Article

Achieving co-presence when together and apart: Hybrid engagements and multi-modal collaborative research with urban indigenous youth

Philipp Horn (iD) **and Olivia Casagrande** (iD)
University of Sheffield, UK

Abstract

This article reflects on collaborative research carried out during the COVID-19 pandemic involving indigenous youth co-investigators from different urban settings in Bolivia and a UK- and Bolivia-based research coordination team. Unlike previous studies that highlight the potential of generating a shared co-presence via virtual engagements and digital methods when face-to-face interactions seem less desirable, this article offers a more cautious account. We question the existence of a shared co-presence and, instead, posit co-presence as fragmented and not necessarily mutual, requiring careful engagement with power imbalances, distinct socio-economic and space-time positionings, and diverse priorities around knowledge generation among team members. These considerations led us to iteratively configure a hybrid research approach that combines synchronous and asynchronous virtual and face-to-face interactions with multi-modal methods. We demonstrate how this approach enabled us to generate a sense of co-presence in a context where collaborator access to a shared space-time was limited, differentiated, or displaced.

Keywords

Hybrid research, shared space-time, multi-modal methods, co-presence, participatory video, pandemic, youth, urban indigenous, Bolivia

Corresponding author:
Philipp Horn, Department of Urban Studies and Planning, University of Sheffield, Geography and Planning Building, Winter Street, Sheffield S3 7ND, UK.
Email: p.horn@sheffield.ac.uk

Introduction

In this article, we reflect on collaborative research carried out during the COVID-19 pandemic involving indigenous youth co-investigators from different urban settings in Bolivia and a UK- and Bolivia-based research coordination team. We make the case for a hybrid research approach that combines synchronous and asynchronous virtual and face-to-face interactions with multi-modal methods to generate co-presence between collaborators with distinct socio-economic and space-time positionings. Our discussion is positioned within and contributes to well-established methodological literatures, namely participatory research, cooperative research, action research, and knowledge co-production, that promote engagement between researchers and the 'objects' of their investigation (Tripp, 2005). We are particularly inspired by related Latin American scholarship on participatory action research (Fals Borda, 1987) and liberation theology (Freire, 1970). In line with these bodies of work, we emphasise the need to deploy methods that involve people living in areas affected by research as co-investigators, thereby departing from distinctions between researchers and passive objects of studies. We are also influenced by decolonial theorists who call for 'border thinking' and the decentred production of academic knowledge (Anzaldua, 1987; Mignolo, 2002) as well as by indigenous and black scholars who call for dismantling historical relationships between knower/known and the consequent decolonisation of methodologies (Alonso Bejarano et al., 2019; Harrison, 1991; Kovach, 2009; Quijano, 2007; Rivera Cusicanqui, 2012; Smith, 2012). Deploying such a critical approach to collaborative research requires bringing together different ways of knowing in a shared space-time for constant negotiation (Kennemore and Postero, 2020: 9). How this space-time is produced is at the centre of recent methodological debates (see Alonso Bejarano et al., 2019; Kennemore and Postero, 2020; Mitlin et al., 2020; Sjöberg, 2018), and this article contributes to this body of literature.

An important departure point for us, and here we follow Tripp (2005: 466), is that the building of shared enquiries must be 'appropriate to the aims, practices, participants, situation (and its enablers and constraints)'. As such, the construction of methodological frameworks should be shaped by local context (i.e., the environment in which research takes place) and by engaging with everyone involved in the research process, something ideally achieved by being together. Yet, what happens when collaborators cannot physically be together at the same time? How can meaningful relationships and some sort of co-presence be established in such a context?

These questions have become central in times of COVID-19 but are also increasingly relevant for international research projects in a climatically changing world in which long-distance travel is not sustainable, posing difficulties for geographically dispersed collaborators to come together. Addressing such global challenges while maintaining a commitment to cooperation across physical boundaries and time zones, an emerging literature calls for undertaking collaborations from a distance. A key point here is that co-presence – defined as the relational construction of a self-other interconnection (Beaulieu, 2010; Mollerup, 2017) – should not be equated with co-location. Yet, most studies emphasise that building co-presence requires some sort of shared space. A possible solution is to establish shared spaces in virtual settings. According to Howlett (2021), the move to the virtual can generate more symmetrical relationships between

team members dispersed geographically across different time zones. Recent research by Marzi (2021) supports this claim. Drawing on insights from a participatory video-making project during the COVID-19 pandemic connecting UK-based researchers and film-makers with women living in an informal settlement in Medellin, she highlights how virtual interactions, and the use of smartphones provide a basis for collaboration not just during fieldwork but also in preceding preparation and subsequent analysis stages. Marzi (2021) demonstrates how shifts to the virtual allow for the construction of a shared 'safe space' in which collaborators can come together in contexts where face-to-face interactions are undesirable and impossible.

Our own experiences of collaborating with indigenous youth groups in Bolivia in pandemic times, also heavily relying on virtual interactions, broadly align with the above-mentioned observations. Yet, our experiences also lead us to question that co-presence, whether face-to-face or virtual, can ever be shared between all collaborators. Instead, we posit co-presence as fragmented and not necessarily mutual, arguing that more attention needs to be paid to collaborators' different positionalities and constraints around access to a shared space-time and their ability to create a joint 'sense of place'. Following Massey (1994) we consider space and time as interwoven – for this reason we deploy the term space-time – and configured through dynamic social interactions. From this perspective, the uniqueness of a place refers to 'a particular mix of social relations' occurring at all scales and across different time zones that are mediated by a variety of local and global forces (Massey, 1994: 5). Each individual's 'sense of place' is therefore just a par-ticular and partial articulation of wider social relations and understandings, and likely differs from person to person, depending on one's socio-economic and space-time pos-ition as well as characteristics such as age, ethnicity, or gender (Massey, 1994). By apply-ing this perspective to the context of international research, we contend that there is a distinct understanding among collaborators on what represents co-presence and allows for the creation of a joint 'sense of place'. We argue that this must be understood in rela-tion to power imbalances among members of a geographically, temporally, and socio-economically diverse collaborative research team. Let us briefly unpack each of these points.

First, we demonstrate that, independent of external circumstances such as COVID-19 social distancing guidelines, access to a shared space-time – whether occurring in-situ or in virtual settings – is not clear-cut but requires finding time to connect and careful sched-uling. In our case, access to a shared space-time can be conceived of as *limited* (with some team members able to meet locally in the same time zone throughout the project), *differ-entiated* (with some having the required resources/time and possibilities to meet virtually or face-to-face), and *displaced* (with some lacking options to engage altogether). We therefore treat the virtual and face-to-face as complementary and not substitutive, leading us to shift between virtual and physical spaces of interaction occupied at times by different team members with distinct positionalities.

Second, in a context where engagement in a shared space-time is limited, differen-tiated, and displaced, we argue that co-presence can be best achieved by relying on asyn-chronous and synchronous engagements as well as multi-modal methods that creatively combine textual, visual, and audio material (Dicks et al., 2006, 2011). In our case, this was achieved through a collage of methods – from Zoom interviews, smart-phone filming, virtual labs, and face-to-face interactive workshops – that revolved around

creative, engaged, and collective co-production of knowledge. The produced material was stored in a shared digital platform accessible to all collaborators. This helped everyone involved in the project to better relate to each other and, over time, generate an understanding of the different places in which we operate.

