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RESEARCH ARTICLE (PEER-REVIEWED)

Where's the Love? Recentring Indigenous and Feminist Ethics of Care for Engaged Climate Research

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Abstract

Across a range of environmental change and crisis-driven research fields, including conservation, climate change and sustainability studies, the rhetoric of participatory and engaged research has become somewhat of a normative and mainstream mantra. Aligning with cautionary tales of participatory approaches, this article suggests that, all too often, 'engaged' research is taken up uncritically and without *care*, often by pragmatist, post-positivist and neoliberal action-oriented researchers, for whom the *radical and relational* practice of PAR is paradigmatically (ontologically, epistemologically and/or axiologically) incommensurable. Resisting depoliticised and rationalist interpretations of participatory methodologies, I strive in this article to hold space for the political, relational and ethical dimensions of collaboration and engagement.

Drawing on four years of collaborative ethnographic climate research in the Peruvian Andes *with* campesinos of Quilcayhuanca, I argue that resituating Participatory Action Research (PAR) within a feminist and indigenous *ethics of care* more fully aligns with the radical participatory praxis for culturally appropriate transformation and the liberation of oppressed groups. Thus, I do not abandon the participatory methodology altogether, rather this article provides a hopeful reworking of the participatory methodology and, specifically, participatory and community-based adaptation (CBA) practices, in terms of a feminist and indigenous praxis of *love-care-response*. In so doing, I strive to reclaim the more radical feminist and Indigenous elements – the affective, relational and political origins of collaborative knowledge production – and rethink research in the rupture of climate crises, *relationally*. The ethico-political frictions and tensions inherent in engaged climate scholarship are drawn into sharp relief, and deep reflection on the responsibility researchers take on when asking questions in spaces and times of ecological loss, trauma and grief is offered.

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Keywords

Care; Relationality; Knowledge Production; Participatory Action Research; Climate Adaptation; Peru

Introduction

'It makes us sad when you ask us these questions.' Yovana's comment stopped me from the next bite of my breakfast. Her face was a mixture of grief and nostalgia. She didn't need to say anything more. I knew then that my work and my constant informal interviewing and asking about the loss of the glaciers, the loss of the waters, the loss of the frogs, fish and harvests had imposed upon the people who had invited me into their community a painful exercise in knowledge co-production. It was at this moment in the Peruvian Andes when Yovana, a dear friend and community collaborator on this participatory research project, called my attention to the affective and relational dimensions of my research. Four years into my doctoral research and my fourth field visit to a single highland valley in the Peruvian Andes – Quebrada Quilcayhuanca – I finally began to *feel* the embodied gravity of the ecological loss and notice the subtle signs of communal love and communal grief in the wake of radical environmental change.

The loss of kin relations with humans and non-humans is expected to be amplified in the coming years, decades and centuries under extractive terracide and colonial-capitalist climatic change (even under scenarios where there is ambitious climate action). When researchers show up in communities under climate or environmental distress, 'inclusively' asking the people about environmental change, they are directly asking about loss, and in some cases loss as great as losing a member of the family. The loss of kin relations; diminished sharing and resource exchange; loss of traditional medicine; and the loss of human and more than human relatives, social cohesion, reciprocity and mutual aid leave climate impacted communities with feelings of 'dislocation and uncertainty that pervades their everyday lives' (Peterson & Maldonado 2016, p. 343). Given the affective and material dimensions of climate impacts and social vulnerability, in this article, I draw into question the ethico-political frictions and tensions inherent in *engaged* climate scholarship. In particular, I ask: *what responsibility does a researcher take on when asking research questions in spaces and times of ecological loss, trauma and grief? What knowledge is generated from these encounters and who does this knowledge serve?*

Part of the impetus for this article stems from noticing that research funding and programmatic incentives are increasingly directed towards knowledge production on crises and complex socio-environmental changes – e.g. the climate crisis, the crisis of mass extinction, the COVID-19 crisis and the crisis of racial inequality, among others – using collaborative and engaged research approaches (Brondizio et al. 2016; Norström et al. 2020). However, critical feminist and Indigenous scholars highlight the lack of attention given to the *relational* and *ethical* dimensions of these research practices, which are too often ambiguously 'engaged' via neocolonial and extractive (masculinist) knowledge-making practices (Coombes et al. 2014; Kanngieser & Todd 2020; TallBear 2014; Tsing 2015). Throughout, I explore what it means to do research under the banner of 'participatory', 'collaborative', 'inclusive' and 'engaged' modalities in the rupture of a crisis; what does it mean to produce knowledge in situations of suffering and loss; and what is the responsibility of the universities and researchers who make inquiries and interventions in these spaces? These questions summon up the ethical and relational dimensions of engaged research, not only for research carried out today, but these questions will become increasingly salient in the uncertain and troubling future that a certain kind of humanity has set in motion. This dystopic present and future is characterised by untold socio-environmental change, disasters and increasing inequality, as well as, paradoxically, 'opportunity zones' and new 'research frontiers' that I argue are structurally designed to benefit an already privileged social class.

