On critical proximity: Distance, difference, and digital sociality

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Abstract

This article offers innovations at the nexus of theory and method for an ethnographic and engaged political ecology. In it we consider the expansion of digital technologies and digitally-mediated social interactions within and beyond the kinds of geographically out-of-the-way sites that have long animated this interdisciplinary field. These transformations, we argue, are taking place at such vast scope and speed that they merit inclusion in the ongoing critical conversation about the methods, commitments, and contributions of political ecology, especially as these relate to the concepts of distance and difference. Putting our field research in Uganda and Bolivia in conversation with our experiences as xennial ethnographers, here we examine three themes: how digital connectivity is changing "the field" and fieldwork; how the ubiquity of digital technologies is changing the relationship between "the field" and "home"; and how ethnographically grounded political ecologists can position our research in academic settings where digital data is increasingly prevalent and powerful. While the extension of digital sociality across these spaces limits formerly idealized forms of "critical distance", we suggest it productively enables "critical proximity" – a situated ethnographic stance which rests not just on engagement with our interlocutors across time and place, but also responsiveness to the kinds of claims-making that digital social interactions uniquely enable.

Key words: critical proximity, critical distance, digital ethnography, human difference

Résumé

Cet article propose des innovations à la jonction de la théorie et de la méthode pour une écologie politique/political ecology ethnographique et engagée. Nous considérons l'expansion des technologies numériques et des interactions sociales médiatisées par le numérique au sein et au-delà des sites géographiquement éloignés de ce domaine interdisciplinaire. Ces transformations ont une vaste portée et se produisent à une vitesse rapide. Elles méritent d'être incluses dans la conversation critique en cours sur les méthodes, les engagements et les contributions de l'écologie politique, notamment en ce qui concerne les concepts de distance et de différence. Nous plaçons nos recherches sur le terrain en Ouganda et en Bolivie en conversation avec nos expériences en tant qu'ethnographes xénaires, afin d'examiner trois

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thèmes: comment la connectivité numérique change le "terrain" et le travail sur le terrain; comment l'omniprésence des technologies numériques change la relation entre le "terrain" et le "lieu d'origine"; et comment les écologistes politiques fondés sur l'ethnographie peuvent positionner leurs recherches dans des contextes universitaires où les données numériques sont de plus en plus répandues et puissantes. Si l'extension de la socialité numérique à travers ces espaces limite les formes autrefois idéalisées de "distance critique", nous suggérons qu'elle permet une "proximité critique." Il s'agit d'une position ethnographique située qui repose non seulement sur l'engagement avec nos interlocuteurs à travers le temps et l'espace, mais aussi sur la réactivité aux types de revendications que les interactions sociales numériques permettent.

Mots clés: proximité critique, distance critique, ethnographie numérique, différence humaine

Resumen

El presente artículo ofrece innovaciones en las conexiones de teoría y método para una ecología política etnográfica e involucrada. En este, tomamos en cuenta la expansión de tecnologías digitales e interacciones sociales mediadas digitalmente en y más allá de aquellos sitios apartados geográficamente que han motivado ampliamente a este campo interdisciplinario. Argumentamos que estas transformaciones se presentan a una velocidad y un rango tan vastos, que ameritan ser incluídas en las discusiones críticas actuales acerca de métodos, participación, y contribuciones de la ecología política, especialmente en su relación con los conceptos de distancia y diferencia. Poniendo en conversación nuestro trabajo de campo en Uganda y Bolivia, con nuestras experiencias como etnógrafos xennials, examinamos tres temas: cómo la conectividad digital está cambiando "el campo" y el trabajo de campo; cómo la omnipresencia de las tecnologías digitales está modificando la relación entre "el campo" y "el hogar"; y cómo quienes fundamentan su etnografía en ecología política, pueden colocar nuestra investigación en un contexto académico en que los datos digitales son cada vez más poderosos y predominantes. Mientras que la extensión de la socialidad crítica a través de estos espacios limita anteriores formas idealizadas de "distancia crítica", nosotros sugerimos que habilita "proximidad crítica" - una posición etnográfica establecida basada no solo en el involucramiento con los interlocutores a través del tiempo y el espacio, sino también capaz de responder a las formas de formulación de argumentos que solamente las interacciones digitales permiten.

Palabras clave: proximidad crítica, distancia crítica, etnografía digital, diferencia humana

1. Introduction

Less than a week after George Floyd was murdered by the Minneapolis Police on May 25, 2020, Felista di Superstar, an eight-year-old Ugandan rapper and self-proclaimed boss kid released her new music video: "I Can't Breath[e] by Felista to George Floyd #GeorgeFloyd #icantbreath #Blacklivesmatter #racism." Her tribute to Floyd, posted on YouTube and circulated on WhatsApp, Twitter, Facebook, and Instagram, opens with an image of Felista superimposed onto a portrait of George Floyd painted by a Dominican-born artist @Eme_Freethinker on one of the last remaining sections of the Berlin Wall. Felista is standing tall with her arms crossed, eyes closed, and head turned towards Floyd's over the hashtags: #georgefloyd #stopracism #sayhisname.

Viewers briefly see the text "there is only one race, the human race" before we see Felista in a Uganda Cranes football jersey. We then hear Floyd's voice in the final moments of his life as an East African style reggae beat sets in. Felista begins what she calls her freestyle with her body in a close approximation of Floyd's at the time his life was taken from him: lying on the ground, hands bound behind her back, and a man's knees pressing firmly into her neck.

² Felista di Superstar's given name is Nyanyanzi Faith, a name she references in her live performances and online. We refer to her as Felista throughout, in line with her late 2019 release "You Know Me."

Help
Please
I can't breathe
I'm suffocating
Dying underneath.
Mi done everything officer as you wish
You're killing me
Yet you are the police?

As Felista's tribute to George Floyd began to circulate within, between, and beyond Africa and Europe, Felista was sought out for interviews by print journalists and television and radio personalities. When asked why she composed her tribute to Floyd, Felista explained that it was because of the pain that she felt inside her body as she watched him die, together with her father, on his mobile phone: "I felt so bad for this man. It really touched me so deep. So, so, so deep." She asked: "How can a policeman kill someone when people are even watching?" To process the pain and anger that she felt and shared with so many, Felista and her father began laying down lyrics for Floyd and for people "all over the world."

This collaboratively written article is about Felista's work and the provocations it offered us – two environmental anthropologists trained in political ecology – for reflecting on how digitally mediated communications and spaces are interwoven with ethnographic practice. It is therefore also about the remarkable expansion of digitally mediated forms of social interaction – which we shorthand as "digital sociality" – in everyday life and in scholarly research, so extensive in the 2020s as to be near-ubiquitous. It is also about rising awareness of racial injustice and inequity that forms of digital sociality amplify. For ethnographers, and particularly political ecologists researching so-called remote sites, these intersecting phenomena offer opportunities for examining received wisdoms around the concepts of distance and difference (Leach and Mearns 1996). Drawing on examples from our fieldwork in Uganda (Johnson) and Bolivia (Keleman Saxena), and using Felista's work as a touchstone, here we consider how thinking with digital sociality might help to build ethnographies that assert not just "critical distance", but also "critical proximity."

The term "critical proximity" was coined by Birkbak *et al.* (2015) to describe an approach to ethnographic research within the emerging field of Techno-Anthropology. For the authors, actual close, in-the-flesh study of digital worlds is necessary for moving beyond standard critiques of grand scale concepts and claims – like democratization and capitalist exploitation – by bringing ethnographers closer to how these are problematized by our interlocutors and materials we think together with (Birkbak *et al.* 2015: 14). The authors trace their use of the term to Donna Haraway's fierce critique of critical distance (1988) via an unpublished manuscript by Bruno Latour (2005). We found the term evocative, and worth extending here beyond the in-the-flesh relations to relations of proximity that digital spaces afford for ethnographers across time and place. Our use of the term draws upon Anna Tsing and colleagues' (2019) interrogation of implicit wholes and parts freighted within ideas about systems through critical description of systems themselves, and extends the closeness implied by the idea of proximity to fleshy and patchy connections across distance.

