order to uncover power relations in participatory research (Mauthner and Doucet 2003; Russell and Kelly 2002), and understand how these may affect both the results of the research and its societal impacts (Pohl et al. 2010; Wittmayer and Schäpke 2014). A reflexive approach emphasises the researcher's relations to the people with whom he or she is working and acknowledges that outcomes are shaped by these relations (Hardy et al. 2001). In this study I draw on frameworks for multi-layered reflexivity proposed by Lai Fong Chiu (2006) and Ruth Nicholls (2009)

and the concept of 'first-, second- and third-person research practice' (Reason and Torbert 1999) to distinguish between three dimensions of reflexivity. 'Self-reflexivity' refers to reflection by the researcher on his or her positionality, including personal beliefs, motivations, objectives and expectations. It focuses on the 'hidden assumptions' (Nicholls 2009: 121) that may underpin the research. 'Inter-personal' (2019: 122) or 'relational' (Chiu 2006: 199) reflexivity encompasses interpersonal encounters in collaborations. Here I complement Nicholls' and Chiu's frameworks with an analysis of different roles in the research process and mutual expectations among participants in the process, drawing on Julia Wittmayer and Niko Schäpke (2014). The third dimension, 'collective reflexivity and catalytic validity' (Nicholls 2009: 123), considers the effects of reflections on the research process, for example in terms of participation, empowerment and exclusion, and also the potential of the research to contribute to social change.

Self-Reflexivity: Positionality and Revised Biases

My positionality is an integral part of my identity as a researcher. It influences and is influenced by the varying contexts in which the research takes place and is linked to my own subjectivity (Ratner 2002). Reflecting on my positionality means to become aware of how I position myself in relation to the research and the data (Berger 2013; Pitard 2017). My positionality includes not only my personal background and apparent categories such as race, gender and education, in my case as a 'white' woman working for a German university, but also my assumptions, preconceptions and initial biases. During my first visit in Tumbang Batubara, I talked to every family at least once by visiting their house in order to introduce myself. My aim was to find out about villagers' views on current mining activities and potential future conflicts. I also wanted to get an overview of the different standpoints of villagers and divisions within the village in order to avoid reproducing power relations during the research process. When I sat together with the *adat* leader Pak Pujo for the first time, he straightaway started to explain that he and his family had lived in the village for generations and that they depended on the land for their livelihoods. He said that I should be generous when considering what to give them for the land. I answered: 'I am sorry, but I come from a German university and I have no possibility to support people directly with money.' Pak Pujo

replied: 'Ah, you are from the university? I thought you were from the mining company.' After that, for him, the conversation about mining was finished and he started chit-chatting about the weather. I assumed that he did not want to talk with me about mining to prevent my involvement or interference in mining issues. His assumption that I work for a mining company was shared by other villagers. This was not surprising. While German academics were rare in the village, representatives from the nearby operating mining companies come to the village regularly to discuss the implementation of corporate social responsibility (CSR) programmes with members of the village elite or to arrange compensation payments for land. Fortunately, unlike Pak Pujo, other villagers were happy to talk about coal mining despite my personal background as an academic working for a university. Some villagers dropped hints about the conflict over *adat* land. They also mentioned a corruption case that occurred in the course of land sales several years ago, involving representatives of a mining company and the former village head, but gave few details about what had happened. The *adat* leader and the village head Pak Winto were sure to know more about these issues; however, they were unwilling to talk about these sensitive topics with me, at least in the beginning. Before I visited Tumbang Batubara for the second time, while staying in the district capital, I informed Pak Winto via the messenger WhatsApp about my forthcoming arrival in the village. Coincidentally, he was also staying in the district capital on that day and we met for a coffee in a restaurant. During our conversation, he told me about the exact details of the corruption case for the first time. It seemed that the fact that I had come back to visit the village for a second time after several months enhanced his trust. I also sensed that the district capital was a more neutral space for conversation, where he felt more comfortable talking about sensitive issues than in the village. Following this experience, in drawing up my time schedules, I always included a few days' stay in the district capital before and after visits in Tumbang Batubara. This allowed me to meet with Pak Winto and other villagers in an environment where they could talk more openly about conflicts over mining.