Beginning with the view that power and the political are woven throughout the life of research, I suggest that research conducted *about*, and even *with*, so-called 'vulnerable' communities involves a complex

negotiation of power that has historically proven to be prone to power imbalances and the wrong use of power (Tuhiwai Smith 2005). In this article, I draw upon my own attempt at collaborative climate ethnography over a four-year timespan with campesinos (small-scale farmers and agropastoralists) of the Peruvian Andes. Reflecting on this research program in the wake of devastating climate impacts of rapid glacier melt and ecological devastation and loss, I hope to elucidate the relational, ethical and political dimensions of *what it means to be an engaged researcher in the rupture of crisis*. By storytelling and reflecting on the relational and affective moments of my collaborative research project, such as the dialogue with Yovana at the beginning of this article, I intend to illuminate the power relations that are inherent in participatory and engaged research. I argue that collaborative and participatory methodologies taken-up uncritically remain extractive and neo-colonial, even when mobilised through Liberalism's language of 'inclusion' and 'justice'. Despite this critique, I do not abandon the participatory methodology altogether, but provide here a hopeful reworking of the participatory action research (PAR) framework in terms of a feminist and Indigenous *praxis of love-care-response*. In so doing, I strive to reclaim PAR for engaged climate research from all too uncritical and rationalist (masculine) interpretations imbued with notions of 'objectivity', 'concern' and 'individualism' – and also reclaim the more radical feminist and Indigenous elements, the affective, relational and ethico-political origins of this participatory research tradition.

New Ways of Knowing are Needed for Just Climate Action

Participatory action research (PAR) has long stood as a methodology for taking colonial oppression, power and relationships seriously in the production of knowledge. As a counter-methodology, PAR is a mode of knowledge-making that resists colonial research and the tradition of positivism, which values knowledge only after what is 'knowable' has been divorced from the relational, political, emotional and spiritual context in which it is embedded/embodied. The architects of PAR fiercely reject the epistemic violence and colonisation produced by a universalising scientific superiority that asserts Western ways of knowing as the best way of knowing. Latin American PAR is perhaps the most radical and transformative branch of participatory inquiry and is attributed to the thinking of Fals-Borda & Rahman 1991, Orlando Fals-Borda 1988 and Paolo Freire 1970, among other Latin American scholars. In this tradition, Fals-Borda explains that the purpose of PAR is clear – '*to create knowledge upon which to construct power for the oppressed in their struggle for autonomy and self-determination*' (Fals-Borda, 1988).

The autonomy and self-determination that Fals-Borda sought to address through a liberatory PAR praxis remains an ongoing struggle for local and Indigenous communities under climate duress. Colonialism and intensified globalisation, coupled with the post-political imaginary of climate change urgency (Swyngedouw 2013), usher in new kinds of (neo)colonial land and resource grabs in the emerging climate frontier space (Benjaminsen & Bryceson 2012; Fairhead, Leach & Scoones 2012). Inherent in the political project of resilient world making (formal politics, policy and development) remains an unfettered commitment to Western knowledge production and politics as usual, where market-based and technoscientific climate solutions rooted in Enlightenment rationalism remain privileged and desirable in the climate knowledge–policy interface (Nightingale et al. 2020). The conventional alliance between colonial knowledge production and climate resilient worldmaking (planning and policy) is increasingly called into question by climate justice scholars and activists (Haverkamp 2017; McGreavy et al. 2021; Nightingale et al. 2020; Whyte et al. 2016; Yeh 2016). For these scholars, just adaptation to climate change is not myopically about addressing carbon budgets and biophysical climate impacts, but requires 'changing hegemonic systems of knowledge production and opening-up of deliberative spaces for defining possible futures' (Nightingale et al. 2020, p. 344). Here, just resilient worlding requires renewed commitments to multiple knowledges and plural worlds (ontologies), which returns us to PAR's original intention to resist imperial processes of knowing and worlding, and to take up the peoples' struggle for sovereignty and self-determination.

Rejecting neocolonial climate adaptation and technoscientific decision-making from above, participatory research approaches under new names, such as community-based adaptation (CBA), have (re)emerged as alternative modes of collaborative knowledge production that operate *with* and *for* climate-afflicted communities (Forsyth 2013; Schipper et al. 2014). A critical approach to participatory and collaborative adaptation, like a critical PAR praxis, is far more than a mechanism for participation and inclusion. It is a mechanism for social transformation and depends upon a *relational* way, as opposed to a *rational* way, of knowing and meaning-making with the aim of overturning entrenched social, political and economic inequalities and systems of oppression. However, as participatory research modalities have rapidly increased in popularity, they themselves have become (paradoxically) hegemonically enshrined as 'best practice' for doing 'engaged' research in the context of environmental change: climate change and disasters (Button & Peterson 2009; Crate 2011; Roncoli 2006; Schipper et al. 2014); conservation and biodiversity loss (Berkes 2007; Brosius et al. 2005; Roncoli 2006); and development and sustainability planning (Brondizio et al. 2016; Chambers 1994; McGreavy et al. 2021; Norström et al. 2020). Noticing this trend, Geographer David Demeritt states that '[f]rom natural resource management to medicine, the rhetoric of public engagement, participation and dialogue has become something of a mantra across a wide sweep of policy fields that were once the exclusive preserve of scientific experts' (Demeritt 2015, p. 2).