Third, our discussion on achieving co-presence sheds further light on power relations characterising the politics and geographies of collaborative knowledge production (Kennemore and Postero, 2020; Rappaport, 2017). We concur with Miller et al. (2006: 6) by defining power as 'dynamic, relational and multidimensional, changing according to the context, circumstance and interest'. From this perspective, moves to the virtual do not eliminate uneven power relations but, as we argue here, rather exacerbate this problem. Recognising this challenge, we call for managing power relations through mixed forms of engagement and multi-modal methods. We also emphasise the need to consider flexibility and process-oriented methodological approaches within grant applications and research project governance as this can set the basis for more experimental, shared, and horizontal knowledge co-production; internal work procedures that prioritise a situated construction of mutuality; and shifting resources to collaborators based within the physical setting in which the research takes place.

In what follows, we first provide an overview of the collaborative research project, outlining its core methodological principles. We then unpack how we generated access to shared spaces and promoted co-presence while considering and addressing power imbalances in all stages of our research. We conclude with some reflections on future collaborative research in (post-)pandemic times and in a climatically changing world.

The research project: studying development alternatives with urban indigenous youths

The methodological reflections presented here build on insights from ongoing funded collaborative research with urban youth groups in Bolivia. At the moment of article submission, we were in the data analysis and output development stages. The project examines the dynamic interactions of urbanisation, youth activism and development alternatives proposed by indigenous youth[1] in Bolivia, a country with a large and diverse indigenous population that is predominantly young and urban (FILAC, 2017). We work with youth co-researchers in distinct urban settings, namely the major cities of El Alto and Santa Cruz, peri-urban areas and rural enclaves surrounding Bolivia's capital city Sucre, and rural indigenous communities situated in the Madidi National Park.

We focus on these places because the UK-based principal investigator as well as Bolivian research collaborators have worked for more than a decade with indigenous youth activists and support organisations based in these settings. As part of this research project, we seek to further enhance and deepen these relationships by deploying a collaborative methodological approach that foregrounds indigenous youth voices and priorities (Camarotta and Fine, 2008; Ocaña and Lopez, 2019). Speaking to debates outlined in the introduction, a key goal is to move beyond habitual research paradigms and contribute to literatures on decolonial and indigenous methodologies through more self-questioning and ethically responsible critiques of knowledge-exchange processes.

To meet this goal, a first step to allow for the establishment of jointly agreed priorities and activities was to embed flexibility into the grant proposal – something we consider recommendable for any project involving collaborative endeavours. This provided the basis for a more process-oriented methodology, enabling us to collaboratively develop and agree decisions around research focus, methods, data analysis and outputs between research coordination team (composed of a UK-based principal investigator and research associate as well as three researchers based in the Bolivian city of La Paz) and youth co-investigators from each case study, following primarily the interests and priorities of the latter. Achieving this meant carefully managing expectations and relations within a team composed of people with distinct positionalities. We responded to these issues through the principle of *olla comun* (in English: common pot), widely employed within indigenous communities in Bolivia and referring to a situated understanding of mutuality and reciprocity whereby any individual effort supports shared collective goals (Dangl, 2019; Rivera Cusicanqui, 1987). The application of this principle was meant to generate a shared terrain and understanding and to transcend the risks of dualisms often characterising 'giving back' and 'capacity building' approaches.

Following the *olla comun* principle, initial negotiations between coordination team and youth co-researchers led to the establishment of four case-study specific research topics, with data and outputs to be generated collaboratively.[2] For the Santa Cruz case study, which involves five female co-researchers affiliated with the organisation Jóvenes Indígenas y Afroboliviano de Santa Cruz (JIASC), we decided to focus on obstacles women face in their trajectory towards becoming indigenous leaders. To investigate these issues, we conducted smartphone video-interviews, focus groups, and oral histories accompanied by photo elicitation, with final results to be presented in a book. In El Alto, where we work with four young Aymara women associated with different youth collectives, we decided to prepare a documentary film on indigenous youth visions in a context of ongoing economic, political and health crisis. In peri-urban Sucre we collaborate with eight young Quechua co-researchers – four male and four female. This group decided to examine the role of youth in territorial autonomy struggles of the Qhara Qhara indigenous nation and to display research results via a multi-media representation including video interviews and film material about their territory, as well as insights from archival analysis and focus group discussions. In the Madidi National Park we work with a group of seven co-researchers – four female and three male – belonging to distinct indigenous nations and affiliated with the organisation Mancomunidad de Comunidades Indígenas de los Ríos Beni, Tuichi y Quiquibey. We focus on displacement and rural-urban migration dynamics in a context of infrastructure expansion and extended urbanisation. Similar to Sucre, this group decided to produce a multi-media representation that brings together insights generated from video interviews and other film materials, and results from participatory appraisal techniques such as problem trees.

Following decisions on research topics and data and output generation, all youth co-researchers received training on relevant research methods, data processing, storage, security and analysis, lone working, safeguarding, and research ethics.[3] In a context of shifting circumstances especially in the light of COVID-19 developments, we viewed safeguarding and risk assessment as continuous process. During fortnightly coordination team meetings and in workshops and laboratories with youth co-researchers we reviewed risks, hazards and mitigation strategies. We also took time for mood checks and

discussion around any distress or harm. To ensure youth co-researcher safety we followed a lone working policy whereby they had to share personal contact information, an emergency contact, and details of where and when research activities take place with the coordination team. Co-researchers were asked to notify members of the coordination team via WhatsApp within one hour after completion of a research activity. This protocol worked effectively without the need for coordination team members to escalate the situation via notification of emergency contacts or reaching out to previously identified local community security representatives.

We have decided to reimburse youth co-investigators for their work. Paying our co-researchers helped to at least partially resolve the challenge of unequal relations between academics like ourselves who are paid full-time to conduct research and indigenous youths for whom engagement in a research project represents just one out of multiple economic activities (see also Head, 2009; Mitlin et al., 2020). But we are also aware that introducing financial resources in contexts of relative scarcity can lead to problems, such as compromising free, informed consent - an important issue to consider in our context where co-researchers also contributed valuable data - and generating new insider-outsider dynamics (Head, 2009). While we recognise that these issues can never fully be resolved, we believe that the following actions helped in managing expectations: To address possible concerns around free, informed consent, we explained to co-investigators (and research participants) that payment was purely for their time, intellectual contribution, travel costs, and resources required to participate in virtual meetings or in-situ activities. Consent was discussed separately. We stressed to both groups that payment does not relate to consent, that they can withdraw at any moment, and that they are free to not respond to specific questions. To manage insider-outsider dynamics, we have been transparent about recruitment choices. As part of research initiation workshops, we collaboratively defined co-researcher tasks and recruitment criteria with case study representatives. Co-researchers were then selected by a panel composed of members of the UK- and Bolivia-based coordination team and case study representatives belonging to indigenous communities. We also emphasised the wider benefits of the project to indigenous youths who could not participate as co-researchers, including opportunities to participate in activities related to knowledge exchanges (e.g., national or international policy events and youth exchange workshops) as well as overall benefits from case study findings for their communities and organisations. These were fundamental aspects that proved key in embedding more horizontal collaboration within our project, addressing power imbalances between team members dispersed across space-time with different positionalities, resources, abilities, and availability to engage in project activities. We will now reflect in detail on the construction of co-presence through synchronous and asynchronous virtual and physical engagements and the implementation of a multimodal collaborative methodology.