Based on reports published by international environmental organisations and information gained during my preliminary research visit to the provincial capital of Central Kalimantan in 2016, I assumed that the main line of conflict over mining in the province would be between villagers and civil society organisations on the one side and companies and the

government on the other. I somewhat naïvely imagined that most villagers would actively oppose large-scale coal mining, with the support of environmental or indigenous peoples' rights organisations. However, unsurprisingly, the situation turned out to be more complex. As I learned during my stays in Tumbang Batubara, most villagers are in favour of mining. Despite rising pollution, lack of transparency on the part of the mining companies and their failure to make agreed compensation payments, most villagers are in favour of coal mining and optimistic about the effects of its further expansion in the area. The company, in its role as steward of good growth, provides employment opportunities, infrastructure, education and social security – all things that the Indonesian state fails to provide. Currently, about two-thirds of the people living in Tumbang Batubara work for mining companies in nearby areas. Mining sustains their livelihoods and they are happy with the well-paid stable employment that is provides. Members of the village elite such as the village head, Pak Winto, as well as the *adat* leader, Pak Pujo, also support mining and are enmeshed in a patron–client relationship with the companies (Großmann 2019). As clients, they accept or even support ongoing expropriations and endure the negative environmental impacts of the destructive exploitation by the companies. The company, as a patron, in return provides employment opportunities and supports infrastructure development in the village through CSR programmes and personal support for members of the village elite and their families. Members of the village elite acknowledge that they are politically dependent on the companies' support and it is an open secret that they also benefit personally from the relationship. These patronage networks entail extreme power asymmetries; villagers who are critical of the mining companies are excluded from the village elite and in some cases threatened. However, those who support mining have diverse motivations for doing so and they do not necessarily endorse all of the company's actions. The village head, Pak Winto, as a 'client' of the mining companies, generally supports what they do. However, at the same time he is one of the promoters of the Dayak land management scheme, mentioned in the Introduction, which aims to secure villagers' access to *adat* land that is threatened by the expansion of mining activities. For him this is not a contradiction; he argues that the companies have gained enough land and they should spare at least this remote part of *adat* land for the villagers.

About one-third of the villagers adopt a critical stance towards the mining activities in the region.

These villagers rely predominantly on agriculture and agroforestry to sustain their livelihoods and not on income from employment in the mining companies. The main concerns they express are that mining restricts their access to land they rely on for their livelihoods and that the benefits of mining will only last for a short time. Among those who criticise mining is Pak Toni, who has set up an 'anti-mining' group and stood as an opposition candidate in the last two elections for village head. He argues that corruption, collusion and nepotism among the current village elite are hindering development in the village. His supporters express their anger about the compliant attitudes adopted by Pak Winto and Pak Pujo in negotiations with company representatives and their failure to secure lasting improvements to the village infrastructure.

Before I visited Tumbang Batubara, I knew that not all villagers would be 'fighting against' the mining companies. However, I was astonished that so many villagers endorse mining. Accordingly, I had to revise my biased preconception of a binary contrast between the 'anti-mining villagers' and the 'exploitative mining company'. It is true that members of the village elite are entangled in long-established patron–client relationships with companies. However, most villagers generally support mining because of the employment opportunities it provides, even though they know that the jobs will disappear when coal reserves are exhausted and they can see that mining damages their environment. People who oppose mining generally cite concerns about livelihoods rather than displaying political motivations. The longer I stayed in the village, the more I was able to appreciate the complex, multifaceted nature of the villagers' relations to mining and the mining companies.

Inter-Personal Reflexivity: Supporter rather than Facilitator

Reflexivity on the inter-personal level critically examines the different roles assumed by participants in the research and the extent to which mutual expectations are met. Wittmayer and Schäpke (2014) describe how researchers in participative anthropology may act as process facilitators, knowledge brokers or agents of change, among other roles. In the following, I reflect on the roles that I assumed (and did not assume) in the course of the research, as well as the roles that I imposed on others, and the extent to which mutual expectations regarding our roles were

met or disappointed. Pak Ignas, the head of the villagers' representative body, was not happy with the situation of the *adat* land management scheme. He expressed deep disappointment not only about the company's failure to respond to his request for dispute settlement but also about the distinctly cool response received from the Dayak organisation based in the provincial capital. Pak Degut, a member of this organisation, had participated in the futures workshop that I had conducted in the provincial capital in 2018. In conversations outside the workshop, I had already discussed weaknesses in the implementation of the land management scheme with him. The main problem was that the *Adat* Land Clarification Letter, on which the claim to land ownership by the villagers was based, is not a legally binding document. Pak Degut told me that similar problems had occurred in other areas where concessions overlapped with *adat* land. Therefore, during our discussions in Tumbang Batubara about the conflict, Pak Ignas and I decided that it might help if I talked to Pak Degut and asked, on behalf of the villagers, for his organisation's support. So, I called him and we spoke on the phone about the support his organisation might be able to provide. I suggested that he could provide information about the legal situation and strategies the villagers could adopt in their negotiations with the company. Although Pak Degut was aware of the problems and had stated in earlier discussions with me that they were working on solutions, he told me on the phone that, at that moment, the most he could do was to invite a villagers' delegation to meet with him in the provincial capital. However, he also said that if villagers organised a meeting with company representatives in Tumbang Batubara, he would attend. I had the impression that his reluctance to travel to the village was at least partly due to the limited capacity and resources of his organisation. At the end of our talk, he advised me that I should be careful and not allow villagers to use me for their own ends.