Through the popular institutionalisation of PAR, the liberatory, participatory and dialogic praxis for environmental justice is made palatable and complicit in dominant worldviews and values, and thus devoid of the potential for decolonial and transformational ends (Nightingale et al. 2020). A co-opted PAR asserts a more *rational* agenda through instrumentalist and disembodied (objective) reasoning that seeks to employ PAR for the purpose of better science (i.e. increasing knowledge production, scientific accuracy) and for obtaining consensus and community buy-in for expert-led interventions – all things that do nothing to redress longstanding power imbalances and social inequalities. After several decades of critical participatory inquiry (Cooke & Kothari 2001; Lindroth & Sinevaara-Niskanen 2014; Mosse 1994; Nadasdy 2003, 2021; Willow 2015), it can be argued that, too often, participatory and collaborative research is taken up *uncritically* and without *care*, often by pragmatist, post-positivist and neoliberal research programs, for which the *radical and relational* practice of liberating methodologies is paradigmatically incommensurable.

Recentring Feminist and Indigenous Ethics of Care in Climate Knowledge-Action

The institutionalisation of PAR and its methodological variants in environmental knowledge production and decision-making is most often employed from a rationalist (masculine and ethnocentric) moral philosophy – an *ethics of justice and concern* anchored in Western onto-epistemologies. Feminist thinkers are particularly helpful here in understating how rationalism's dichotomy between reason (rationality) and emotion, in which the former is ascribed to a masculine (public) domain and the latter to the private, domestic and feminine sphere (Plumwood 1991) stymies the realisation of transformative environmental justice goals (e.g. healing, liberation, decolonisation).

A rationalist (masculine) praxis of PAR centres around Liberalism's rights-based discourses, and specifically on achieving procedural equity through the upholding of fundamental democratic rights of participation (Demeritt 2015). Yet, as feminist critiques of Liberalism suggest, a rights-based justice is *cognitive* and universal: it is the 'rational' and normative discourse that appeals to NGOs, policy worlds and donors in a secularised knowledge economy that demands a *politics of reason, not emotion*. Feminist thinkers have urged us to rethink individualistic rights-based justice after locating it as part of the 'prestige of the public sphere and the masculine [domain]' (Plumwood 1991, pp. 8–9). For Plumwood, a more promising approach, and one that is much more in line with the current directions in feminism, 'would be to remove

rights from the centre of the moral stage and pay more attention to some other, less dualistic concepts such as respect, sympathy, care, concern, compassion, gratitude, friendship and responsibility'.

A feminist and Indigenous approach to engaged climate research centres around a relational axis. This means bringing the *heart*, *feelings* and *senses* back into the research praxis, not separate from reason but *with* mind/reason. Arturo Escobar (2016; 2020), drawing upon Fals-Borda, has referred to this as a praxis of *sentipensar*, or thinking-feeling, *with* the Earth, and here I also mean a thinking-feeling *with* human and nonhuman others. Indigenous and non-Indigenous scholars Anja Kanngieser and Zoe Todd refer to the relational, attentive, thinking–feeling methodology with human and more than human kin – which acknowledges the radical interconnectedness between 'land and ocean, people, plants, animals and spiritual worlds' – as 'kin-studies', and not as 'case-studies' (Kanngieser & Todd 2020, p. 388). For relational knowledge making in Indigenous worlds, Indigenous scholars call upon engaged researchers to 'bring their whole selves' to research (Montgomery, personal communication, 27 January 2021). Engaging in holistic meaning-making involves using the heart (emotions), mind (intellect), body (physical action) and spirit (spirituality), as well as recognising the relationships of these realms to oneself, family, community, land, environment and wider society (Archibald 2008, p. 4). As colonial domination and worldmaking violently disrupt human relationships with the environment (Whyte 2018), a relational approach to climate change knowledge-action opens up to possibilities of decolonising, restoring and healing human and more-than-human relations. Drawing participatory methodologies into an intimate conversation with feminist and Indigenous ethics of care allows me to think through an alternative framework to the rationalist deployment of collaborative and participatory research, driven by a cognitive ethics of (masculine) concern and justice, and to recentre the relationality of engagement.

Taking Root in a Love-Care-Response Framework

The Spanish word for 'care' is a fuller approximation of the care that I am trying to invoke here. *Cariño*, as Peruvian Anthropologist Marisol de la Cadena reminded me (personal communication 2020), is a 'love-care-response', for which there is no English synonym. Taking cariño as my conceptual framework, I use it here to think through the praxis of engaged research. Specifically, to ask what engaged research might become if it is *de-linked* from colonial, rationalist and masculine orientations of concern-rights-justice and *re-linked* to Indigenous and feminist moral orderings of love-care-response. In what follows, I strive to breathe life into the love-care-response framework by animating it with my own experiences of undertaking collaborative climate research *with* campesinos of the Peruvian Andes.

The collaborative climate research reflected on in this article is the participatory ethnographic work of my doctoral studies. From June 2015 to April 2018, I worked *with* campesinos of the Peruvian Cordillera Blanca mountains, specifically 250 agro-pastoralists of Quebrada Quilcayhuanca, on issues of climate impact, adaptation and resilience. Engaged climate ethnography in the Andes meant co-researching *with* campesinos and at times included work with government officials, NGOs and other actors related to climate adaptation in Qulicayhuanca. Twenty-one semi-structured interviews, 17 oral histories, 2 participatory adaptation workshops and 35 questionnaire responses were gathered (for more on methodology see Haverkamp 2021).

