Hybrid ethnography: Access, positioning, and data assembly

Ruo-Fan Liu [iD]
Department of Sociology, University of Wisconsin-Madison, USA

Abstract
This research suggests three ways in which hybrid ethnography can be used to overcome the shortcomings of single-realm ethnography, in particular, ethnographies that situate solely in the offline or online worlds. I focus on how researchers adapt the ethnographic toolkit to an environment where digital and physical landscapes touch, overlap, and blend. I name these tools multi-access, multi-positionality, and online-offline data assembly. Multi-access refers to researchers using alternative access points to renegotiate blocked access. Multi-positionality refers to researchers leveraging online and offline self-portrayals to reestablish relationships with multiple participants. Online-offline data assembly refers to researchers analyzing multi-faceted data generated by researchers and participants to validate analyses. Taken together, researchers combine, separate, and mix three tools as toolkits to flexibly transition online and offline in the post-pandemic era.

Introduction

Since the COVID-19 pandemic arose and has resurged across the globe, ethnographers have encountered challenges when access to face-to-face settings is limited. According to the National Science Council, 87% of researchers reported disruptions, lack of access, research termination, and lack of control over future research agendas (Levine et al., 2021). As respondents transition online and offline via mobile phones, social media, and zoom meetings, and many events are organized in a hybrid format (Akemu and Abdelnour, 2020;

Corresponding author:
Ruo-Fan Liu, Department of Sociology, University of Wisconsin-Madison, 2422 Social Sciences, 1180 Observatory Drive, Madison, WI 53711, USA.
Email: mikki.liu@wisc.edu

Gabriels and Bauwens, 2015), ethnographic work has to capture this "new normal." While most ethnographers either extended their research sites to virtual settings or conducted online-offline ethnography simultaneously (Bagga-Gupta and Dahlberg, 2021; Beneito-Montagut, 2011; Christin, 2020; Dong, 2016; Garcia et al., 2009; Jordan, 2009a; Lane, 2019; Seaver, 2017; Tummons, 2020), little research has addressed how ethnographers adapt tools for this new reality and how they consider the implications of retooled processes.

This research reviews the emerging work of online-offline ethnography, the challenges scholars confront, and how they adapt existing tools when digital and virtual landscapes overlap and blend into each other. I term this work hybrid ethnography, an ethnography that studies social interactions spanning digital and physical field sites (Przybylski, 2021).[1] As researchers redefine *where* to study from physical or virtual settings to more or less mixing, interconnected virtual and physical settings (Leander and McKim, 2003; Sade-Beck, 2004; Jordan, 2009a; Zeller et al., 2015; Przybylski, 2021), they also transform the toolkit of *how* we study the interconnected research field. This reconceptualization challenges what the field is, where it is, and when to access it. For example, researchers can stay "in the field" on campus but "off the field" on Instagram. A field is constructed relationally, based on how respondents are embedded in the network, the kind of social relations in which respondents are embedded, and which sites reveal these social relations.[2]

As researchers transition online and offline to follow participants, they put negotiations at the center of research procedures and raise a set of questions about access, positioning, and data collection. For instance, scholars switch roles by utilizing visible social traits (e.g., gender, age, and race) or digital self-portrayals (e.g., avatars and headshots) to position themselves (Bluteau, 2019; Beaulieu, 2010; Caliandro, 2018; Ferguson, 2017). Their approach may change when entering a site by hyperlinks or by contacting key informants (Christin, 2020; Dong, 2016; Lane, 2019; Zani, 2021). They may analyze data from field notes generated by researchers or screenshots, digital footprints, or videos generated by participants (Bagga-Gupta, 2017; Colom, 2021; Luhtakallio and Meriluoto, 2021; Murphy et al., 2021; Pascoe, 2012; Sanjek and Tratner, 2016). As researchers move across digital and physical realms, they recombine these tools when online or offline methods alone are insufficient.

This article unfolds as follows. First, I address the limitations of conducting ethnography solely online or offline and why hybrid ethnography can overcome the shortcoming of a single-realm ethnography. Thereafter, I turn to retooled processes addressed by online-offline research to unveil how researchers adapt their tools in gaining access, taking positions in the field, and analyzing data. Finally, I used my hybrid ethnography in a high school and on the multi-media platforms Instagram, Google Meet, YouTube, and LINE Chatrooms (an equivalent to WhatsApp) as an example, suggesting the three tools for flexible transitions online and offline. Researchers can take advantage of these tools to renegotiate their research procedures and to use whichever ethnographic realm proves the most beneficial. I call the three tools multi-access, multi-positionality, and online-offline data assembly. Multi-access refers to researchers using alternative access points to renegotiate field entry when they are blocked from one access point. Multi-positionality refers to researchers leveraging online and offline roles to reestablish

relationships with different social groups. Online-offline data assembly refers to re-searchers recontextualizing their interpretations by analyzing field notes generated by researchers and screenshots generated by participants. Each tool enables researchers to transition flexibly online and offline in the post-pandemic era.