Disappointed, I told Pak Ignus about my lack of success. He seemed to be less upset than I was – maybe because his expectations had been low from the beginning. Afterwards, Pak Ignus, other villagers and I had some lively discussions about our experiences of indigenous rights' organisations, their unsuccessful programmes and the issue of representation. Villagers were certainly disappointed about the lack of support from the Dayak organisation. However, some villagers already suspected that the head of the Dayak organisation had only supported the land management scheme in 2015 in order to promote his candidacy in the 2106 provincial governor's election. The failure of the organisation to support the scheme now merely confirmed their suspicions. Moreover, one villager told me, this was just one of many disappointments. They felt let down by everyone: the government, the companies and now also by the Dayak organisation. Some days later, Pak Ignas and some villagers took up the invitation to send a delegation to the provincial capital and met Pak Degut. According to the villagers, nothing came out of the meeting, either in terms of new information or ideas for new strategies. At the time of writing, the mining company has still not responded to the village head's request for a meeting and is continuing with its mining activities in the disputed area.

My sympathies were strongly on the side of Pak Ignas and the villagers. I was disappointed by the lack of support from Pak Degut and other members of the Dayak organisation. What puzzled me was Pak Degut's comment that I should be careful not to let myself be exploited by the villagers. I was disturbed by his perception of the villagers as people who would try to take advantage of me. My perception was that the villagers were the ones who were always being exploited, either by companies, the state or civil society organisations. However, while reflecting on this issue, I remembered my own preconceived ideas about villagers being 'anti-mining' and fighting against the company. Maybe my perception of the villagers as being 'exploited' was another of these preconceptions? On reflection, I think it was not. It is true that some villagers, such as the village head, are in a relatively privileged situation and are therefore in a position to exploit others. But it is also true that all people living in Tumbang Batubara are structurally more disadvantaged than owners of mining companies or members of Dayak organisations living in the provincial capital. It was clear, however, that Pak Degut did not share my sympathies and perception of the villagers' circumstances. This lack of support showed me that Pak Degut and other representatives of the Dayak organisation were not allies of the villagers, as I initially expected them to be. Rather, new lines of conflict were evolving between villagers and the Dayak organisation.

The villagers had hoped that I could help persuade the Dayak organisation to support them. Nevertheless, I had to disappoint them. I could not assume the role of 'process facilitator' (Wittmayer and Schäpke 2014: 488) by directly helping to arrange meetings and actions, or be a 'change agent' (2014: 489) in the sense of catalysing change and enabling people to transform their lives. My role and engage-

ment were limited to offering encouragement and support (Low and Merry 2010). All I could do was to encourage villagers to continue to demand that the mining company recognise their land rights, and to continue pressing the Dayak indigenous rights organisation for their support – or else to search for other allies.

Collective Reflexivity and Flexible Research Design

Staying for longer periods in Tumbang Batubara helped me to understand the complex social and political structure in the mining village. I gained insights into the motivations and interests of villagers, as well as the divisions and entanglements that marked relationships among villagers and between villagers and external actors. However, people often felt more comfortable talking about sensitive issues in places outside the village and, whenever it was possible, I met villagers in the district capital before and after travelling to Tumbang Batubara. To do so, I often changed my travel plans spontaneously. This taught me that flexibility is a precondition for effective participatory research.

During my meetings with villagers, I became aware that my assumption that the vast majority of the villagers oppose mining and the company was the product of stereotypical thinking. The binary opposition I expected to see between the villagers and the mining company did not turn out to be true. Also, I had to recognise that people act in ways that, according to my way of thinking, were contradictory and not coherent. The village head generally supported mining and was entangled in a patron–client relationship with the company. At the same time, he promoted the *adat* land management scheme to secure villagers' access to land threatened by the expansion of mining activities. Here again I was trapped in my own stereotypical and binary thinking, as I had assumed that those villagers who supported mining would not support an *adat* land management scheme. Reflecting on the research process taught me that constant critical reappraisal of my own biases is necessary in order to grasp the nuanced and complex nature of relationships between the villagers and coal mining.