Being together in shifting configurations: the case for hybrid engagements

When the research project was first conceived, in conversation between PI, Bolivian research collaborators, and case study representatives, we included plenty of resources

and time for fieldwork – defined as the 'interaction with research in their own setting' (Wood, 2007: 123), or 'deep hanging out' (Rosaldo, 1994; see also Clifford, 1996). Our attempt to share a space-time to advance collaborative efforts was constrained by the COVID-19 pandemic and related quarantine and travel restrictions that came into force in March 2020. Our research, for which we secured funding in December 2019, was due to begin in June 2020. Facing strict lockdowns in the UK and Bolivia and the fact that most of us dealt with other priorities, we decided to ask for the longest start date extension provided by the funder, January 2021. But COVID-19 waves and variants, related travel, and physical distancing restrictions remained in place in one way or the other. Being tied to funder timeframes – 24 months (though we did receive a 4-month no-cost extension) to complete all activities – forced us to iteratively adjust ways of collaboratively engaging with each other even in otherwise difficult circumstances. Fortunately, having flexibility written into our initial grant proposal provided us with the advantage to adapt our methodology to pandemic circumstances. Still, we had to rethink how to establish a shared space-time that connects co-researchers based in different geographical locations and time zones.

In the early stages of the pandemic, when face-to-face interactions remained impossible both in the UK and in Bolivia, we shifted towards virtual interactions such as synchronous monthly whole-team Zoom video calls and asynchronous WhatsApp group chats to facilitate people to engage with each other when they had time. Such virtual interactions are increasingly considered viable alternatives to in-situ meetings as they enable inter-personal exchanges throughout the entire project cycle (O'Connor and Madge, 2017; Marzi, 2021), and provide the opportunity to share verbal and non-verbal cues between collaborators (Howlett, 2021). While virtual interactions helped achieving this to some degree in our project, it soon became evident that we could not substitute in-situ with virtual interactions as access options, resources, and skills required to engage in either of these spaces were not transferable (see also Ash et al., 2018; Kindon et al., 2007). For example, in-situ interactions were mainly mediated by the ability and capacity to access and pay for transport and accommodation. Meanwhile, virtual interactions required access and the capacity to manage gadgets like laptops and smartphones, the internet and related operating infrastructure (e.g., fixed line and wireless bandwidth provision), and mediating applications such as Google Drive, WhatsApp or Zoom. Options to engage with each other in-situ and virtually differed between co-researchers, leading to *limited, differentiated,* and *displaced* patterns of engagement. Below, we unpack these three dimensions (for a summary see Table 1).

Limited engagements

Engaging with project members was limited, both, by time and physical constraints. Time differences between the UK and Bolivia had to be considered in virtual interactions. Asynchronous virtual engagements like WhatsApp group chats effectively addressed this issue, enabling collaborators to communicate in times that worked for them. Meanwhile, synchronous virtual encounters like team meetings or case study laboratories could only occur during specific times (i.e., in the afternoons/evenings in the UK, in the morning/early afternoon in Bolivia), and often on weekends so that project activities would not overlap with other day-to-day priorities.

Table I. Mixed Interactions Within Our Multi-Sited Collaborative Research.

Activities	Main purpose	Format and frequency	People involved
Coordination team meetings	• Discussion of project milestones and day-to-day coordination of activities. • Preparation and evaluation of training, data generation, analysis, and output development.	• Synchronous weekly online Zoom meetings (combined with face-to-face meetings for those team members who share a working space) • Accompanied by WhatsApp group chat and individual chats for asynchronous updates.	UK- and Bolivia-based project coordinators
Team plenary workshops	• Getting to know each other • Definition of mini-project ideas • Logistical updates • Knowledge exchanges and comparative work between case studies	• Synchronous online Zoom meetings (initially monthly since July 2021 every 3 months). • Face-to-face knowledge exchange workshops (in November 2021 after fieldwork; in November/December 2022 to evaluate initial project outputs). • WhatsApp group for asynchronous updates	Everyone in the team
Case study laboratories	• Discussion and evaluation mini-project milestones. • Training on research methods, data analysis techniques, research ethics, safeguarding, and output development • 'On the spot' implementation of new techniques • Allocation of offline tasks.	• Synchronous online Zoom meetings (fortnightly), substituted with face-to-face laboratories after easing of lockdown restrictions • WhatsApp group for asynchronous updates	Case study-specific: Youth co-researchers, members of the coordination team

Table 1. Continued

Activities	Main purpose	Format and frequency	People involved
In-situ fieldwork	• Collaborative data generation in the field (including filming, interviews, focus group, analysis of archival material, photo sessions)	• In case study settings • WhatsApp group for asynchronous discussion, online support, and feedback	Case study youth co-researchers (at times, members of the research coordination team)

Elaborated by the authors.

While local and international travel restrictions limited face-to-face interactions, they did not make them completely impossible. For example, the UK-based PI and research associate could meet in-situ locally to prepare virtual meetings, training materials for collaborative data generation and analysis, and discuss project milestones. This occurred first in outdoor spaces when indoor mixing of households was prohibited and later in university offices after lockdown restrictions eased. Similarly, two out of three of our Bolivian research collaborators work in the same organisation and, after local quarantining ended, they could work on project activities in their office space in La Paz. Easing of local lockdown restrictions also enabled La Paz-based project coordinators and youth co-researchers from nearby El Alto to meet in face-to-face workshops.

Indigenous youth co-researchers – especially those living more closely to each other in dense urban environments like El Alto, Santa Cruz, and Sucre – could meet outside for hangouts and data generation activities when quarantining guidelines were lifted locally but national and international travel restrictions remained in place. At this stage, communication with team members based in different settings in Bolivia and the UK continued via synchronous and asynchronous virtual encounters. Only from autumn 2021, when national and international travel restrictions were eased, was it possible to arrange travel and larger-group meetings connecting team members based in different locations. At this moment, the PI travelled to Bolivia and, together with the Bolivian collaborators, undertook several field visits to all case study settings to facilitate in-situ workshops, collaborative data generation and analysis. Youth co-investigators from all case studies also came together for an in-situ knowledge exchange in Cochabamba at the end of November 2021.

Differentiated engagements

Engagements also differentiated between team members because of variation around personal circumstances and availability. For example, differences can be noted between UK-based PI, a white male researcher without caring responsibilities, and the research associate, a white female mother of two young children. International travel became a possibility for the PI after travel restrictions eased. Meanwhile, the research associate opted against international travel as possible delays linked to getting COVID-19 and having to quarantine abroad could have negative childcare implications, an example

which illustrates the impact of academic work on care responsibilities and how such issues need to be better mitigated within fieldwork-intensive research projects (see Bastia et al., 2022; for the impact of the pandemic on women academics in the UK, see Carruthers Thomas, 2022). In our case, we opted for distributing work tasks based on our location and availability – with the research associate focusing on preparation of training materials and analysis of fieldwork results and the PI- and Bolivia-based team running in situ training sessions and overseeing data generation on the ground – keeping each other updated synchronously through Zoom meetings and asynchronously via WhatsApp.