Writing through the rapid shift to online work and social connection that has marked the global Covid-19 pandemic, the digital tools that help make Felista's work possible have become so familiar that it is easy to forget how remarkable her interventions are within the larger scope of history. Felista and her collaborators – including her father and other artists – knit together geographically distant events, intimate personal experiences, and a lively public. Felista insists on her shared humanity – not only with Floyd, but also with the police officers who killed him – as her lyrics draw apt comparisons between systems of oppression that actively prohibit equity and perpetuate injustice within and across places like the US and Uganda. Felista's claims were deemed so explicit that her original tribute to Floyd was "identified by the YouTube community as inappropriate

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³ The interview quoted here is available in Luganda from: SparkTV Uganda (2020). We are grateful to Mpiriirwe Moses, a Ugandan friend and colleague now based in Germany, for sharing a careful translation of Felista's work and for thinking with us over GoogleHangouts about Felista's interventions.

or offensive to some audiences." Before viewing, audiences there must now first click on a box indicating that: "I understand and wish to proceed." Not all of her work is so serious, but virtually all of it invites audiences to respond – to have a happy birthday, to be kind, to know the symptoms of Covid-19, to contact her for collaborations or bookings, or at the very least, to follow her across social media platforms.

We (the authors) engage with Felista as political ecologists whose disciplinary home is in environmental anthropology. We have observed – and are still observing – rapid expansions of digital technologies in our fieldsites. We see the use of these technologies shaping the lives of our interlocutors, and also our own, in ways that simultaneously transform the conditions under and within which our research is conducted, conveyed, and evaluated. These changes, we argue, are taking place at such vast scope and speed that they merit inclusion in the ongoing critical conversation about the methods, commitments, and contributions of political ecology, especially as these relate to the concepts of distance and difference. This article is rooted in asking ourselves – and each other – what to make of Felista's work in the context of this historical moment, and by extension, in the context of our own ethnographic practice on fishwork in Uganda and food and agriculture in Bolivia.

Here we consider what digital sociality means for contemporary ethnographically-grounded political ecology. We do so in a mode we consider conversational ethnography – we are friends who talk about our fieldwork, our home lives, and how these relate to theory and method. Drawing from our long-term experiences, as "xennials", ethnographers, and political ecologists, we ask: What does it mean for political ecology – and political ecologists – to attend to an historical moment in which it is possible for an 8-year-old Ugandan girl to intervene directly in global conversations about police violence and anti-Black racism? Put another way, how is digital sociality changing the kinds of relations that political ecologists aim to study, and the practice of research itself for scholars working in "remote" sites?

Building on Boellstorff's (2016) image of difference as the "bolt" around which ethnography – and more specifically, the ontological turn – turns, we begin by examining how digital sociality challenges received wisdoms around two key elements: distance and difference. Subsequently, we situate ourselves as xennial ethnographers and offer three provocations for an ethnographically informed political ecology, drawing from our long-term engagements with geographically remote sites. First, we consider how the expansion of digital technologies is transforming "the field." Second, we ask how digital connectivity is shifting relations between "the field" and "home." Third, we turn to the role of qualitative research within the larger academy, asking how ethnographic data, necessarily also digital, can be positioned in conversation with "big data" approaches.

We build these arguments to advocate for a conceptual and methodological shift – which is also an ethical one – to accommodate not only "critical distance" from ethnographic data, but also to acknowledge and build upon "critical proximity" in ethnographic relations that digital spaces potentiate. For political ecologists, critical proximity offers a commitment to orientating encounter and analysis towards similarity and shared connections, even as we continue to interrogate the historically contingent and ongoing unequal relations of power that continue to make scholarly research possible and necessary.

2. Distance and "the bolt of difference"

Challenging received wisdoms around distance and difference is a matter of urgency. Writing from the United States in the early 2020s, academic research is situated within a larger social context where confrontations with the intersecting legacies of settler colonialisms (Allen & Jobson, 2016; Jobson, 2020; Todd, 2018), white supremacist ideologies (Abdul Khabeer, 2017; Cromer, 2019; Shange, 2019), and heteropatriarchy

⁴ These conversations are situated within the discipline of anthropology, but are also publicly available in ways that would have been impossible without the internet. For example, livestreamed events like: "The case for letting anthropology burn? Race, racism and its reckoning in American Anthropology" hosted by the UCLA Department of Anthropology and the Wenner-Gren Foundation for Anthropological Research (2020); posts like Girish Daswani's (2021) "On the Whiteness of Academia" on the *Everyday Orientalisms* blog; podcasts like Alyssa A.L. James' and Brendane A. Tynes' *Zora's Daughter's* (2020); and the release of timely statements alongside the continued unearthing of contemporary harms perpetuated by particular anthropologists, for example, the possession and unethical use of the remains of children killed in the 1985 bombing of the MOVE organization in Philadelphia to teach an online course in forensic anthropology hosted by Princeton University via the online platform Coursera (2021).

are ongoing and long overdue (TallBear, 2019; Tallbear & Willey, 2019). Critically, these conversations have been amplified in the midst of the Covid-19 pandemic, at a moment when the work of environmental social science (teaching, mentoring, tracking events in "the field", and interacting with colleagues) moved almost entirely online. These circumstances are advancing a critical reckoning with the unequal power relations in which scholarly research continues to be imbricated, just as we must also defend the core contributions of social science against, for example, attacks on critical race theory. Given the likelihood that traditional, face-to-face ethnographic field methods may be some of the last to resume their "normalcy" (Wood *et al.*, 2020), this is a key juncture for reflecting on how digital sociality might feature within qualitative research across geographic distance in ways that challenge how social differences are made and re-made across time and place. Here, we join others in advocating for ethnography that troubles the traditional "cores" of academia and the centrality of Euro-American encounter as the defining features of contemporary social life (Appadurai, 1986; de la Cadena & Blaser, 2018; Escobar, 2020; Latour, 1993).

As a field that bridges anthropology, geography, and environmental studies, political ecology examines how power, knowledge, and identity shape nature-society relations, and in particular, access to, and use and management of, natural resources across scales (Benjaminsen & Svarstad, 2021; Paulson & Gezon, 2004; Peet et al., 2010; Peluso, 1992; Robbins, 2004; Rocheleau et al., 2013; West, 2012; Zimmerer & Bassett, 2003). Ethnography has been central to the development of political ecology. As a qualitative research method and mode of writing, ethnography offers insights into how people live with, shape, and are shaped by the "natural" world. Ethnographic scholarship has helped to demonstrate that the categories of nature and culture (and the boundaries between them) are socially constructed, historically contingent, and grounded in the particularities of place. Ethnographic research draws linkages between larger socio-structural patterns, vernacular practices, and meaning making. These are particularly important contributions for research with indigenous people, non-western cultures, minority language groups, people living in out-of-the-way places, and other marginalized communities. While this methodology is not perfect, it is useful for interrogating the project of natural resource management and pushing the conversation beyond universalizing technical narratives.