Reflecting on the question of participation and its effects on social change brings me back to my disappointment about Pak Degut's refusal to travel to the village and support villagers' claims against the company. This was not what I had expected. Like my stereotypical view of 'villagers against the mining company', my preconception that 'Dayak organisations strongly support the villagers' turned out not to be true. Once again reflexivity was essential to avoid being trapped by my own preconceptions. I became aware that Pak Degut was not an ally for villagers, as I had expected; on the contrary, a new fault line was opening up, evidence of an emerging dispute between villagers and the representatives of the Dayak organisation. Without the support of the Dayak organisation, villagers currently have few opportunities to further their claims to *adat* land as they lack the necessary legal advice on how to proceed. I had to accept that all I could do was encourage people in the village to continue to press the mining company to recognise their claim to rights over *adat* land. I was not in a position to facilitate change in the way I had hoped, and my aim of enhancing the participation of villagers in decision making regarding the future of the area was, at best, only partially achieved.

After three years doing research, I have to acknowledge the 'messiness' (Jones and Jenkins 2008: 475) of participatory research processes. The process and outcomes of participation are highly contextual and never predictable. I have learned that it is the people with whom I work who have to define what they perceive as a conflict, what participation means to them, what aims they wish to pursue and how conflicting interests can be negotiated. Moreover, as a researcher and 'outsider', I have to constantly reflect on my own assumptions, expectations, biases and aims in order to not reproduce existing power relations. Thus, constant reflection on multiple levels is essential not only to make the research process transparent but also to (re-)assess and adapt my expectations and aims. This also entails a willingness, where necessary, to change the research design – as in fact often occurs in participatory research processes (Hill 2004) – in order to achieve the co-production of knowledge that is relevant for social change.

These reflections on the experience of participatory research and analysis of results obtained so far provide a solid base for understanding the complex social and political situation in the mining village. In order to further enhance villagers' participation in decision making, more 'actions' would be needed. However, what activities would bring what kind of change in this highly complex situation? Which specific measures could I take in the future in order to enhance the participation of villagers in decision making and strengthen their claims over *adat* land? Would one option be to help build links between actors who are not yet connected, such as between

the head of the villagers' representative body, Pak Ignas, and the mining company? Or would it help to establish contacts with other Dayak organisations or environmental groups that might be prepared to support villagers' claims over *adat* land? Reflecting about these possible actions, it becomes clear to me that the first issue that should be discussed with villagers is what 'participation' means to them. Is the way forward for the village head to write a second letter to the company urging acknowledgment of the contested nature of *adat* land? Or would the interests of the villagers be better served by giving their support to the efforts of the 'anti-mining' group to gain strategic positions in the village administration, where they would be better placed to lobby consistently for villagers' interests? These are questions I hope to discuss in future meetings with people living in Tumbang Batubara.

Kristina Großmann is a professor at the Department of Southeast Asian Studies, University of Bonn, Germany. Her main research interests are environmental transformations, dimensions of differentiation in ethnicity and gender, and civil society organisations in Southeast Asia.

Notes

1. *Pak* is the abbreviation of *Bapak*, which originally means father, but nowadays is used to address an adult male.
2. *Adat* can be broadly described as local practices and a common set of rules and codes of conduct.
3. In order to protect my collaboration partners, I used pseudonyms for all persons. The village name Tumbang Batubara is fictional. The village and its inhabitants that I describe are based on several settlements I visited in this mining area.
4. Villagers ascribed cultural and economic importance to this forested area, as this is where they hunt as well as gather forest products for food, medical purposes and rituals. Although villagers have no land use title according to national law, they assert their right of access to the land according to *adat* law.
5. As of January 2021.

References

Berger, R. (2013), 'Now I See It, Now I Don't: Researcher's Position and Reflexivity in Qualitative Research', *Qualitative Research* 15, no. 2: 219–234.

Bishop, R. (2005), 'Freeing Ourselves from Neocolonial Domination in Research', in *The handbook of qualitative research*, 3rd edn, (ed.) N. K. Denzin and Y. S. Lincoln (Thousand Oaks, CA: Sage), 109–138.

Chambers, R. (1994), 'The Origin and Practice of Participatory Rural Appraisal', *World Development* 22, no. 7: 953–969.

Chiu, L. F. (2006), 'Critical Reflection: More than Nuts and Bolts', *Action Research* 4, no. 2: 183–203.