Our project was also affected by the unequal status of team members operating under different time and resource constraints (see also Mitlin et al., 2020). Unlike PI and research associate who could dedicate most of their working time to project activities, indigenous youth co-researchers had to juggle their engagement with studies and other jobs. Some youth co-researchers struggled in fully engaging in whole team meetings. This may be because they found it challenging to accommodate to a larger group, but also because they listened while working or travelling through the city. It was also sometimes hard for co-investigators to undertake tasks or activities independently between meetings. They were certainly busy with other life responsibilities, but we also had a sense of difficulties in connecting with us and the project from a distance while performing more solitary tasks. Attempts to engage through different virtual and face-to-face interactions as well as payment incentives (see previous section) could only partially resolve this problem, and this confirms that, despite the best efforts to reduce them, inequalities and power imbalances can never be fully flattened. Instead, they require constant attention and problematisation.

Things changed to some degree when we decided to reduce the frequency of plenary workshops while working in a more focused manner with co-researchers from case study groups in fortnightly laboratories conceived as highly practical and hands-on. These laboratories centred on methods and data analysis training and the active 'on the spot' implementation of techniques, including filming or interviewing. Most laboratory exercises required engagement with physical surroundings, be it one's house, street, or neighbourhood, and with off-line tasks completed during and after the lab. As such, the virtual started to lose its digital-only contours. This hybrid lab approach was evaluated positively by youth co-researchers as it allowed them to apply lessons from collaborative discussions according to their own terms. Co-researcher Maria Luisa from the Qhara nation underlined this as follows: 'We tell you what we want to do. In our Zoom meetings we discuss whether this is possible, and you give us some ideas on how to do what we want to do but later, after the labs, it is us who have the control over how to translate the research into action' (personal communication). This testimony underlines how knowledge production processes, often controlled by academics and their institutions (Standing and Taylor, 2016), can shift the scaffolding of activities through hybrid forms of engagement that involve different team members in distinct moments. Our experience suggests this can be achieved through designing collaborative activities that deliberately depart from exercising 'power over' (i.e., one individual/group – normally academics – dominates a process) and, instead, generate 'power through' by building capabilities of all team members, and in our case especially youth co-researchers, to do different tasks in line with their priorities (see also Miller et al., 2006; Mitlin et al., 2020).

   It is important to note that virtual engagements were also constrained by differentiated internet access. While coordination team members had continuous and stable internet connections, most indigenous youth co-researchers relied on mobile phone data packages purchased through project money to participate in online meetings. While this worked to some degree for those based in cities where internet speed is generally good, youths from more remote rural areas struggled finding a stable connection (see below). We tried to address this challenge by sharing meeting recordings on Google Drive and by communicating asynchronously via WhatsApp or phone call, so that those who could not participate could access material when it worked for them.

   Due to these differentiated connection experiences, many team members became frustrated by virtual exchanges and desired a return to in situ encounters. This was especially the case for youth co-investigators who, similar to Bolivia's urban majority (Goldstein, 2016), predominantly work informally and earn their income in crowded public spaces. In line with observations by Bhan et al. (2020), for them 'social distancing as prescribed by northern health protocols is just about impossible'. Unlike our research coordination team which could work in their homes or offices, for our youth co-investigators staying at home during the pandemic would mean losing income to survive. In a context where most of their life continued 'as normal' despite health risks, it was understandable that demands for face-to-face interactions increased. As we had to adhere to research and safety protocols in both countries and in our institutions, in-situ interactions only became a possibility later in the project cycle when COVID-19 restrictions gradually eased, first locally in Bolivia and later internationally.

Displaced from engaging with each other

During parts of the project, some youth co-researchers seemed completely displaced from activities and unable to participate physically or virtually. This was particularly evident for indigenous youths in the Madidi National Park where internet connections are non-existent in rural communities and of fluctuating quality in the nearest town Rurrenabaque, which can be reached via a boat journey taking between 30 minutes and 3 hours depending on one's location. With international tourism coming to a halt during the pandemic, flight routes from Santa Cruz and La Paz to Rurrenabaque have been cancelled for 2021 and good parts of 2022. Rurrenabaque, which represents the main connection to communities in the Madidi National Park, could therefore only be reached by embarking on an arduous long-distance bus journey departing either from La Paz or Trinidad. Our team of research coordinators only had the availability to embark on this journey once and, similarly, our youth co-researchers left their territories once to participate in the project's knowledge exchange workshop. Travel delays caused by traffic jams and getting stuck on rain-covered mud roads, meant that each journey took between 24 and 48 hours. From January 2022, this journey became impossible altogether as, with the rainy season in full swing, roads are frequently blocked and impassable due to floods and landslides. Consequently, this case study became physically inaccessible, and virtual as well as phone interactions remained limited, meaning that youth co-researchers could not connect with nor obtain support from other collaborators.

Multi-modal engagements

In a context of limited, differentiated, and displaced patterns of engagement, project team members hardly came together as a whole but in fragmented and shifting configurations. This had implications for achieving co-presence and constructing a shared sense of the different places which we studied. Here we discuss how we found solutions to this problem. We highlight how we shifted attention towards methods that target multiple senses, so that all collaborators could still engage with each other in some ways and learn from/through different places from a distance and virtually. This led us to deploy a collage of methods that revolved around creative, engaged, and collective co-production of knowledge, and that can be conceived in the frame of multimodal methodologies that entail invention and plurality.

Creative compositions are at the core of multimodal methodologies, combining different media – video, text, still images, audio recordings – to iteratively generate relations with and among participants and collaborators. These compositions engage with multiplicity and complexity, addressing cultural meaning as heterogeneous (Dattatreyan and Marrero-Guillamo, 2019). Multimodal methods creatively engage with the plurality of knowing subjects, and with possibilities entailed in the use of different and complementary, or synergistically organised, methods. The fusion of resources of meaning-making results in 'co-occurring' and 'multi-semiotic' modes, that together produce a 'particular ensemble of meaning-effects' (Dicks et al., 2006: 82–84). While no recording camera can capture the multi-modality of living environments, and any recording technology actually reduces the range of media and modes occurring in the field, as noted by Dicks et al. (2006), the use of multiple methods allows maximum flexibility and responsiveness in facilitating self-expression (Dicks et al., 2011). As highlighted in recent literature and as discussed in our introduction, beyond constituting a more engaging way of working with people, the use of a range of different visual methods and materials was key during the 2 years of the COVID-19 crisis.

Yet with time, it went well beyond this initial use, producing 'inventive engagements' that 'aspire to contribute to enhancing new entities, new relations, new worlds' (Dattatreyan and Marrero-Guillamo, 2019: 221). We found that multi-modal engagements and reflections on techniques, forms, and content, but also roles and relations, contributed to constructing a shared space-time of creation. In allowing the decentring of roles between coordination team members and co-investigators (but also co-directors, co-performers, co-authors) multi-modal engagements became a 'collaborative device' (Dattatreyan and Marrero-Guillamo, 2019: 220), contributing to bridging gaps and different positionings. As our project aimed to deconstruct or at least critically address power dynamics usually involved in research with indigenous peoples, our chosen methods needed to resonate with local narratives, orality, and aesthetics (Willow et al., 2012: 129; see also Kindon, 2016). Below, we address how we applied these multimodal lines of work to elaborate shared representations of specific contexts and/or topics.