The struggle with climate impacts in Quilcayhuanca is both cognitively known and physically embodied. Quilcayhuanca, a historically stable, glacier-fed waterway, cuts through the hybrid grassland–wetland valley floor in an alpine mountain landscape that is vast and expansive. The Cordillera Blanca (White Mountain range) is a glacierscape, home to over 6000 tropical glaciers, which have stood as the water towers of Peru for millennia (Carey 2010). Today, Quilcayhuanca River no longer carries the cool blue–green colour of alpine glacier melt, but rather runs a copper-reddish colour. This aesthetic change serves as a dystopic daily

symbol of the sweeping ecological changes and climate impacts facing campesinos and their ancestral lifeways. The reddish colour of Quilcayhuanca River is the result of rapid glacier melt, which has triggered unprecedented mineral leaching of the newly thawed and exposed bedrock. The increased loading of heavy metal minerals into Quilcayhuanca from glacier melt has brought the river to a pH of 3 in some places, a level so acidic that it is not suitable for animal or human consumption, nor can it sustain the forms of life(ways) that thrived in this landscape throughout the Holocene.

> **Quilcayhuanca was clean before. It wasn't contaminated; you could drink it. My grandparents, my parents used to drink it … But in these last years it has changed a fair amount. Some ten years ago it became contaminated I believe, because there used to be trout too, there were in that river that descended Quilcayhuanca. In the past, I was still going to fish. [But] Now there simply aren't any left due to the minerals, because a lot of iron – rust I believe in Quilcayhuanca… *Yes, this has killed everything*. (Hernando Ucharima, Interview 16 January 2018)**

To show up and ask questions in Quilcayhuanca about environmental change is to incur a responsibility for radical transformation, loss, death, killings, grief, and even hopeless hope (Haverkamp 2021). In what follows, I reflect on what it is to navigate this research terrain through a love-care-response approach.

LOVE

My research training in Western knowledge centres failed to prepare me for doing *relational research*. Despite graduate courses in qualitative and mixed methods, the completion of a two-year National Science Foundation Integrative Graduate Education and Research Traineeship (NSF-IGERT) and summer research workshops that characterised my graduate education in Geography and Anthropology, I was not prepared for navigating the relational dimensions of knowledge (co)production for climate adaptation. Instead, my approach to research was disciplined, according to Eurocentric and masculine worldviews and ways of knowing. Accordingly, emotions, subjectivities and feelings were to have no place in rigorous and objective Scientific knowledge production.

For me, the process of unlearning the received wisdoms of masculinist and positivist training and re-learning the importance of affective and relational matters (feelings, emotions and sentient connections) was made possible through ethnographic engagements with Andean campesinos with whom I collaborated. In particular, learning the role of love in the context of engaged climate research came from the informal, everyday teachings of campesinos such as Sr Pablo Pachari, an Andean campesino and President of the Users' Association of Quebrada Quilcayhuanca. Pablo and I co-laboured to create a safe and generative space for campesino-led, justice-centred climate dialogues through the organisation of participatory adaptation workshops.

An ongoing history of extractive and (neo)colonial relations characterises the Andean highland landscape today. Campesinos of Quebrada Quilcayhuanca experience a racialised and marginalised position in environmental governance and have resisted and negotiated engagements with the state in various ways since the 16th century Spanish Inquisition (de la Cadena 1998; Rasmussen 2015). As the climate crisis unfolds within this socio-political context, state-led and technoscientific adaptation solutions continue to impose patriarchal, rationalist and colonial ways of knowing and being on the campesinos of Quilcayhuanca – even when its through the language of 'resilience' and 'adaptation' (Haverkamp 2021; Carey 2010; Rasmussen 2015).

In particular, the state-led adaptation plan – an ecosystem-based adaptation (EbA) design – continues the centuries-old colonisng discourses and visions in Quilcayhuanca. Through the proposed EbA project, developed by a transnational network of scientists, NGOs, state agencies and international aid donors, campesinos' agrarian ways of life are imagined as that which must be 'adapted' and 'transformed' so as to

avoid dangerous climate change. Colonial adaptation in Quilcayhuanca does not hold the global capitalist economy accountable as the primary threat to highland livability despite the climate-induced acidification of the glacier waters, but rather leverages rationalist and racialised Malthusian narratives of 'overgrazing' to frame campesinos and their agropastoralist way of life as the greatest threat to a livable future under rapid glacier melt in Quilcayhuanca (Haverkamp 2021). The EbA project thus incentivises campesinos to move away from agro-pastoral activities in their homelands in the name of adaptation, without providing any viable options for their indigenous and ancestral ways of life to survive and flourish. It is by way of the neocolonial and rationalist adaptation design that the erasure of Quechua indigeneity persists in the 21st century and campesinos may be dispossessed of their agro-pastoralist livelihoods and ancestral homelands. Through an ad-hoc approach to implementing the EbA project, state agencies and NGOs impose the green EbA plan through various governance strategies, including coercive grassland management and neoliberal 'voluntary' payment for ecosystem services schemes. Regardless of the coercive or neoliberal governance approach taken, the overall goal of the EbA project remains consistently fixed on the erasure of campesinos and their 'irrational' way of life from Quilcayhuanca.