As environmental anthropologists, trained in political ecology, our interest in digital technologies and platforms dovetails with our interest in more-than-human beings and processes of worlding – an emerging arena of research extending previous conversations about the co-creation of environments and knowledges (Haraway, 2008; Swanson, 2017; Tsing, 2010). As Laura Ogden and colleagues note, animals, plants, and other beings (including people) inspire theorizations of human experience beyond considerations of difference simply as variations on the "standardized human (a species, generally Euro-male)" (2013, pp. 6-7). In considering how digital socialities offer avenues to contest the "standardized human", we draw on anthropologist Tom Boellstorff's work on digital anthropology and the ontological turn. Boellstorff (2008) points out the fallacy in the notion that so-called virtual encounters are somehow unreal, and that only physical ones are, in actuality, "real." Instead, he calls for more anthropological research on the spaces between these conceptual bifurcations, a project requiring a critical examination of the defining role of the assumption of alterity. Complementing the anthropological study of cultural difference, Boellstorff (2016) argues for an "anthropology of similitude", or an "archipelagic perspectivism", one which considers how ethnographers and our interlocutors are imbricated with places, times, or ideas that fall outside of our immediate physical surrounds. This, he argues, is "a view predicated on worlds understood as archipelagoes and thus as ontological assemblages defined in terms of exteriority, not bounded shores" (p. 392).

The assumption of a particular form of boundedness has, historically, underpinned ethnographic methodologies. A difference between the background of the ethnographer and the people and places ethnographers study, in theory, enables heightened insight into patterns of social interaction (Bourdieu, 1977). Although arguments for this assumption have loosened as academia has embraced a wider range of differently positioned ethnographers and research designs, the core training of cultural anthropology still centers on "making the strange familiar and the familiar strange" and unsettling one's assumptions about what is "natural" in social relations. This is exemplified in the theme of the 2015 American Anthropological Association's Annual Meeting: "Familiar Strange". The idealized conventional ethnographer goes to "the field", experiences it through a critical lens, gains insight into an "emic" perspective, and then leaves to write up at "home" – a process which is intended to generate "critical distance" on data necessary for scholarly analysis.

There is enduring value in aspects of this method, but it is also flawed. Perhaps most obviously, ethnography is predicated on social hierarchies and power differentials; the ability to travel to "the field" and the presumption of one's own legitimacy in the study of others, rests on forms of economic, political, and social power, which reify the advantages of elites. This method of fieldwork emerged from a historical period in which the "cores" of power were assumed by its practitioners to be located in Euro-American capitals. Ethnographers – both lay and formally trained – were sent to places presumed peripheral to imperial metropoles. The complicity of ethnographic research with colonial and capitalist projects still sits uneasily with the relations and reciprocal obligations many ethnographers develop with the people and places with whom, and in which, we work.

The assumptions of boundedness inherent in the ethnographic method also sit in tension with ethnographers' history of questioning "imagined holisms" (Tsing, Mathews & Bubandt 2019). These tensions are well evidenced in political ecology trajectories, a field which has fiercely questioned the artificial lines between "nature" and "culture" (cf. Dove *et al.*, 2011), and debunked the assumed isolation and homogeneity of remote communities (Macfarlane, 1977; Raffles, 2008), underscoring that "the community" has never actually been an insular entity, closed to movements of resources, people, and ideas (Tsing 1993; Ferguson 1994; Mintz 1985), or existing without power differentials (Agrawal & Gibson, 1999; West, 2006). As a consequence, environmental anthropology, interwoven with political ecology and cultural and human geography, has expanded its early focus on remote ecologies and indigenous peoples to examine urban spaces (Ahmann, 2019; Anand, 2017; Rademacher & Sivaramakrishnan, 2017), human-built infrastructures (Amin, 2014; Barnes, 2014; Larkin, 2013), and global interconnections (Besky, 2013; Tsing, 2005; West, 2012). Even so, research in seemingly out-of-the-way places continues to necessarily shape important conversations in the field (Chapman, 2018; Govindrajan, 2018; Hussain, 2015).

Digital technologies potentiate space- and scale-crossing social interactions in ways that extend ethnographic critiques of boundedness. For the purposes of this article, we think of "digital sociality" as a phenomenon encompassing platforms (social networks, messaging apps), devices (computers, smartphones), physical infrastructures (cell phone towers, satellites, servers), entities that use them (people, bots, corporations), and virtual spaces ("the internet", "the cloud") that these elements combine to co-create. The social interactions realized across these platforms are both human and more-than-human, bringing together people, built environments, and unmanaged more-than-human entities and spaces (for example, 'nature'), although relations with the latter are often masked unless something goes wrong. For example, when wireless internet becomes unavailable due to a monsoon-driven power-outage; when undersea cables require repair (Starosielski, 2015); or, in contrast, when climate disasters expose the failures embedded in physical infrastructures and hierarchical information channels, accentuating the importance of digital communication (González, 2020). While the instant and, in theory, the worldwide accessibility of web-based platforms can give the effect of an unbounded universality, digital-social spaces are, in effect, imminently "patchy" (Tsing et al., 2019).

Complex and scale-crossing environmental problems, spanning diverse academic and professional communities, require political ecologists to engage in multi-method and/or multi-sited research. Extending this work to acknowledge the extent to which digital sociality already infuses many of these topics and communities may likewise require what sociologists Marres and Gerlitz (2016) refer to as "interface methods", or "emerging methods that we – as social and cultural researchers – can't exactly call our own, but which resonate sufficiently with our interests and familiar approaches to offer a productive site of empirical engagement" (p. 27). For ethnographers working in geographically remote environments – as well, perhaps, for those who work closer to "home" – digital sociality also blurs the imagined boundaries between home and "the field", extending possibilities for situated intimacy across geographic distance, and offering a starting point for contesting dominant framings of difference.

The observation that "anthropology turns on the bolt of difference", (Boellstorff, 2016, p. 390), begs the question: "difference from what?" Writing in the early 2020s, we might reasonably answer that "otherness" in the academy has historically been defined in relation to an ideal-type of academic researcher, which continues to cluster experiences and perspectives drawn from white (Euro-American), male, cis-gendered, heterosexual, and largely Christian Protestant experiences. Thinking with digital socialities offers avenues for shifting away

from this still-too-often unmarked ideal as the center from which difference is assembled, precisely because digital platforms enable worldmaking that is poly-vocal, multi-directional, and constructed through rapid iterations across geographic or social distances that might otherwise inhibit densely networked social interactions. The kinds of socialities emerging in digital spaces foreground and bridge many kinds of differences (both radical and everyday) and allow for the emergence of many forms of similitude (both mundane and uncanny).

Put another way, perspectives that have historically been at the academy's "peripheries" can, via digital connections, become densely, actively, and multidirectionally networked without needing to be translated or validated by the "core." But while digital sociality offers alternative centers, digital platforms also have cores that matter. For example, YouTube's placing of Felista's tribute to Floyd behind a content warning, or Twitter suspending users' accounts for circulating content in violation of their terms of use. Even while critiquing the ideal-type anthropologist (and the larger academic environment to which he responds), the project of foregrounding digital social spaces where the experience of alterity is differently central can also be understood as extending long-standing traditions in ethnographic work. This is poignantly illustrated by the anthropology podcast, "Zora's Daughters", created by two Black women anthropologists, which draws on critical theory to comment on contemporary issues in race, culture, politics, and academia. Their intervention – underpinned by the digital medium of the podcast – is framed with reference to critical re-valorizations of Zora Neale Hurston as a foundational, but under-recognized, figure in US anthropology (James & Tynes, 2020).

3. Xennial ethnography

We write as environmental anthropologists who have engaged with geographically "remote" sites since the late 1990s, and have worked as ethnographers since the mid-aughts. Johnson's work focuses on the ontological politics of water and wellbeing, primarily in Uganda, but also in deindustrialized cities and towns in the US Midwest. Keleman Saxena has researched culinary practices and cultural politics of agrobiodiversity conservation in the Bolivian Andes and, prior to that, in rural Mexico.