Großmann, K. (2019), '"Dayak, Wake Up" – Land, Indigeneity, and Conflicting Ecologies in Central Kalimantan, Indonesia', *Bijdragen tot de Taal-, Land-en Volkenkunde* 175, no. 1: 1–28.

Großmann, K., A. Gullo, P. Juliana, M. Mahin, S. A. Purwanto and M. Septalisa (2019), 'Research Note. Strategies for Shaping Change: Networks for Gaining Access, Enhancing Exchange and Obtain Status', *Pacific Geographies* 51: 12–15.

Hardy, C., N. Phillips and S. Clegg (2001), 'Reflexivity in Organization and Management Theory: A Study of the Production of the Research "Subject"', *Human Relations* 54, no. 5: 531–559.

Hill, S. (2004), 'Doing Collaborative Research: Doing What Feels Right and Makes Sense', *International Journal of Social Research Methodology* 7, no. 2: 109–126.

Jahn, T., T. Bergmann and F. Keil (2012), 'Transdisciplinarity: Between Mainstreaming and Marginalization', *Ecological Economics* 79: 1–10.

Jones, A. and K. Jenkins (2008), 'Rethinking Collaboration: Working the Indigene-Colonizer Hyphen', in *Handbook of Critical and Indigenous Methodologies*, (ed.) N. K. Denzin, Y. S. Lincoln and L. T. Smith (Los Angeles, CA: Sage), 471–486.

Kemmis, S., R. McTaggart and R. Nixon (2014), *The Action Research Planner. Doing Critical Participatory Action Research*. Singapore: Springer.

Low, S. M. and S. E. Merry (2010), 'Engaged Anthropology: Diversity and Dilemmas: An Introduction to Supplement 2', *Current Anthropology* 51, no. 2: 203–226.

Mauthner, N. S. and A. Doucet (2003), 'Reflexive Accounts and Accounts of Reflexivity in Qualitative Data Analysis', *Sociology* 37, no. 3: 413–431.

Mohan, G. (2001), 'Beyond Participation: Strategies for Deeper Empowerment', in *Participation: The New Tyranny?*, (ed.) B. Cooke and U. Kothari (New York: Zed Books), 153–167.

Nicholls, R. (2009), 'Research and Indigenous Participation: Critical Reflexive Methods', *International Journal of Social Research Methodology* 12, no. 2: 117–126.

Padmanabhan, M. (2018), 'Introduction: Transdisciplinarity for Sustainability', in *Transdisciplinary Research and Sustainability. Collaboration, Innovation and Transformation*, (ed.) M. Padmanabhan (London, UK: Routledge), 1–23.

Pitard, J. (2017), 'A Journey to the Centre of Self: Positioning the Researcher in Autoethnography', *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* 18, no. 3: Art. 10, http://dx.doi.org/10.17169/fqs-18.3.2764.

Pohl, C., S. Rist, A. Zimmermann, P. Fry, G. S. Gurung, F. Schneider, C. I. Speranza, B. Kiteme, S. Boillat, E. Serrano, G. Hirsch Hadorn and U. Wiesmann (2010), 'Researchers' Roles in Knowledge Co-production: Experience from Sustainability Research in Kenya, Switzerland, Bolivia and Nepal', *Science and Public Policy* 37, no. 4: 267–281.

Ratner, C. (2002), 'Subjectivity and Objectivity in Qualitative Methodology', *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* 3, no. 3: Art. 16, http://nbnresolving.de/urn:nbn:de:0114-fqs0203160.

Reason, P. and W. R. Torbert (1999), *The Action Turn Toward a Transformational Social Science* (University of Bath, and School of Management, Boston College: Centre for Action Research in Professional Practice).

Russell, G. M. and N. H. Kelly (2002), 'Research as Interacting Dialogic Processes: Implication for Reflexivity', *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* 3, no. 3, Art. 18, http://nbn-resolving.de/urn:nbn:de:0114-fqs0203181.

Rylko-Bauer, B., M. Singer and J. Van Willigen (2006), 'Reclaiming Applied Anthropology: Its Past, Present, and Future', *American Anthropologist* 108, no. 1: 178–190.

Speed, S. (2006), 'At the Crossroads of Human Rights and Anthropology: Toward a Critically Engaged Activist Research', *American Anthropologist* 108, no. 1: 66–76.

Wittmayer, J. and N. Schäpke (2014), 'Action, Research and Participation: Roles of Researchers in Sustainability Transition', *Sustainability Science* 9, no. 4: 483–496.