In this political context, Pablo and I began to co-organise participatory workshops for campesinos to discuss their own climate change experiences, knowledges and adaptation visions in a dialogic fashion. I understood this work to be grassroots and in resistance to managerial (albeit 'collaborative') and technocratic approaches. Community-led adaptation that resisted neocolonial and technoscientific adaptation planning seemed an appropriate counter-approach. Yet, Pablo challenged my own Western dualistic notions of 'us/other' and 'local/global' when he decided to create a participatory workshop that was porous and open to 'those who care for Quilcayhuanca' (Fieldnotes, 22 April 2018) – including historically antagonistic State agencies. Instead of reinscribing an 'us/other' (nos/otros) colonial binary, and leading a locally exclusive grassroots adaptation planning process, Pablo's instruction to gather 'caring' participants together for collaborative adaptation was a way of stakeholder mapping that ruptured my own Western notions of stakeholders fitting neatly into separate spatial and political scales. Pablo destabilised the discursive boundaries that I had drawn around those who 'belonged' to Quilcayhuanca and those who did not (including my own unease with my researcher identity as another Western researcher in the so-called 'Global South'). My geographic imaginary of Quilcayhuanca was predicated on colonial constructs of land rights and maintained notions of 'insiders' and 'outsiders' according to land claims, property rights and colonially imposed borders. Yet instead, affinity networks connected by relations of love-care are more akin to Pablo's inclusive and anti-colonial practice. Accordingly, Quilcayhuanca itself was not overly determined as indigenous space, campesinos' land, or property of the State (i.e. National Park Huascarán), but rather was conceptualised as what feminist geographers call *relational space* (Massey 2004). While planning the workshop, Pablo was asking me to ontologically shift to understand those who belong in conversation with and for Quilcayhuanca through a relational, not just a historical or critical, frame. In this way, Quilcayhuanca is not static, fixed or essentialised space, nor is it historically and structurally determined, but is processual, dynamic, agential, and always in-becoming through the relationships, partial-connections and interconnections that compose it. Pablo's relational ontology necessitated transgressing the human/non-human, local/global, past/present and indigenous/modern binaries inherent in my own rationalist assumptions of procedural justice and notions of who belonged at the adaptation decision-making table.

Pablo's ethico-political commitment to multiple belongings, respectful interdependence, mutual aid and land stewardship demonstrated – and evoked in me – a politics of love for place, for people and for creation. This, I argue, is the foundation for ethical participatory research *with* communities in crisis. This ethico-political praxis of love is the necessary foundation for realising climate actions that aim for just transitions, just transformation, and community healing. Love, as storied through these moments of co-labouring with Pablo, is not sentimental or romanticised; rather, it is understood as a relational force of inclusion politics (Tsing 2010). Like gravity, which draws things into relation with one another – love is a force that gathers

participants together. When love is the propensity that gathers, unlikely alliances are able to be brought into relations of co-learning, co-labouring and co-belonging *capaciously*. By this I mean love is the force that enables a relational politics, whereby relations across human, and more than human, differences exceed the 'self/other' border thinking imposed by dualistic reason and recognise radical *inter*-dependence and multiple belongings. From a politics of love, the *seed of separateness* cannot manifest into 'nature/culture', 'self'/'other', 'insider'/'outsider' dualities. Instead, love disrupts this colonial frontier space and dissolves the apartheid of dualistic onto-epistemologies.

Love in participatory research is not new. Early PAR practitioners also recognised the importance of loving relations in knowledge production for emancipatory social change. According to Orlando Fals Borda (1991), *there is no revolution in which the oppressed can be liberated without love*. The critical pedagogies of Paulo Freire similarly argue that research and a pedagogical praxis encoded with love is the only praxis that can be transformative (2005 [1970]). For Freire, the liberation of the oppressed comes through dialogue. *'Love is at the same time the foundation of dialogue and dialogue itself. It is thus necessarily the task of responsible Subjects and cannot exist in a relation of domination. [...] love is commitment to others. No matter where the oppressed are found, the act of love is commitment to their cause – the cause of liberation*' (Freire 2005 [1970], p. 89*)*. Freire's dialogic praxis is increasingly called for in climate adaptation and crises research (Haverkamp 2021; Fazey et al. 2021; McGreavy et al. 2021; Norström et al. 2020). Just as climate change adaptation necessitates transformative social change, liberation theory instructs that just and equitable transformation necessitates a praxis of love.

In Quilcayhuanca, Pablo graciously navigated contentious encounters in the 'climate frontier' space with those who had historically been hostile and oppressive to agro-pastoralists' way of life. His approach to working across campesino, state and NGO worlds was relational, loving and inclusive. Yet, I do not want to romanticise this approach, or claim it as a panacea for 'safe' collaboration. For when the participatory workshop occurred and State and NGO participants came to the table with the campesinos of Quilcayhuanca, the encounter was neither loving nor dialogic, an experience I chronicled elsewhere (Haverkamp 2021).

Pablo's conviction in and advancement of collaborative and inclusive adaptation planning, even with those most antagonistic to campesinos, I believe was a courageous act of love – love for his people, for his lands and for all his relations (including non-human, ancestral and multi-generational). However, not all actors came to the workshop from this ethico-political space and our intention for dialogic praxis, in which all were able to speak and all were able to listen, was not realised. Instead, the workshop became another hostile neocolonial experience, in which Eurocentric technoscientific expertise commanded the room and dominated the discourse on climate realities and adaptation solutions. The co-opting of the participatory workshop by State and NGO technical 'experts' denied campesinos full participation by discarding their knowledges, wisdoms and visions through patriarchal and managerial corrections. The hegemony of Western ways of knowing and the legacy of shaming Quechua-speaking and illiterate campesinos resulted in the silencing of Andean knowledges, wisdoms and experiences. The women – *las campesinas* – in particular, fell silent and did not speak of *Pachamama* or the indigenous, sentient and affective dimensions of environmental change that they had previously shared with me. Retelling this moment calls attention to the situated vulnerabilities of participants in collaborative research undertaken in stratified social contexts and suggests that a love-care-response approach necessitates that all participants entering into collaborative and participatory action must gather through an ethical-obligation of love that is anti-colonial, anti-racist and anti-discriminatory. *Asymmetrical love is not an option* as it opens the door to abusive and traumatic encounters for vulnerable and oppressed groups.