Our conversation on the extension of digital technologies began while comparing notes about fieldwork and our homecomings from it. It emerged from grappling with our own positionality as white, American researchers, implicitly trained in frames of distance and difference, and finding these challenged by the ways that digital technologies bridged our work "in the field" and our personal lives and ethical commitments "at home." Our analysis also responds to our positions as cis-gendered women, and feminists. To the extent that women are encouraged to define our identities by exteriorities (e.g. identities that develop relationally, such as sister, mother, wife, teacher, friend), digital engagements bring these relational experiences, and the strengths and vulnerabilities they afford, to the center of our ethnographic practice.

We both belong to a mini-generation sometimes referred to as "xennials" – a term coined to describe a small cohort falling between Generation X and the "digital native speakers" of more recent birth years (Prensky, 2001). We first called our friends on phones tethered to the wall, learned to type on computers that never left their desks, and sent our first emails over dial-up modems. We each left for college without cell phones, and yet were some of the first to experiment with social media by virtue of our .edu email addresses, required to join Facebook from 2004-2006 (Hansell, 2006). We were hence among the first generation of anthropologists to receive Facebook friend requests from our interlocutors.

Alongside the version of the U.S. within which we grew up, the field contexts where we came of age as researchers have also transformed rapidly alongside the expansion of digital technologies. In the early 2000s we called home from far-off locations using prepaid cards on public or private landlines, and travelled to internet cafes to send and receive written communication on desktop computers reserved at 5 to 15 minute increments. By the mid-aughts mobile phones were already common among elites from eastern Africa to South America and were already an important tool for scheduling interviews and meetings with those who could afford them. Still, our earliest fieldwork might be considered pre-digital by contemporary standards – smartphones were still in their infancy and priced out of our reach, and wifi was slow and rare at home and virtually non-existent "in the field." Instead of uploading recordings of our first interviews into "the cloud", we brought them home on cassette tapes.

As ethnographers, we have seen digital communications technologies transition from elite status symbols, primarily useful for "studying up" (Nader, 1974) to being widely adopted tools, critical for many kinds of conversations with many different people. By the early 2010s, when we were both preparing for and conducting dissertation research, the internet was almost everywhere. Public and private infrastructure projects had extended the reach of cellular and other connective technologies. Expanded mobile phone networks and wireless modems embedded within USB drives, while still cost-prohibitive for many, brought possibilities for digital connectivity to and from places that may never have been connected to centralized electricity, water, and transportation infrastructures. Digital devices and their capacity to store and transmit data were becoming increasingly accessible, affordable, and useful for establishing and sustaining connections across distances, large and small.

These transformations within our fieldsites and life experiences underscore that the expansion of technologies enabling digital connectivity - and thereby, digitally mediated forms of social, economic, political, and material action — is bound up in processes of historical-technological change. The ramifications of these changes are both wide-reaching and particular, developing simultaneously at a global scale, and in accordance with the localized contours of politics, infrastructures, relations, and relationships. The dimensions of these transformations are so vast, and yet so diffuse, that they are difficult to reckon with ethnographically.

Even so, refusing to account for these transformations, or conceiving of them as separate from the richly variegated lives of our interlocutors, risks reinscribing remoteness and radical alterity as a 21st Century equivalent of the "ethnographic present" (Friedman, 2005; Sanjek, 2013). That is, an "ethnographic refusal" around digital sociality, and an exclusive focus on in-the-flesh relations, risks developing analyses that reify a sort of pseudo-authentic cultural space that exists a priori of digital connectivity and the socio-technical assemblages that enable it. Imagining a "real" cultural space that does not intersect with digital worlds is nearly impossible (and inaccurate) for most places where ethnographers now work. We turn now to considering how some of these transformations have changed everyday life, work, and scholarly practice in our own "fields."

4. Digital sociality in "the field"

The expansion of digital technologies is transforming the contexts within which ethnographers' interlocutors live and work. It is also transforming the contours of ethnographic fieldwork itself. This is especially true for political ecology, for which many field contexts are literally farmer's fields or places otherwise geographically distant from urban metropoles.

In early 2014, Keleman Saxena was in the midst of mixed-methods field research in Bolivia.⁵ This included survey work and some ethnobotanical research, which required collecting quantitative data. Needing access to the Excel spreadsheets where this data was cataloged, she brought along a laptop – a small netbook computer – on some field visits. One day, in a high-altitude Andean community, which she regularly visited but did not live within, Keleman Saxena opened her netbook while sitting in the courtyard of one of the farming households that collaborated closely with the NGO that she worked with.

Don Joaquin, the young male household head, and a father of two children under the age of five, eyed the device with some curiosity. After a few minutes, he started asking questions – did Keleman Saxena bring it from the US? How much did it cost? Somewhat uncomfortable and concerned that this technology called attention to her privilege as a foreign researcher, she tried to give straightforward answers without inviting more conversation. After a few minutes, Don Joaquin turned and had a short exchange with one of Keleman Saxena's NGO collaborators in Quechua – too rapid for her to follow.

"He's been thinking about buying one for his son", her companion informed her. This clarification unsettled Keleman Saxena's assumptions. Rather than examining her computer as something novel and out-of-reach, a symbol of an inaccessible world elsewhere, Don Joaquin recognized it as a useful tool that could and perhaps should be a part of his own daily life – and his children's.

Conventional wisdoms about distance and difference that we carry with us from "home" and into our ethnographic encounters make Don Joaquin's questions surprising, when they might otherwise be read as

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⁵ Parts of this section are modified from Keleman Saxena (2016).

supremely everyday in nature. Because he lived high in the mountains and far from the capital city, it is too easy to assume that his engagements with digital technologies were naïve or nascent. And yet, Don Joaquin was an early adopter. He and his family already had cell phones, and in their off-grid community, they had paid for the private installation of solar panels to provide electricity to their household. What's more, his aspirations were well-informed; within a few weeks of this exchange, 4G coverage became newly available in this community, and in many formerly un-served communities in rural Bolivia, due to an extension of coverage provided by the state-run cellular company, Entel.

This example demonstrates two points: first, the extension of digital connectivity in remote fieldsites is not simply a top-down process. Rather, it involves agentive action by multiple actors, and in many forms. In the case described from Keleman Saxena's fieldwork, Don Joaquin was actively pursuing access to a bundle of technologies, despite limited resources. He, and others like him, sought cell phones, computers, and solar panels not as status symbols, but as practical instruments that aided in carving out future possibilities for themselves and their families. Further, the expansion of cellular connectivity that Don Joaquin was positioned to take advantage of reflected larger patterns of global geopolitics. The satellite providing new 4G coverage was launched, on Bolivia's behalf, by the Chinese government. Demonstrating the deepening economic and political cooperation between the two countries, this technological relationship also signals the extent to which the geopolitics of digital connectivity may relate to broader transformations in the political-economy of resource extraction, governance, labor, and trade.

Digital connectivity can also change how people interact with long familiar contexts, as illustrated by an experience from Johnson's fieldwork. Much of Johnson's ethnographic attention in Uganda focused on movements of people, fish, and ideas about fish and people that circulated within, between, and beyond several hundred islands that fringe Uganda's southern shores. Travel along these shores takes place primarily by boat. Travel between islands and between islands and the mainland has, at least for the last 1,000 years, worked to enact worlds that, to borrow Boellstorff's phrasing, are "defined in terms of exteriority, not bounded shores" (392).⁶ While infrastructures more common on the mainland, like electricity and piped water, are virtually non-existent on islands like these, cellular networks have expanded and extended possibilities for material and metaphoric connection between islands, the mainland, and beyond.