Still images and oral narratives

Eliana looked into the camera on her computer and started talking. Contrary to our initial and unspoken fears, she did not shy away from the screen and its flat surface. She wore a colourful

wool jumper that appeared very thick and warm. In the UK, from where we were interviewing her, it was summer; wintertime in Bolivia, but the sun was shining outside her window. Only a few questions every now and then were enough to get the interview going: we talked for more than two hours. Almost without pauses, Eliana went back to her childhood, her first days at a new school in El Alto, when her family moved into the neighbourhood. She then talked about her experience as a student at the local public university, and how her perception of the city changed by inhabiting different areas of the city. Her family's experience of moving from a rural environment to the city, two generations before hers, lay in the background of her narrative. She reflected about the challenges of being young in one of the youngest cities in Latin America, delving into her memories and dreams.

Recent writing on research during pandemic times highlighted how data collection through interviews can be taken forward in a virtual format (see Bampton et al., 2013; Brown, 2018; Janghorban et al., 2014). The focus on words, discourse, and narratives can be repurposed in online interactions, sometimes more effectively in terms of confidence and time. The above story about Eliana illustrates how online interviews proved rich for our project, providing insights for illuminating our understanding of her experience of El Alto, without the need of physical co-presence. Still, looking at Eliana through the screen, listening to her talking, taken away by the warm sound of her voice and the richness of the images her narrative conveys, we were aware that we were missing out much more than if we had been there together.

Responding to this feeling of 'missing out', we opted for two parallel solutions: decentring our roles as researchers and introducing visual methods and materials into our collaborative research process. The first move implied collectively working on interviews and involving our collaborators as interviewers, rather than only as subjects being interviewed. At the beginning, individual virtual interviews as the one with Eliana were proposed to all team members. In this first round the UK-based PI and research associate conducted the interviews. The groups then worked together to elaborate questions that responded to their interests and concerns. Afterwards, the groups engaged in an internal process of reciprocal interviews, in some cases also involving external actors to further explore issues. In the case of our Santa Cruz team, interviews were conducted with other indigenous activists focusing on their personal trajectories as female leaders in urban contexts; the El Alto group interviewed indigenous youth on issues of job precarity, professional development and personal aspirations; youths in the Madidi National Park involved previous generations in the construction of a narrative around territorial issues and migration; youths belonging to the Qhara nation worked with elders in exploring the temporal depth of their political and territorial struggle. While the first round of interviews was held online, subsequent phases led by our youth co-investigators were undertaken face-to-face in the frame of the previously outlined *limited* and *differentiated* collaborative engagements. The UK- and Bolivia-based research coordination team participated in training and follow up sessions after interviews were conducted and shared via Google Drive as audio or video files.

This brings us to our second move. In an effort of gaining a sense of place from a distance, to share produced material within the broader team, and to generate a multi-sensorial and multi-modal engagement capable to dialogically construct meanings, we opted for relying on a range of visual materials (photos, drawings, video). As a way of

engaging in collective discussions, but also storytelling, biographical memories, and personal trajectories, we started working on the connection between visual materials and oral narratives. The visual in particular played a key role in our collaborative work, conveying indigenous youth imaginations and visions. Photographs and images have been extensively employed in oral history as an elicitation method and are becoming increasingly common in digital methods (see Ahlin and Li, 2019; Burgess and Vivienne, 2013; Volpe, 2019). In this regard, one key example comes to mind: responding to their initial choice of working with interviews and photographic portraits, we engaged youth members from Santa Cruz in training sessions, aimed at trying out the methods that they were then going to apply during interviews. One of these sessions focused on developing biographical narratives moving from selected photographs. The exercise brought with it in-depth accounts from childhood, family history, and complex trajectories of leadership and struggle. As each youth co-researcher shared images concerning recent or older activities, the others, often also depicted in this or that photograph, reacted, commented, and participated, rendering the exercise highly dialogical. This shed light on internal mechanisms characterising the group itself, their friendship, mutual engagement and complicity, and the construction of their relationships through time (Figure 1).

All these details, slowly adding to every virtual conversation, zoom meeting or WhatsApp exchange, shaped our understanding of places and relationships we could only partially access – not only because of the distance produced by virtual engagements, but also because of another kind of 'distance', the one produced by our differently situated experiences and positionalities. In this vein, the visual, as object, meaning and process, proved significant throughout the project in relation to the politics of representation.
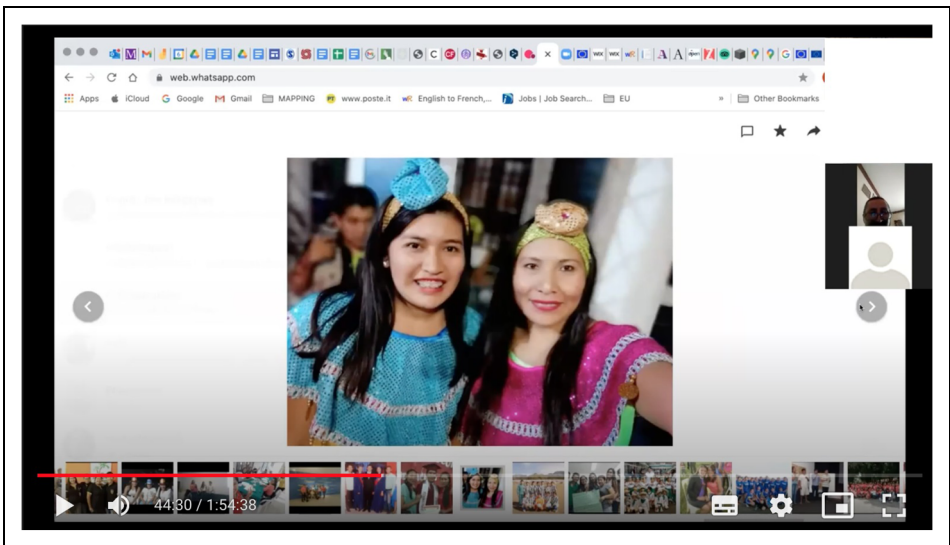

Figure 1. Screenshot of JIASC group during an online session on biographical narrative and photo-elicitation methods. Published with their permission.

Another telling example is the design of the project's website. The page, firstly elaborated by the research coordination team in its basic features, was later presented to the youth teams that worked on the text and images for each section. What initially seemed non-essential to the coordination team became a topic of heated discussion initiated by our youth collaborators: the naming of the exact geographical location of participating indigenous communities (something of particular importance for members of the Qhara Qhara nation whose territorial struggle is a fundamental feature of their identities); the choice of profile photographs in traditional indigenous versus everyday urban clothing (something particularly relevant for the members from Santa Cruz), discussions that also led to the reworking of the text presenting each group. Again, this was an exercise mixing online with offline engagement, resulting in images and texts that are still key for each of the contexts analysed.