A day after the workshop, Pablo and I reflected on the workshop happenings. After this workshop, I was convinced that the oppressed cannot work with their oppressors towards liberating ends. Yet Pablo charted a less-dualistic path. He turned not to the hostile actors at the workshop, who were unable to hear,

unable to understand and unable to love. Rather, his next steps were full of hope in collaborating with those with whom he had found affinity and solidarity (Fieldnotes and Interview, 1 May 2018). This was a heterogeneous and selective group of State and NGO participants. I share this outcome from the workshop to illuminate the fierce politics of inclusion that love enables, and to notice that Pablo's love-care-response approach makes possible his openness to collaboration, which also requires his vulnerability to collaborative harms. For Pablo, this condition meant not always remaining open, but also closing the door to 'adaptation options' presented by stakeholders at the workshop who were not gathering through the same love ethic, but by other motivating forces such as 'empowerment', 'capacity building' and 'winning'. Thus, in the practice of PAR, encoded with cariño (love–care–response-ability), the objective is not to become 'empowered' per se, but rather how to become vulnerable. This may sound strange, but I wonder what justice would mean if, instead of all becoming equally powerful actors endowed with our weapons of individual rights and knowledge claims, we were to become equally vulnerable agents of love-care. Justice, then, would no longer be defined by Liberalism's rationalist imagination, but as feminist Indigenous scholar Michelle Montgomery says, '*Justice is about recreating a new world that really is about love*' (Montgomery 2021).

CARE

I started this article in conversation with Yovana Lliuya – a friend and PAR collaborator – calling my attention to the ways in which my research in Quilcayhuanca intersected with the profound experiences of loss and grief that were ongoing in the community. She noticed that my research questions about environmental change summoned up sadness and grief for research participants and called my attention to these cultural/affective/emotional dimensions of the study.

Asking questions about the loss of the glaciers summoned up responses more profound than the rationalist framing of water (in)security and instrumental use of resources could register. Similarly, the drying of Quilcayhuanca grasslands is more than an 'impact' on land use; the emaciation of campesino's cattle and the disappearance of frogs and native plants species are more than 'losses' in biodiversity and livelihood options. These are relational losses. To name the experience of climate change in Quilcayhuanca is to name a suffering as great as the loss of 'a member of the family', Sr Maximo Morales, a campesino of Quilcayhuanca, explained to me in 2016. I did not know this loss, this grief, until the loss of my own baby – a year after my last field visit. Living intimately within a web of relations in which part of your interconnected-self dies is a kind of love-grief that can only be engaged with the most radical praxis of love-care-response. Showing up in any other way is to deny the vulnerability of the situation and the intimacy of our interconnectedness, and shuts down any possibility for healing, liberation, or *just* transformational outcomes.

Interdependent relationships based on giving, nurturing, healing and protecting are a relational politics of care that I ground in my embodied knowledge as a mother and primary care-provider to six children. The sleepless nights devoted to moments of tireless care: walking, holding, rocking, singing, nursing, affirming and thus caring for the sleepless baby to whom I am committed. This is not only a cognitive exercise of love-care-response; these acts of nurturing and care are the heart-mind-body of my mother-work. I extend these experiences to research, in which relational research is not only made up of cognitive (masculine) concern, but also a feminist ethics of care that demands action and response-ability beyond contemplation, worry and theorisation (rationality and reason). I make this statement in cautious awareness of essentialising notions of the 'feminine' that have relegated women to the motherly or domestic role. Yet, I do not want to deny the wisdom of the so-called 'domestic' sphere, and so I draw upon my m*other*work as the grounding source of my lessons in care and to draw *care* out as a 'labour of love' (Puig de la Bellacasa, 2017) that is not only a matter of the mind, but a matter of the heart and body – the matter required for creating a *nourishing research praxis*.

In the age of the Anthropocene, characterised by mass extinction, unprecedented environmental disasters and climate change, researchers are incentivised to engage in community struggles and to 'care'. Counter to positivist assumptions of pure a-political research, granting agencies and philanthropic foundations now award problem-based research that sells crises through affective frames of novelty, urgency, finitude and techno-optimism. Yet, still rooted in rationalist research approaches, knowledge production in the Anthropocene hegemonically narrates grounded climate realities, flattening the relational, emotional, spiritual and embodied elements of climate impacts through discourses of '(in)security', 'resources', and 'loss and damage'. These meta-discourses are in service to policy experts, and technical and managerial interventions.

The problem with such global abstractions and generalities is that the reality of loss becomes dis-embodied and dis-emplaced, and distorts grounded realities. A solely rationalist approach to PAR, or community-based research, is myopically cognitive and disembodied, and asserts reason over the emotional, spiritual and embodied experiences of research participants. As rational friends showed up in moments of intervention to my own embodied experience of the loss of my daughter, their secularised, dis-placed and dis-embodied interventions imposed a reality that distorted my own reality of stillbirth, of life and non-life, and failed to tend to *what remained vital*.