Johnson experienced such a connection on a day in late 2012. Regularly staying on one island, she had been invited to visit another by a wealthy fisherman who lived there. After a few days on his island, he again arranged a boat to take Johnson back to the island where she was based. The two islands were not connected by a regularly serviced route, so it was necessary to arrange a special boat for the trip. After the morning's storms ended, they boarded an open wooden boat about twenty feet long and headed east. The captain of the boat spent almost the entire journey talking on his phone, but Johnson could barely hear a word of his conversation over the persistent roar of the outboard engine and waves smacking against the bow. The phone calls themselves were not surprising; it is normal for people to make and take many calls on the move, and cell service was particularly good on the stretches of sea between the islands and the mainland.

Some thirty minutes after they departed the captain pointed out another boat coming from the mainland to Johnson. That boat, not his, would take her back to the island site where she was working at the time. He had made these arrangements, the captain said, early in the morning with a colleague who runs a transport vessel around market days and regularly passes through the wide stretch of open water that separates these islands. Johnson moved quickly as instructed into the other boat, first one leg and then the other as the gap between the two began to widen.

It is unlikely that this kind of convergence and transfer would have happened before mobile phones were widely available. Plans could be coordinated far in advance, for example, in a face-to-face meeting at a weekly market. Still, the vagaries of weather conditions and local circumstances that necessitate nimble timing and trajectories of travel on the water make it difficult to envision this kind of fleeting coordination occurring otherwise. The combination of existing personal connections and the mobile phones used to realize them, made this on-the-water meeting possible.

⁶ See for example: Johnson (2017, 2018).

In place like coastal Uganda, or the high-altitude Andes, residents daily navigate complexity in their use of, and transits across, "the environment." In Johnson's case, interlocutors make sense of a wide range of variables, including wind, waves, and rain, and cycles of seasons, the moon, and market days, which serve as dynamic and changing scaffolds informing decisions about travel, work, and leisure. Digital devices offer new ways for navigating social interactions and needs across these complex spatio-temporal signals. In the case Keleman Saxena describes, digital devices offer new ways to imagine the future from remote spaces, reducing assumed tradeoffs between emplacement and aspiration. While these changes are subtle, they are also wide-reaching – and it is to this reach that we turn in the following sections.

5. Digital sociality between "the field" and "home"

Felista's work, described in this article's opening, draws attention to the capacity of digital technologies to bring distant worldmaking events into close emotional proximity. Something similar occurs through the digital connections forged during, and after, ethnographic fieldwork. The dings and buzzes of digital messages, and the increasing availability and clarity of voice and video calls, now connect researchers in "the field" to people and events "at home", just as they connect friends, colleagues, and interlocutors to researchers who have physically departed from their fieldsites. "The field" is no longer a temporally and spatially bounded place that ethnographers may choose to visit but not be visited by. For academic ethnographers, especially in anthropology, there is an expectation that connections to particular field sites should be maintained over a lifetime, stretching beyond an initial period of immersion during one's professional training. And yet, disciplinary conversations about how these ongoing connections should be developed and maintained are still based on a model that fits uncomfortably in worlds that have changed almost beyond recognition.

The conversations between Johnson and Keleman Saxena that underpin this article began as something of a confessional, as we both questioned whether and how our use of digital technologies and social media platforms "in the field" and "at home" departed from the expectations of "immersive" fieldwork. For one of us, digital platforms had made it possible to stay closely connected to precious home contexts during fieldwork. These connections helped her maintain mental and emotional wellbeing during a period of more than two years in the field, punctuated by political uncertainties in her fieldsite. They also generated an insecurity about whether these investments in close personal ties back "home" somehow made her "less connected" with the fieldwork experience, or at least an idealized version of it. The other felt ambivalent about sustaining connections to a large number of then physically distant contacts once she left "the field." She was grateful that digital technologies allowed her to continue workshopping ideas first developed with her closest interlocutors, fleshing out moments sketched too briefly in her fieldnotes, or requesting copies of documents or translations over the phone, WhatsApp, or email. Still, her inner critic scolded her – a "real" ethnographer would already have had all she needed to "write up" before reaching home. At times, the frequency of contact and the weight of its content was overwhelming.

These tensions, as we have come to interpret them, highlight the class, gender, and life-stage implications embedded in the "traditional" model of fieldwork. The ideal-type of a life at "home", punctuated by neatly packaged visits to the "field", and the geographic and social distance from one's loved ones and interlocutors that such visits imply, seems ill-fitting for engaged, feminist scholarship in this historical moment. For us, digital connectivity affords possibilities for continuing to do fieldwork while also keeping open lines of affect and caregiving that tie us to our friends, parents, siblings, partners, and children. These connections provide support across geographic space in moments when we are especially physically or mentally taxed, e.g. during an unexpected illness; in moments of civil unrest; through the everyday dissonances caused by navigating gendered and cultural norms; or when grieving the death of a loved one. Over time, these kinds of disruptions have accumulated not only in the field sites where we work, but also in our own "home" contexts – and we have found ourselves receiving support and care from still-connected interlocutors in our fieldsites, just as we have sometimes offered it to them.

The question then becomes: where- and what - is "the field" in our digital age? If ethnography's founding image of fieldwork is the "man on an island", represented by Malinowski's literal exile into the field in 1916-1917, now more than a century later, this model and the assumptions and expectations it implies need explicit

revision. It is obvious that contemporary fieldworkers are not uniformly young, unmarried, and male, and they do not all claim European roots. Nor are fieldworkers predominately married men aided by their wives in their fieldsites and in their home offices. It is instead the assumption of mutual isolation between home and field that undergirds idealized forms of long-term fieldwork in the style Malinowski which is in need of unsettling. Felista di Superstar – and our encounters with her through ongoing forms of digital sociality – again, illustrates this point.

We learned about Felista's tribute to George Floyd through Johnson's ongoing connections with interlocutors in Uganda – connections that were first made in person over a decade ago. In late May of 2020, on the second day of Black Lives Matter protests in Indianapolis, Indiana, Johnson was one of hundreds of protesters who, in full daylight, encountered members of the police in riot gear attempting to create a physical barrier to prevent protestors from continuing their peaceful march. It was not clear why this confrontation was staged. There were no official declarations of unlawful assembly or instructions to disburse. As police outside of a downtown Whole Foods store began pointing their teargas launchers at protestors and threatening to shoot, Johnson began recording video on her phone.

Johnson had no local point of reference for an encounter like this, remembering instead accounts of similar altercations with police forces told to her by a close Ugandan friend. Laughing, her friend had emphasized how often the Ugandan police would accidentally gas themselves by failing to control their weapons and accurately read the wind. That day in Indianapolis, after a few verbal taunts from protestors and a single water bottle thrown towards police, the officers began pulling their triggers. As one of the first tear gas cannisters hit and bounced off the roof of a police car, Johnson laughed: her friend had predicted this. At first, she stood still, observing and filming. She remembered his advice – if ever in a similar situation: pay attention to the wind and find a clear path out. Johnson found the wind, but as clouds of gas merged and started filling the city street, she, like others, was forced to flee through the gas in an attempt to escape from it.

Earlier that day she had received a WhatsApp message from that same Ugandan friend. It was a forwarded copy of a video of protestors streaming into a large white structure framed by tall white pillars. "Was this the Whitehouse", he asked? "No", she had replied, speculating as to which monument was depicted. That night, Johnson sent her video of her encounters with police via the same WhatsApp thread. She woke to a copy of Felista's tribute to George Floyd, a video he had just received from a group composed of over a hundred alumni from his secondary school in a village far from the country's capital. The video of Floyd's murder, he said, was sent to him via the WhatsApp group for his primary school, less than 24 hours after Floyd's death.