Moving images: drawing trajectories through time and space

During an intensive five-day workshop in the Madidi National Park, in the riverbanks of the Beni River, the visual presence of the river felt immediately a leading character (Figure 2). The river carries with it stories and memories. It threatens local indigenous communities with sudden flooding and provides food and transport infrastructures at the same time. It was the river that guided and limited our research in that territory. And it was, again, the river coming back again and again in recorded scenes, from many different angles, an integral part of the landscape and yet impossible to obviate. A more subtle aspect emerged gradually while we worked on the editing of the collected materials: sound. The sound of the forest, when filming b-rolls and landscape clips. Birds and animals, leaves and a quiet breeze, water, the strong or distant noise of boat engines. The sound of someone's voice during interviews echoing the richness of the environment. Moving from that sound, we went back to lengthy discussions with youth collaborators about the ruptures produced by urban migration, nostalgia, and loss.

As already emerged above, visual materials were key for our research, being simultaneously drivers and driven by our virtual and in-situ collaboration. We relied on the visual to bring places, people, and issues of concern alive, and to construct shared narratives across space-time. Key to this was the use of participatory video techniques in both synchronous and asynchronous video production. Using participatory video-making was not a choice we began with, rather constituting the *result* of negotiations and debates about content, methodology, and modalities of knowledge production, involving all team members and prioritising youth interests.

Participatory video-making has been increasingly applied across social sciences to engage in collective, visual, and narrative inquiry (Yap, 2021: 2). Many scholars have underlined how this methodology enables, on the one side, contesting hegemonic systems of knowledge production (see, e.g., Fricker, 2015; Makamba et al., 2019; Mistry and Berardi, 2012; Pain, 2004); and on the other side, fostering social and political transformations, challenging marginalisation, and oppression (Boni and Velasco, 2020). It is the exchange between 'oral and visual modes of engagement' that makes participatory video particularly apt to allowing agency and empowerment of involved participants and local communities in matters of self-representation, and in choices regarding topics, contents, and narrative (Mistry et al., 2016: 2; see also Johansson et al., 1999; Lunch and

Figure 2. The Beni River. Photo by the authors.

Lunch, 2006; Pink, 2009; White, 2003). Starting from sharing the whole process of cre-
ation, script, and montage, participatory video-making has the potential of enabling
change through capacity building and training; by raising awareness on specific issues;
and by influencing policymakers or the general public (see Lemaire and Lunch, 2012;
Plush, 2012; Wheeler, 2009). For these reasons, and probably also for constituting a pos-
sible response to recent stances for the decolonisation of methodologies mentioned above,
participatory video-making is increasingly applied as a viable research tool alongside a
variety of other visual creative tools such as digital storytelling, photovoice, videovoice,
and cellphilming. As noted by Sarah Flicker and Katie MacEntee (2020, 22), these
methods share 'an emphasis on giving participants an opportunity to direct, document,
and reflect on their own narrative(s) using visual technologies', thus amplifying partici-
pants' voices. While this has not been exempted from tensions and critiques (see, e.g.,
Mistry et al., 2016), the creative and relational possibilities entailed in this kind of work,
in and outside the boundaries of a screen, strongly contributed to shaping our exchange
and the shared production of visual representations, as reported in the short vignette above.

   Another telling example relates to a session with the El Alto group around filming
short clips inspired by the environment each of us was immersed in. We gave all team
members, including the research coordinators, half an hour to film with the smartphone
and then send materials in our shared WhatsApp group. When watching, the moving
images, colours, sounds, suddenly enlarged the portion of the world we were able to

share through our screens. While the contrasts between the different filmed environments were at times striking (a back garden in the UK, a street at the outskirts of El Alto, dogs playing in an earthen courtyard, cactuses aligned on an illuminated window in La Paz), a strong sense of engagement through space-time brought us into a fragile familiarity, in which small details of our everyday lives could be visualised and shared.

Later, moving from these virtual labs, some of our collaborators decided to shoot short videos of their environment and day-to-day routine. Eliana, especially, among the El Alto team, shot clips with her phone whilst travelling in the bus to university. Her own elaborations on these videos and her everyday route, and more broadly on the daily lives of many youths in El Alto, shaped by high levels of mobility through public transport, gradually came to constitute the red-line of the documentary the El Alto team is working on.[4] Similarly, the Madidi National Park team currently films scenes of local festivities, dance, and other cultural manifestations to be included in their final product, with the coordination team providing film training.

As such, the labs enabled us to engage more closely with one another, across distances and time zones, but also to work together toward the elaboration of a narrative that reflects indigenous youth concerns. Returning to our reflections opening this section, the choice of multimodality also responded to this call: the need to find representations and media that better responded to the different local contexts forming part of our project, at times giving more space and weight to oral narratives and interviews (Santa Cruz); multimedia representations of trajectories traversing multiple territories and temporalities (Sucre and Madidi National Park); video-documentary and ethno-fiction in the reproduction of local aesthetics and visions (El Alto).

Concluding remarks

Unlike previous research that highlights the benefits of moving to the virtual when in-situ constructions of a shared co-presence becomes undesirable (Howlett, 2021; Marzi, 2021), we offer a more nuanced account. Our reflections on *limited, differentiated*, and *displaced* patterns of engagement lead us to question the existence of a shared co-presence and to depict this phenomenon as more fragmented and not necessarily mutual. While the move to the virtual may be desirable for those with good internet connections, it is not an option for those who remain disconnected. In our case, catering for difference meant that we had to carefully schedule activities and to configure face-to-face and virtual interactions in an iterative way throughout the project. The result is a hybrid approach towards collaborative engagements that treats the virtual and in situ not as supplements but as complementary, recognising advantages and disadvantages of both. What emerged was an assemblage of interactions in which collaborators came together rarely as a team but in different configurations, sometimes synchronously and sometimes asynchronously, sometimes in real space and sometimes virtually. We argue that such a mix of interactions not only serves to undertake collaborative research in pandemic times; it also provides a good illustration of how international teams can continue working together while being in distinct space-times and in a context of a climatically changing world in which we need to reduce our carbon footprint and travel less.

While hybrid interactions seemed to work for most members of our team, it failed to some degree for our Madidi National Park case study which was characterised by a lack of sustained virtual and physical access. This experience speaks again for the need to

depart from one-size fits all approaches around accessing a shared space-time. Instead, we call for future research to adopt more flexible methodological approaches that embrace the diverse priorities, availabilities, power differentials and positionalities of co-researchers as well as the specific contextual factors and shifting circumstances within different research sites. In our case adopting such an approach was possible because we included flexibility around the research process and methods in our funding proposal and within internal project governance. We are aware that many research projects, including those departing from participatory and collaborative traditions, cannot incorporate such levels of flexibility due to funder restrictions. To address this issue, it would be useful for funding bodies to better acknowledge principles of flexibility and adaptation.