In Quilcayhuanca, death and loss of glaciers, species, waters and harvests are not so clearly defined by an absolute finitude – or an end to life and livability. Nor are local 'solutions' imagined through a human/nature binary and a mastery and control over the lands and resources. Rather, moments of destruction and loss are also fertile ground for nurturing and caring interventions – a vital politics that works in service to a flourishing of ecological, human and non-human creation. I was confronted with this paradox of death and loss that manifested simultaneously alongside life and vitality as Esteban Nicanor, a sixty-five-year-old campesino elder of Llupa, described the farmers' experiences with unseasonal precipitation and frost events.

> **'Cold snaps,' Sr Nicanor declared – 'When the cold snaps come they come like thunder and damage the fields. […] The skies are clear, there is no fog, the cold snaps come [without warning] and damage *everything* when they are just beginning to sprout' (Sr Nicanor, Interview 17 January 2018).**

Cold snaps that kill the harvest lead to real material conditions of destroyed foods, loss of labour, seeds and fertiliser – 'you do lose all of that', Sr Nicanor explained. And yet, in the next moments he goes beyond this reality of loss, stating that – 'Obviously not everything is ruined. At least a little remains … [It] doesn't spoil everything, isn't that true. Of course, where the cold snap hits things are ruined, but if there is a small section [unburned/unfrozen]- with just that you can sustain yourself with food, *with what remains*. And also, that which is injured by the cold sprouts again if it's still young. If it's mature it can't anymore. That's why we need to have two, three little plots, so that in another plot, some can survive to fix all of this' (Sr Nicanor, interview in Llupa, 2018).

When looking at climate impacts in Quilcayhuanca through a rationalist policy framing of food and water insecurity, the possibility for tending to *that which remains* is obscured and the fear-driven emphasis on control and securitisation of 'resources' leaves little room for reimagining the practice of cultivating, caring and nurturing the remainders. Similarly, by focusing on the 'loss' of my daughter, relatives and well-wishers overlooked the continuation of my relations (visible and non-visible, knowable and unknowable, physical and metaphysical), and in so doing did not see or hear my reality and my experience. *Taking care of that which remains* in the wake of disaster, traumatic events, or even death necessitates grounding in a particular embodied, emplaced reality, queering rationalist binaries, and engaging the possibility of an otherwise. This is critically important, because in spaces of transformation and crisis, the narrative process of meaning-making and naming of reality is done. Indeed, moments of grief and loss are sacred and transformational spaces that require nothing less of researchers than a love-care-response commitment.

RESPONSE-ABILITY

Throughout the duration of the participatory project in Quilcayhuanca, I encountered researcher fatigue and scepticism among the local agropastoralists. Many of them would ask me directly, what can this research do for them? – a legitimate question to ask of a probing researcher who is posing intimate questions around their experiences with climate change and thus loss, death and grief. For over half a century now, far too many engineers, ecologists, geologists, glaciologists, anthropologists and interventionists have been poking around the Cordillera Blanca, promising projects of hope, improvement, knowledge and aid, most without fruitful outcomes for the highland inhabitants. After speaking with Estaban Nicanor at his home in Llupa about the cold snaps and frosts, he confronted me with this scepticism of Western research and researchers:

> **"How can you help? In what way are you going to…? For all of that, you must have time. Sure, you can say, "we're going to do this, we're going to…" But there isn't enough time. [Turning and speaking to my translator] She'll be doing something else, the other …, a year passes, two years and they [researchers] don't live up to their promises. They don't live up to their promises. When she finishes her studies, she won't even remember this place and that will be the end. [For] what she has studied, she has seen how it is, but after all that she won't do anything. That's how it is." (Esteban Nicanor, Interview 17 January 2018)**

Moments like this one with Esteban were recurrent when meeting with campesinos and required a great deal of reflection and humility. Esteban's statement holds the historical trauma of extractive research and a fierce critique of the wrong use of knowledge/power. Indeed, I had seen the communities' struggle with capitalist climatic change and its articulation with the coloniality of power in which it was entangled. It was clear that climate adaptation in Quilcayhuanca was not only about climate, but also, once again, about the struggle for sovereignty (that is, not government abandonment) and self-determination. Esteban was directly asking, how could my study aid campesinos in adapting to climate change in a way that was also about justice. I had no easy answers to the serious question '*how can you help?*' Steeped in privileged positionalities and through the logic of 'co-benefits', researchers often suggest that a study will usher win-wins for all participants – for both the oppressed and the oppressors, will inform policy, or will 'empower historically marginalised groups'. Yet, how could such claims be made after a year, four years, or even a decade of collaborative research in the face of centuries-long colonialism, racism and hetero-patriarchy?

In offering my response, I take my cue from feminist indigenous philosophies to rethink 'help' in less cognitive and masculine justice-framed terms and instead reimagine procedural and restorative justice *relationally*. In this way, what I could offer campesinos through my engaged climate ethnography were spaces in which to gather – to be in community, allyship, love, care, friendship and nourishing connection with each other in troubling times. Through a labour of love for the people and place, I co-laboured with campesinos in order to gather together and co-produce knowledge that would be in service to campesinos' cause of self-determination and *just* climate futures. I have no fantasies that this work 'empowered' campesinos or restructured power-relations, and I remain sceptical of studies that assert participatory successes over short time scales and according to win-win logics or co-benefits. Engagement alone does not offer any guarantees of equity, justice or liberated peoples and knowledges, and must be more humbly acknowledged as a multi-generational and relational process of the heart-mind-body-spirit.