As Johnson and Keleman Saxena shared conversations about these videos and unfolding events – also over various forms of digital social media – Felista's tribute became a touchstone for this already-underway article. Engaging in this way places us on ethically complex terrain. Felista's work is in the public domain, as are many of the interviews with her that we draw from, so no formal permission is required to write about her work. But what are the ethics of writing ethnographically about a minor who one has never met in the flesh? In conversations like the WhatsApp exchange that brought Johnson access to Felista's work, where is the line between drawing data from conversations that one has initiated – and continues – as both ethnography and friendship? Although tensions like these have perhaps always existed in ethnographic research, they are amplified by the ubiquity of digital devices, which both makes the public spaces of the internet (like YouTube) instantly accessible to a wide audience, and heightens the feeling of intimacy in friendly relationships, with messages from interlocutors in the field being communicated through the same apps that bring messages from friends, family, or collaborators physically closer to home.

The ethics of these encounters merit wider conversations. The AAA Ethics Forum last engaged with "multimedia anthropology" and sites like Facebook in 2013. Less than a decade later the suite of technologies and the worlds within which they are used feel worlds away. Further, while many institutional review boards (IRBs) give guidance on the collection and storage of data, their capacity to advise on the finer points of qualitative research is limited – and indeed, for communications undertaken via smartphone, or over social

⁷ See for example: AAA Committee on Ethics (2013) and Collins and Durington (2013).

media, it is questionable whether one would or should want to give their institution jurisdiction over interactions through a personal device, with people they have long known.

In the case of Felista, we have navigated these questions by reaching out to her directly via channels that she and her collaborators made publicly available, to ask whether she would be comfortable with us writing about her. But even while writing, we wonder about the ways in which this consent might, in the future, fall short, or be revised. Despite being connected to Felista through social media and WhatsApp, we are still separated from her by geographical distance and social difference. It is difficult to predict whether, in 5, 10, or 20 years our shared interest in the 2020 Black Lives Matter protests will develop as an enduring resonance or similitude, or prove a momentary intersection on the internet. In this sense, it is increasingly important to consider consent for ethnographic research as an ongoing process, one which participants may revoke at any time. Similar to advocacy for 'dynamic consent' in genomics research with indigenous groups (Garrison et al., 2020), this is a standard which goes beyond narrow codifications of "prior informed consent;" it should also reflect our commitments to keeping our interlocutors (and ourselves) safe over the long lifetimes of digital data. Ongoing conversations about indigenous data sovereignty (Carroll et al., 2020, 2021) stand to chart ways forward for political ecologists working with digital data.

Digital devices present challenges for ethnographers beyond those posed by pen and paper. It is virtually impossible – for us anyway – to imagine doing fieldwork without them, or to separate our fieldwork digital selves from our digital social interactions at "home." And yet, information contained on these devices can be apprehended by public and private actors remotely, without our consent, and without us even knowing a particular disclosure has occurred.8 And while our writing here focuses on the ways that digital devices have helped us to forge wanted connections and supportive relationships, not all relationships developed in fieldwork are so comfortably extended. Though under-discussed, ethnographers also experience, for example, interpersonal violence, or gender-, ability, or race-based stigma during fieldwork, and post-fieldwork digital connections can extend these vulnerabilities.

As digital-social spaces dissolve the boundaries between "field" and "home", prioritizing safety for our interlocutors - and for ethnographers - is a topic that requires responsive conversations within classes on methodology, and in research groups, academic departments, and professional associations. What "safety" means, and for whom, may change as technology changes. Fostering spaces where the assumption is not "critical distance" from the field, but rather "critical proximity" during and following fieldwork, stands to help ethnographers workshop and think through challenges as they arise, and develop shared expectations about the ethical and personal stakes of remaining digitally connected.

6. Digital data in the academy

Digital data offer avenues for researchers outside of the social sciences and humanities to approach topics which have often been the purview of qualitative, ethnographic inquiry. "Big data" approaches allow data scientists to search and analyze text on platforms like Twitter, Facebook, and Reddit and, for example, attempt to analyze political behavior (Gayo-Avello, 2013), responses to natural disasters (Kumar & Ukkusuri, 2020), and users' perceptions of the "eco-friendliness" of major brands (Blasi et al., 2020); or identify the communication tactics correlated with the uptake of ideas, thereby distinguishing online "influencers" (Lahuerta-Otero & Cordero-Gutiérrez, 2016). Information volunteered in less explicitly "social" platforms can also be used for tracking trends in embodied experience. Strikingly, in the early days of the Covid-19 pandemic in 2020, when the disease was still little understood, Google searches (e.g. "why can't I smell?") were used to crowd-source information on common symptoms, and help track where case numbers were growing (Kelly, 2020).

As Marres and Gerlitz point out, social media "invites us to consider in more detail the similarities and differences between the methods that are 'built into' online media, and our 'own' social research methods" (2016, p. 22). While the analytical frames and methodological practices of data science differ from those applied by

⁸ Consider, for example, Edward Snowden's revelations about the extent of the U.S. National Security Agency's digital surveillance efforts (MacAskill et al., 2013). On corporate surveillance, see Zuboff (2019).

ethnographers, both types of researchers are interested in the kinds of granular information volunteered within the intimate spaces of interpersonal interaction. Thinking with this intimacy, however, highlights just how much digital-social spaces trouble ethnographic inquiry. Depending on one's security settings, the information volunteered on social media platforms while physically located in "private" spaces can itself be both "public" (in terms of who can ethically access and re-use it) and "proprietary" (in terms of the right claimed by a forprofit corporation to re-use and profit from it). Personal laptops, smartphones, or affinity groups on Facebook or WhatsApp, in this sense, may present a parallel to the "household" or the "community" as key concentrators of social interaction, but these forms also represent new sorts of "black boxes", obscuring, just as they illuminate. Observation in such spaces, whether participant or otherwise, raises long-standing ethical issues about the feasibility of informed consent in long-term interactions, and practical questions about the extent to which the observer's presence may bias what she sees.

As data scientists, spatial analysts, and others undertake research on topics, people, and spaces that have historically been the subjects of ethnographic inquiry – or, put another way, on issues defined by distance and difference – a broader conversation about how ethnographers engage with these methods and their proponents is warranted. What can classic ethnographic methods – which rely on "being there", including face-to-face interaction and embodied experience – contribute to these conversations? How can ethnographers position ourselves in conversation with such research, while still maintaining a critical perspective? And when technology or analysis based on digital data threatens or actually does violence, how can we best position ourselves to actively resist it?

Thinking as environmental anthropologists, we identify at least two core ways that research involving digital social spaces can help shape academic conversations developed around digital or remotely gathered data. First, ethnographers are uniquely positioned to provide the kinds of critical insights that can only be derived from long-term participant observation, helping to understand how life online articulates with material, in-the-flesh socialities. Second, ethnography is uniquely positioned to take a critical perspective on how systems are conceived of and enacted by scholars and practitioners working in digital spaces outside of critical social science, identifying and critiquing the kinds of "imagined holisms" that digital-social interactions rest upon, assume, or sometimes, create. In both of these ways, ethnographic approaches can also highlight the power relationships involved in digital technologies and digital spaces, including the ways in which they reinforce preexisting hierarchies or, sometimes, contest and upend them.