Our findings also highlighted advantages of multi-modal methodologies in achieving 'co-presence' while being apart or together in shifting space-time configurations. Beginning as a partial answer to the limits of virtual encounters, this became a key tool to gain a better understanding of contexts we were analysing alongside our collaborators, but also to engage in building more horizontal relationships. The use of different modes of engagement and methods of data generation, ranging from group discussions to drawing exercises and visual techniques, besides allowing for collective elaboration of shared narratives and representations, proved key for us in coming to terms with a pivotal issue in collaborative research: the frictions between the motivation of involved team members and goals and format of standard academic research (Mistry and Berardi, 2012). As highlighted by literature on the topic, there is a need for engaging in the 'open exploration of motivations using an adaptive research approach', going back time and again to the different, complementary, or diverging motives guiding team members into research activities (Mistry et al., 2016: 19; see also Reed and Peters, 2004). Analysing the motivations of everyone involved – in our case UK-based and Bolivia-based academics and youth co-researchers – means a continuous engagement with what concerns who and why. Extending this reflection towards *how* stories, trajectories and concerns should be represented is particularly valuable, especially if one aims to move beyond habitual research paradigms and to foreground the knowledge of often underrepresented voices – in our case, indigenous youths.

There is no simplistic and straightforward connection between collaborative research, the construction of alternative systems of knowledge production, empowerment, or research impact. Instead, it is key to recognise how much is built, negotiated, and addressed within relationships – and depending as much on the *kind* of relationships – developed during the research process. In this article, we have elaborated on our own experience of working across boundaries, trying to capture problems, desires, and future hopes of indigenous youth from a distance and together in different space-time configurations mediated by the pandemic. Moving from this fragile yet precious collaboration, we call for future research to reconfigure its own processes by dealing with the question of how different roles, responsibilities, and positionalities, as well as different types of situated knowledge can be negotiated, rethought, and represented when together and apart.

(Universidad Mayor de San Andres, La Paz) as well as all youth co-researchers involved in the project "Indigenous Development Alternatives: An Urban Youth Perspective from Bolivia" that forms the basis for the reflections shared in this article.

ORCID iDs

Philipp Horn https://orcid.org/0000-0002-4122-4866
Olivia Casagrande https://orcid.org/0000-0003-4680-3805

Notes

1. Aligning with OECD criteria and Bolivia's Youth Bill of Rights, we define youth as people aged between 15 and 30 years. All youth participants fall into this age range. The majority of youth co-researchers also fall within this age range, with all of them aged over 18 years. Six out of 24 co-researchers are above age 30, falling into the age group 31 to 35.
2. As the project progresses, research updates and outputs can be accessed on our project website (https://www.alter-nativas.net/).
3. Some further details on data storage and security protocols as well as data analysis: First, a data management plan (available upon request), which includes details on researcher training, secure data storage, confidentiality and consent, data anonymisation, data archiving, and publication, has been prepared for this project. It was approved as part of an ethics application submitted to and evaluated by the PI's University's ethics committee, aligning with UKRI protocols on data storage and safeguarding. Second, data analysis was a continuous process, involving indigenous co-researchers and research co-ordination team. Multiple techniques were deployed, including critical policy analysis to explore policy constructs related to indigeneity, narrative analysis to decipher how different people approached express their ideas, social network analysis to make sense of multi-scalar and interpersonal indigenous youth networks, and comparison to identify variations in indigenous urbanisation.
4. Initially, but also during successive filming phases, the use of cellphones was key in the El Alto case. However, we would not define this work as 'cellphilming' (see MacEntee et al., 2016) for it was rather a mixture of different filming techniques and materials, including the use of cameras, archive video-material, pre-recorded music and videos from social media.

References

Ahlin T and Li F (2019) From field sites to field events. *Medicine Anthropology Theory* 6(2): 1–24.
Alonso Bejarano C, López Juárez L, Mijangos García M, et al. (2019) *Decolonizing Ethnography. Undocumented Immigrants and New Directions in Social Sciences*. Durham & London: Duke University Press.

Anzaldúa G (1987) *Borderlands/La Frontera: The New Mestiza*. San Francisco: Aunt Lute Books.

Ash J, Kitchin R and Leszczynski A (2018) Digital turn, digital geographies? *Progress in Human Geography* 42(1): 25–43.

Bampton R, Cowton C and Downs Y (2013) The e-interview in qualitative research. In: Sappleton N (ed) *Advancing Research Methods With New Technologies*. Hershey, PA: IGI Global, 329–343.

Bastia T, Hope J, Jenkins K, et al. (2022) Navigating the challenges of fieldwork and childcare: Revisiting 'muddy glee'. *Area* 54: 569–573.

Beaulieu A (2010) Research note: From co-location to co-presence: Shifts in the use of ethnography for the study of knowledge. *Social Studies of Science* 40(3): 453–470.

Bhan G, Caldeira T, Gillespie K, et al. (2020) The pandemic, southern urbanisms and collective life. *Society and Space*, August 3. Available at: https://www.societyandspace.org/articles/the-pandemic-southern-urbanisms-and-collective-life.

Boni A and Velasco D (2020) Epistemic capabilities and epistemic injustice: What is the role of higher education in fostering epistemic contributions of marginalized knowledge producers? *Global Justice: Theory Practice Rhetoric* 12(1): 1–26.

Brown N (2018) Video-conference interviews: Ethical and methodological concerns in the context of health research. *SAGE Research Methods Cases* 2: 1–21.

Burgess J and Vivienne S (2013) The remediation of the personal photograph and the politics of self-representation in digital storytelling. *Journal of Material Culture* 8(3): 279–298.

Camarotta J and Fine M (2008) Participatory action research: A pedagogy for transformational resistance. In: Camarotta J and Fine M (eds) *Revlutionizing Education: Youth Participatory Action Research in Motion*. Abington: Routledge, pp.10–21.

Carruthers Thomas K (2022) *Dear Diary: Equality Implications for Female Academics of Changes to Working Practices in Lockdown and Beyond*. Available at: https://www.deardiaryresearch.co.uk/project/ (accessed: 24 January 2023).

Clifford (1996) Anthropology and/as travel. *Etnofoor* 9(2): 5–15.

Dangl B (2019) *The Five Hundred Year Rebellion: Indigenous Movements and the Decolonization of History in Bolivia*. Chicago, CA: AK Press.

Dattatreyan EG and Marrero-Guillamo I (2019) Introduction: Multimodal anthropology and the politics of invention. *American Anthropologist* 121(1): 220–228.

Dicks B, Lancaster L, Flewitt R, et al. (2011) Multimodal ethnography. Working at the intersection. *Qualitative Research* 11(3): 227–237.

Dicks B, Soyinka B and Coffey A (2006) Multimodal ethnography. *Qualitative Research* 6(1): 77–96.

Fals Borda O (1987) The application of participatory action-research in Latin America. *International Sociology* 2(4): 329–347.

FILAC (2017) *Informe: Perspectiva de Jóvenes Indígenas a la Adopción de la Declaración de Naciones Unidas sobre los Derechos de Los Pueblos Indígenas*. La Paz: Fondo para el Desarrollo de los Pueblos Indígenas de América Latina y el Caribe.

Flicker S and MacEntee K (2020) Digital storytelling as a research method. In: Pauwels L and Mannay D (eds) *The SAGE Handbook of Visual Research Methods* (2nd ed.). London: Sage, 267–281.

Freire P (1970) *Pedagogía del oprimido. Translated by Jorge Mellado*. México, DF: Siglo XXI Editores.

Fricker M (2015) Epistemic contribution as a central human capability. In: Hull G (eds) *The Equal Society: Essays on Equality in Theory and Practice*. Lanham, MD: Lexington Books, 73–90.

Goldstein DM (2016) *Owners of the Sidewalk: Security and Survival in the Informal City*. Durham, NC: Duke University Press.