Esteban's statement exposed this local critique of Western research, but he also included a flicker of hope for *doing research otherwise*: an invitation to do research another way, a non-extractive way, a relational way that registers and meets the needs of oppressed communities. Linda Tuhiwai Smith calls researchers' attention to the importance of moments of invitation, the exchange, the ask *and the response*. She writes that:

> ***When the invitation comes, many research institutions are ill-prepared—[…] Many discipline-based researchers may not even understand the issue and have often turned communities away rather than listen***

> *deeply to their concerns. Being invited is a first and tentative step in rebuilding a relationship between indigenous communities and researchers–how often those invitations come is entirely dependent on how researchers respond* (Tuhiwai Smith 2012, p.20).

Estaban's critique was not only a critique, but an invitation to respond. The questions he posed were sceptical about what he and his community will gain from this research engagement, and simultaneously an invitation for doing collaborative research another way. He did not close me out, but instead invited me into his home, offered me time and an interview, and then posed his inquiry. The responsibility of a community-engaged researcher is to show up, open and ready to be in relation with people, history and place over an untold trajectory of time and space that will likely exceed the project horizon. Yet, a researcher's response to this invitation is shaped as much by their situated motivations and positionality as it is by larger structures of the academy and Western knowledge production. In this way, the ability to do research otherwise, decolonially and relationally, often goes against the institutionalised norms and values of modern positivist science. Enabling infrastructures (policy, platforms, research calls, funding solicitations) for doing relational research rarely exist, although they are flourishing for participatory and collaborative research that is complicit and compatible with current power structures that privilege the rational over the relational. National science academies seek 'measurable' and 'concrete' outcomes in relatively short time scales; however, relational outcomes are messy, often intangible and unquantifiable. This is not a challenge to quantify and make measurable the messy intangibles of relational research (feelings, emotions, senses and experiences). Rather, it is a call for loosening the totalising grip of a certain way of knowing and registering the invisible relational labour (care) embodied in ethical engaged research.

In the last recorded interview with campesinos after four years of relationship building, four cycles of showing up in community – leaving – returning, and two participatory climate workshops, I feared that I had not met the expectations of the community, that my work had not elevated their voices or aided their struggle for just climate adaptation. This (perhaps not unusual) anxiety of a community-engaged researcher is rooted in linear and short temporalities, and 'best practice' rhetoric for Liberalism's participatory justice. Although my own PAR research did not realise goals of liberated knowledges, restorative justice, or level power relations across stakeholder groups in 'measurable' ways, it was not without meaning and value to the community, and myself, and is still unfolding in untold ways.

During my last day in community, Pablo met with me, thanked me for co-labouring with him on the participatory adaptation workshops and invited me back. His comments reassured me that this research had meaning for the community and recentred the relational research elements of mutual aid, respect, reciprocity and care:

> *Thank you for gathering us….then at least they [State agencies] will realize that there is a volunteer lady who has come to gather us all together. […] Yes, thanks for your cooperation, to show us how to do it [organize community climate workshops], eventually we'll do the same, because if we don't do it, they [the State] will never care about campesinos. [...] we needed more dialogue but it's over now. God bless you […] and the day you think of Peru, you'll be welcome and we'll talk [with you] in our valley about our reality and experiences* (Sr Pachari, Interview 1 May 2018).

At this moment, I was unsure of when I'd return to 'fieldwork' – to continue co-labouring. My funding had run out, my dissertation was due, and I had no academic job secured for the next year. The precarity of academic life imposes hardships on relational research in ways that rational and extractivist approaches don't endure. However, instead of adhering to funders' research timelines and capitalist temporality, Pablo's 'goodbye' was not an end to the project, but a vision of a cyclical, continued relational research commitment, reminding me that this research is in its infancy, and that this is just the beginning of our relational research engagement.

Conclusion

Calling participatory research into an ethics of love-care-response only makes sense when engaged research is conceived of as *relational research*, and is therefore situated as a political, historical, subjective and affective mode of knowledge-making. The more that scientific experts and practitioners of engaged research can forefront this reality, the more possible it then becomes to disrupt the rationalist (masculine) and colonial narratives and norms that have co-opted the transformative potential of this methodology. By reflecting on my own collaborative climate ethnography work in the wake of devastating climate impacts of rapid glacier melt and ecological death, I highlighted the relational, ethical and political dimensions of *what it means to be an engaged researcher in the rupture of crisis*. In this article, I strived to reclaim a co-opted PAR and reconnect it with its origins as a *praxis* of knowledge-making that serves the cause of liberation of oppressed peoples. Thus, the intellectual exercise undertaken is not so much a focus on method, but on intentionality, positionality and relationality. The concern for replicability is thus not about creating a relational research model to be implemented anywhere and everywhere, but rather an ethico-political framework that, when applied to a grounded context, *will* and *should* reflect the unique particularities of that place and of that community. Storytelling the relational, personal–political and affective moments of collaboration *with* campesinos who co-laboured in this research project, allows me to explain a research politics of *cariño* and a love-care-response approach to doing relational (engaged) research in times of climate crisis.

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