The experience of "being there", or of knowing our sites and interlocutors within and across time and place, remains a core contribution of ethnography. Attunement to the complexity of human experience – including our own – allows ethnographers to probe received wisdoms that undergird the conceptual scaffolding of large sample-size research designs, the practice of remote inquiry, and the training of algorithms. In his critique of rapid, "expert" assessments in rural development research, now some forty years old, Chambers (1984) famously pointed out that researchers tend to collect and interpret information based on who and what they encounter. People who are deceased, or unable to attend meetings, or events that fall outside of the seasonal frame that makes it easy for researchers to visit, are often rendered invisible to analysts. Identifying the limits of short-term and narrowly targeted engagement is one area where the sustained work of ethnographic research is invaluable. As digital sociality continues to transform the nature of research itself, ethnographic approaches can help to clarify what digital data does, and does not, have the capacity to reveal.

An example concerns the interpretation not of speech, but of silence. In Bolivia, much of Keleman Saxena's research took place in group interactions, in the company of agronomists from a collaborating NGO. She also conducted a household survey, stretching over a period of months, with the support of a team of ten Quechua-speaking Bolivian university students. These efforts, especially days spent in the field, involved a great deal of shared decision-making, bookended by discussions undertaken on long car-rides to and from the capital city, where the field team lived. These sustained encounters, in the interstices of more structured research methods, also generated "data", and these colleagues became some of Keleman Saxena's closest interlocutors.

Through these activities, Keleman Saxena learned how to track, and guide, group interactions, and in particular, to pay attention to moments of silence in group discussions. Her companions did not use silence to indicate comfortable assent to an idea or plan. Rather, silence often indicated disagreement, and a reluctance to

express dissent. Keleman Saxena's Bolivian coworkers held an expectation of workplace discussions derived from highly hierarchical environments (e.g. classrooms or offices) where disagreement with an authority figure might well be met with retribution or punishment. In these group settings, and in other contexts in Bolivia, Keleman Saxena learned to interpret silences not as spaces absent of meaning, but rather as moments freighted with multiple, often conflicting, concerns, ideas, and opinions.

These experiences have been useful as, post-fieldwork, Keleman Saxena observes conversations among Bolivians on digital media. Primarily through Facebook, she keeps in touch with Bolivian colleagues, and follows public groups dedicated to discussing food and agricultural development. Posts made in these public fora largely center on social events (travel photos, weddings, birthdays, and deaths) and draw comments that, in a few words or memes, support, empathize with, or gently tease the original poster. These digital expressions seldom venture into political topics, and posts that do share news articles or memes about current events are only infrequently subject to extensive comment. Further, explicitly political content is often posted by Bolivians in positions of relative social or economic power, or who live outside of the country. This relative silence around political issues is particularly remarkable given the events that have taken place in Bolivia in recent years, including the fires that struck the Bolivian Amazon in summer 2019; the ouster of Evo Morales from office that same fall, and the political violence that followed; and the ongoing Covid-19 pandemic. Drawing from the experience of fieldwork, Keleman Saxena interprets this lack of online discussion – among people who she knows, from face-to-face interaction, to be well informed, highly literate, and to hold carefully thought political opinions – to reflect a fear of social or political retribution for expressing controversial views.

Observing these patterns helps Keleman Saxena to contextualize discussions in other Bolivia-based online forums. For example, a 3,000-member public quinoa producers' group, which Keleman Saxena follows, consists largely of posts that share quinoa recipes, announce quinoa-related events, or request information on current prices, or organic certification standards. Posts seldom host lengthy comment threads, and when they do, these usually remain narrowly focused on quinoa. Discussion of politics, the environment, or other intersecting but potentially controversial topics is rare. Hence, in the recent context of the coronavirus, a post in July of 2020 stood out: "A todos los que salimos a trabajar, que la sangre de cristo nos cubra." ("Let the blood of Christ cover all those of us who leave home to work.") The post was followed by several comments – many simply saying "Amen" and another – referencing neighboring Peru – expressing a pointed lament about the state of the national health care system.

Prior ethnographic research – and the mixture of face-to-face interaction with interlocutors, and extended interaction in virtual spaces – aids in interpreting silences in digital forums and moments when these silences are broken. "Data mining" methodologies put to use in a group like this one might document the small number of expressions on politically sensitive topics and conclude that politics – and by extension the concatenation of social, environmental, and public health crises in Bolivia – are of little concern to quinoa farmers. Meanwhile, an ethnographic interpretation of these forums, grounded in observations on the function of silence in face-to-face debates, might conclude something different; it might conclude that the moments when these concerns surface reveal a larger context of collective preoccupation, seldom shared explicitly for fear of conflict. In this context, a prayer for safety in the midst of a pandemic and a lamentation about the inadequate public health system is not a one-off, incidental comment, dwarfed by conversations about the price of quinoa. Rather, it can be seen as a pointed and possibly risky expression of concern about the larger conditions of precarity in which agriculture is practiced, resonant with other users of the forum.

The role of ethnography in helping to interpret unstated content in digital spaces is perhaps not so different from its historical role in offering interpretations of granularity, nuance, and life-as-experienced by cultural "insiders", as opposed to life-as-observed by outsiders. Even so, this historically emergent period of digital sociality begs more careful consideration of method (e.g. how/what ethnographers do and observe), interpretation (how/what we analyze), and audience (who we speak to about it all). When and how does "lurking" in a public digital forum parallel participant observation, and where do those parallels end? And how to justify what we learn from such experiences in terms not only understandable to our own disciplines, but also to others that aim to make interventions on similar topics? These are challenging questions, but they are arguably critical, not only for helping our method and theory keep up with contemporary life, but also for the survival of our scholarship within a larger academic context. Like interrogating the "black box" of the

household, critical ethnographic engagements with digital sociality require unpacking the black boxes of the internet.

But critical thinking about digital social spaces also requires thinking critically about the nature of these spaces, or systems. Perhaps the most daunting – and most imperative – arena for research in this sense is understanding the world-making effects of "the algorithm." As a technical term, this word denotes a set of coded instructions that lead digital devices to perform specific tasks. In common parlance, the word more frequently gestures to a sort of Heisenberg uncertainty principle of the internet, or the fact that the observer's interaction with digital spaces changes the content they view. For example, the advertisements that one sees in social media, or when watching videos on YouTube, are influenced by the kind of content that one has previously engaged with, either within those platforms, or elsewhere. Consequently, it is difficult to distinguish what is stable content, in the sense of being equally perceptible to others as to oneself, as opposed to what is an artifact of one's own prior interactions.

Knowing that digital spaces respond to one's own interactions can give a hallucinogenic quality to digital interactions, unsettling ethnographic observation. This sense is easily compounded by knowing that bots, trolls, hackers, or scammers may use these same spaces to actively disseminate false information, or trick a user into revealing details about themselves that might be subsequently damaging. Critically, it is the notion of human connection that allows these forms of digital sociality to do "real" work. Bots, trolls, scammers, and hackers rely on invented identities, or profiles of typical users, to gain the interest and trust of their targets. The dissemination of false political propaganda through Facebook, for example, would be impossible if other users did not treat these profiles as if they were "real", reproducing, validating, and embellishing such material. These are forms of worldmaking: of using human connection to stabilize (or contest) particular forms of storytelling about the present, and the meanings assigned to them. These means and meanings have material effects.

While digital spaces are at once necessary for exchanging and accessing information, they are also built around simulacra: this is the world of "alternative facts" and "fake news." Engaging with the nature of these spaces – and particularly with "alternative facts" – puts ethnographers into strange territory. On one hand, taking seriously the kind(s) of information disseminated through digital forums may mean validating viewpoints which are demonstrably false (i.e. not fact-based), or which validate political views that the ethnographer may find repugnant. On the other, defending a certain set of stories as "real" or "valid" risks reifying the perspectives of particular cultural groups, and flies in the face of the relativisms (cultural and otherwise) that are founding principles of ethnographic work.