Harrison FV (1991) *Decolonizing Anthropology: Moving Further toward an Anthropology for Liberation*. Washington, DC: Association of Black Anthropologists, AAA.

Head E (2009) The ethics and implications of paying participants in qualitative research. *International Journal of Social Research Methodology* 12(4): 335–344.

Howlett M (2021) Looking at the 'field' through a Zoom lens: Methodological reflections on conducting online research during a global pandemic. *Qualitative Research* 22(3): 387–402.

Janghorban R, Latifnejad Roudsari R and Taghipour A (2014) Skype interviewing: The new generation of online synchronous interview in qualitative research. *International Journal of Qualitative Studies on Health and Well-Being* 15(9): 24152.

Johansson L, Knippel V, de Waal D, et al. (1999) Questions and answers about participatory video. *Forests, Trees and People Newsletter* 40/41: 35–40.

Kennemore A and Postero N (2020) Collaborative ethnographic methods: Dismantling the 'anthropological broom closet'? *Latin American and Caribbean Ethnic Studies* 16(1): 1–24.

Kindon S (2016) Participatory video as a feminist practice of looking: 'take two!'. *Area* 48(4): 496–503.

Kindon S, Pain R and Kesby M (2007) Participatory action research: Origins, approaches and methods. In: Kindon S, Pain R and Kesby M (eds) *Participatory Action Research Approaches and Methods: Connecting People, Participation and Place*. Abingdon: Routledge, 9–18.

Kovach M (2009) *Indigenous Methodologies: Characteristics, Conversations, and Contexts*. Toronto: University of Toronto Press.

Lemaire I and Lunch C (2012) Using participatory video in monitoring and evaluation. In: Milne EJ, Mitchell C and de Lange N (eds) *The Handbook of Participatory Video*. Lanham, MD: Video Altamira Press, 303–317.

Lunch N and Lunch C (2006) *Insights into Participatory Video: A Handbook for the Field*. Oxford: InsightShare.

MacEntee K, Burkholder C and Schwab-Cartas J (2016) *What's a Cellphilm? Integrating Mobile Phone Technology into Participatory Visual Research and Activism*. Rotterdam: Sense Publishers.

Makamba P, Matewa C, van Dijk J, et al. (2019) Participatory video, giving voice and respect to the epistemic sovereignty of communities in Rural Zimbabwe. In: Nielsen P and Kimaro H (eds), *Information and Communication Technologies for Development. Strengthening Southern-Driven Cooperation as a Catalyst for ICT4D. IFIP Advances in Information and Communication Technology, vol. 552*. Springer.

Marzi S (2021) Participatory video from a distance: Co-producing knowledge during the COVID-19 pandemic using smartphones. *Qualitative Research* (Online First).

Massey D (1994) *Space, Place and Gender*. Minneapolis: University of Minnesota Press.

Mignolo W (2002) The geopolitics of knowledge and the colonial difference. *South Atlantic Quarterly* 101(1): 57–96.

Miller VL, VeneKlasen L, Reilly M, et al. (2006) *Making Change Happen: Power, 3*. Washington, DC: Just Associates. [Available at: https://justassociates.org/wp-content/uploads/2020/08/mch3_2011_final_0.pdf].

Mistry J and Berardi A (2012) The challenges and opportunities of participatory video in geographical research: Exploring collaboration with indigenous communities in the North Rupununi, Guyana. *Area* 44: 110–116.

Mistry J, Bignante E and Berardi A (2016) Why are we doing it? Exploring participant motivations within a participatory video project. *Area* 48(4): 412–418.

Mitlin D, Bennett J, King S, et al. (2020) Knowledge matters: The potential contribution of the coproduction of research. *The European Journal of Development Research* 32(3): 544–559.

Mollerup NG (2017) 'Being there', phone in hand: Thick presence and ethnographic fieldwork with media. In: *The EASA Media Anthropology Network's 58th e-Seminar*, February 2017.

O'Connor H and Madge C (2017) Online interviewing. In: Fielding NG, Lee RM and Blank G (eds) *The SAGE Handbook of Online Research Methods* (2nd ed.). London: Sage, 416–434.

Ortiz Ocaña A and Arias López MI (2019) Hacer decolonial: Desobedecer a la metodología de investigación. *Hallazgos* 16(31): 147–166.

Pain R (2004) Social geography: Participatory research. *Progress in Human Geography* 28(5): 652–663.

Pink S (2009) *Doing Sensory Ethnography*. London: Sage.

Plush T (2012) Fostering social change through participatory video: A conceptual framework knowledge. In: Milne E J, Mitchell C and de Lange N (eds) *The Handbook of Participatory Video*. Lanham, MD: Altamira Press, 67–84.

Quijano A (2007) Coloniality and modernity/rationality. *Cultural Studies* 21(2–3): 168–178.

Rappaport J (2017) Rethinking the meaning of research in collaborative relationships. *Collaborative Anthropologies* 9(1–2): 1–31.

Reed MG and Peters EJ (2004) Using an ecological metaphor to build adaptive and resilient research practices. *ACME* 3(1): 18–40.

Rivera Cusicanqui S (1987) El potencial epistemológico y teórico de la historia oral: De la lógica instrumental a la descolonización de la historia. *Revista Temas Sociales* 11: 49–64.

Rivera Cusicanqui S (2012) Ch'ixinakax utxiwa: A reflection on the practices and discourses of decolonization. *The South Atlantic Quarterly* 111(1): 95–109.

Rosaldo R (1994) Anthropology and 'the Field'. In: *Conference held at Stanford University and UC Santa Cruz*. February, 18–19.

Sjöberg J (2018) An epistemology of play: Provocation, pleasure, participation and performance in ethnographic fieldwork and film-making. *Anthropologica* 60(2): 403–412.

Smith TL (2012) *Decolonizing Methodologies. Research and Indigenous People*. London: Zed Books.

Standing H and Taylor P (2016) Whose knowledge counts? Development studies institutions and power relations in a globalised world. *IDS Bulletin* 47: 169–178.

Tripp D (2005) Action research: A methodological introduction. *Educacao e Pesquisa* 31: 443–466.

Volpe C (2019) Digital diaries: New uses of PhotoVoice in participatory research with young people. *Children's Geographies* 17(3): 361–370.

Wheeler J (2009) The life that we don't want: Using participatory video in researching violence. *IDS Bulletin* 40(3): 10–18.

White S (2003) Autoethnography: An appropriate methodology? *Qualitative Research Journal* 3(2): 22–32.

Willow AC, Harper SL, Edge VL, et al. (2012) Storytelling in a digital age: Digital storytelling as an emerging narrative method for preserving and promoting indigenous oral wisdom. *Qualitative Research* 13(2): 127–147.

Wood E (2007) Field research. In: Boix C and Stokes S (eds) *The Oxford Handbook of Comparative Politics*. Oxford: Oxford University Press, 123–146.

Yap C (2021) Making the city through participatory video: Implications for urban geography. *Urban Geography* 43(9): 1394–1414.

Author biographies

Philipp Horn is Senior Lecturer in the Department of Urban Studies and Planning at the University of Sheffield.

Olivia Casagrande is a Postdoctoral Research Associate in the Department of Urban Studies and Planning at the University of Sheffield.