Rather than trying to distinguish the "real" from the "fake", a way forward, may lie in the ability of ethnographic research to identify and contest imagined holisms. Tsing and colleagues (2019) have recently written about the importance of such holisms in the context of the Anthropocene. In service of the larger point that the Anthropocene is best understood as "patchy", these authors argue that a potential contribution of anthropology is to interrogate the imaginaries implicit in notions of systems, with particular emphasis on systems of political economy, ecological modeling, and alternative cosmologies. Digital anthropologist Meg Stalcup mirrors this perspective in pointing out that the tools and methods of anthropology allow for interrogating digital spaces "at a human scale", by "looking at how something comes to count as true, what underlies belief or disbelief, and, beyond what people say, what they don't say, and what they actually do." Stalcup's observations underscore that understanding the effects of truth claims in digital-social spaces entails looking not just at systems of discourse and ideology, but also how these intersect with technology (what devices, apps, or platforms are people using), and capital (who pays for the transfer of data, and how are profits made)?⁹

Ethnographic engagement has the potential to identify how these systems work through digital-social spaces by asking, for example, how do larger forces of capitalism link the cost-to-user of data packages with larger inequalities in the distribution of information? Or how do predominant conceptual frames disguise the climate and environmental impacts of "virtual" work? While these questions are very much relevant for, for example, suburban voters in the US or Europe, they are increasingly relevant for fishworkers in Uganda, or

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⁹ Text quoted above from a conversation with Stalcup featured on the Emergent Conversations Blog of *PoLAR: Political and Legal Anthropology* (Curtis, 2020).

farmers in the Bolivian Andes. Low-cost smartphones, the expansion of infrastructures for digital connectivity, and the reach of low-data-use platforms like WhatsApp connect the users of these technologies to their friends and families, just as they broker connections to larger systems of knowledge, power, and practice like communities of politicians, development practitioners, foreign researchers, and companies that send their CEOs into space.

Understanding what changes – and what stays the same – as these digital-social networks begin to overlap with other forms of social interaction is an empirical question for future research. So, too, is the question of how these expanding interconnections intermesh with the sociomaterial assemblages we might otherwise gloss as "the environment." Put another way, if "systems are thought experiments to make sense of structures" (Tsing *et al.* 2019) ethnographers of remote landscapes might engage with digital connectivity by asking how digital social interactions reshape the ideas, practices, and material forms that scaffold life in these spaces.

7. Critical proximity and conversations ongoing

This article has taken several years to write. When we began, a key touchstone for our thinking was "Mama Hope", a woman Johnson worked with in Uganda in the early 2010s. During a chance encounter when Johnson went "back to the field" in 2016, Mama Hope made the point that proximity was not just about physical distance, but also about the frequency and quality of interactions. Mama Hope was referring then to her proximity to the sea, something she evaluated in relation to the availability of fish for her small business and the strength of relations with others who made her fish purchases possible — a place, potential product, and group of people that she was subsequently estranged from due to a government crackdown on so-called illegal fishing. This, it seemed to us, articulated something central to the changing nature of digital sociality, and its implications for ethnography. Digital interactions, through their potential frequency, afforded by their increased accessibility, allow for the emergence of a sense of proximity, even across physical distance, and perhaps especially, across conventionally drawn lines of social difference.

Our thinking on this topic has also necessarily been shaped by the events of the past several years, including the rise of authoritarian populism, the Covid-19 pandemic, and the ascendant push for racial justice in the United States and elsewhere. Felista, who opens this article, struck us as a powerful figure in this regard, for her historically unprecedented ability to publicly participate in ongoing conversations about events seemingly a world away. The claims-making she engages in is not unique to the contemporary moment, but the immediacy and reach of her interventions are.

We wrote the end of this article in the wake of the trial and sentencing of Derek Chauvin, the police officer now convicted of murdering George Floyd. Here, too, the capacity for digital spaces to elevate voices and perspectives of people who might otherwise be silenced was salient: during the trial the public (which potentially included anyone with a radio, tv, or smartphone) learned that the video of Floyd's death had been filmed by a young woman, at the time a minor. Her testimony during the trial underscored the wrenching choices she and other observers of Floyd's death faced, knowing that what they were witnessing was wrong, but appeared impossible to stop (Chappell, 2021). By documenting Floyd's death using her cellphone camera, this young woman captured and communicated a lived reality of racial injustice that, despite the efforts of Chauvin's lawyers, proved beyond contestation. Throughout, Felista herself has continued producing art and commentary; her first full-length EP was released on YouTube the day after Chauvin was convicted.

It is not new, in ethnographic research, to consider the meanings and implications of our interlocutors' engagements with "modern" technologies. Encounters between "traditional" peoples and the materialities of modernity have been the subject of extensive ethnographic commentary, much of which underscores the insight that, while one might differentiate "modernism" as a particular historical period, the claim to "being modern" is not fully captured by specific epochs, technologies, or practices. Rather, claims to modernity might better be understood as claims to particular kinds of subjectivity (Latour, 1993) – and when made from spaces of post-coloniality, these claims may also be understood as claims to membership in a larger global order (Ferguson 2002). In these contexts, Appiah (1991) has evocatively described modernity as a "space-clearing gesture", undertaken in pursuit of autonomy and the recognition of sovereignty.

Ethnographic discussions of indigenous media and communications technologies, too, reiterate many of these themes (cf. Shepard Jr. & Pace, 2021). Ethnographers' commentary on indigenous peoples' engagement with media communications moves beyond the incongruities of tradition and modernity (e.g. the "novelty" of indigenous peoples with cell phones), and instead underscores the extent to which such media can strengthen and build connections among particular language communities, or help to reinforce territorial rights and sovereignty claims (Smith & Ward, 2000). Spaces examining indigenous media production have also challenged anthropologists to consider indigenous interlocutors not just as sources but as co-producers of knowledge, and in the best circumstances, co-authors (Gurrumuruwuy et al., 2019).

Digital sociality affords possibilities for these conversations across distance and difference. Like Felista, in our own digital media, we see interlocutors from historically marginalized groups asserting shared humanity across lines of social difference – and also underscoring that allyship demands a response. It is common for users of Facebook, Twitter, and other social media platforms to ask white users to go beyond simple expressions of solidarity and instead to take action – to donate, protest, learn more about the histories of oppression of which they are a part, and take the initiative to teach others (and particularly other white people) to do the same. Digital sociality in this way fosters claims to membership, and more; these spaces allow for the explicit establishment of critical relationality, and that relationality, in turn, calls for not just an analysis, but action.

Critical proximity, as we think of it, is what might emerge for ethnographers working within and across physical and virtual spaces. It is about recognizing that our work comes into being through our relations with others in a contemporary moment, and that these connections generate obligations, big and small. Digital sociality extends possibilities for ethnographic observation of, and participation within, our "fieldsites" across distance. By sustaining intimacy across time and place, critical proximity affords possibilities for doing difference differently. In the process, it generates responsibilities for intervention when conventional framings of distance and difference are put to use in projects – scholarly or otherwise – that do harm.

We write the final version of this article with the sense that any meta-analysis of digital technologies is always-already late to the conversation. Research in political ecology on the implications of digitization, and the extension of digital connectivity to remote environments, is rapidly expanding. Recent ethnographic contributions in this sphere examine, for example, the implications of digitization for the exacerbation of economic inequalities in Indian agriculture (Stone, 2022); the uses (and limitations) of digital communication to bridge geographic and social distance over the course of Covid-19 "lockdowns" (Jalais & Sridhar, 2021); and the use of networked digital media to develop collaborative community-based research and monitoring of environmental issues (Albright & Wylie, 2014). As researchers both engage with "the digital", and engage in ethnography using digital forms and media, thinking with critical proximity offers a perspective to situate political ecology research within larger socio-material assemblages of environment, economy, communication, and knowledge.

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