From offline to online ethnography

As the explosion of social media extends to daily communications, scholars turn to internet, online, virtual, and digital ethnography to study social interactions (Hine, 2000; Kavanaugh and Maratea, 2020; Numerato, 2016; Pink et al., 2016). Digital ethnography is defined by researchers' immersion and participant observations in technology-mediated platforms (Akemu and Abdelnour, 2020; Bayre et al., 2016; Caliandro, 2018; Hine, 2000; Gyor, 2017; Murthy, 2008; Pink et al., 2016). Unlike offline ethnography, the boundaries of the field in digital ethnography are discursively constructed rather than bounded within geographic spaces (Tummons, 2020). Twitter, Facebook, YouTube, and other platforms are both tools and fields to study social relationships that differ from those occurring at traditional sites such as schools, firms, and classrooms. While the research subject may be the same, the ways in which researchers "gaze upon" them differ, depending on how technology mediates or highlights a particular dimension of social interactions.

Studying technology-mediated interactions not only allows researchers to overcome transnational distances (Flewitt, 2011; Fleischhack, 2019; Kudaibergenova, 2019) but also challenges the authenticity of what a physical site can reveal. For example, studying how journalists use metrics to market articles, what they viewed as dirty work in the workforce, Christin (2020) adopted "fly on the screen" techniques to observe how journalists take account of algorithms. Bluteau (2019) found that researchers co-presented in lab-chatrooms to examine how scientists produce knowledge. Akemu and Abdelnour (2020) extracted emails organizational members sent and received, finding that this data enriched their understanding of between organization communications. These studies challenge the authenticity of what a physical site can reveal and extend the research themes beyond social media to many other settings that were previously studied via offline ethnography.

Despite accessing and positioning in digital platforms, digital ethnographers change the workflow of data collection. While ethnographers jot field notes and shadow, digital ethnographers screenshot data generated by participants (Sanjek and Tratner, 2016; Pascoe, 2012). Multi-faceted data (diaries, storylines, and photos) empower participants to be part of data production and interpretation. It raises the question of who records the data, what counts as ethnographic data, and ethical issues of collecting data. Most importantly, it reverses the power dynamic between researchers and participants when respondents interpret what data mean while producing online footprints (Beneito-Montagut, 2011; Tagg et al., 2017).

While flexible and efficient, however, digital ethnography confronts limitations. The boundaries between online and offline landscapes are pervasively blurred, requiring a truly hybrid ethnography (i.e., one that combines research in virtual and physical spaces) for three reasons (Gabriels and Bauwens, 2015; Hine, 2000; Jordan, 2009b; Sade-Beck,

2004; Tummons, 2020). First, it is impossible to demarcate an online site from offline settings when respondents constantly switch between them (Beneito-Montagut et al., 2017). Second, without conducting offline observations, it is hard to know whether researchers are studying the population they had planned to study and whether people's online behaviors can move into offline behaviors, given the anonymity of internet users (Leander and McKim, 2003). Third, the continuous shift between offline and online work characterizes the multi-sited extension when researchers gradually add or eliminate sites as new insights develop (Hannerz, 2003; Marcus, 2012, 2021).

Hybrid ethnography: What is it and why do we need it?

In this article, I define hybrid ethnography as researchers studying social relationships across digital and physical settings. Hybrid ethnography refers to researchers conducting online and offline fieldwork simultaneously in different research phases. The online-offline divide perhaps reflects researchers' understanding of the world rather than how respondents view it; hybrid ethnography arises. It reconceptualizes the notion of the field from physical or virtually bounded places to more or less mixing, interconnected virtual and physical settings (Jordan, 2009a; Leander and McKim, 2003; Przybylski, 2021; Sade-Beck, 2004; Zeller et al., 2015).

Researchers typically initiate hybrid ethnography for three reasons: tracing populations, following places, and unveiling processes and mechanisms. Most scholars extend their online or offline fieldwork into hybrid ethnography while following a population that naturally inhabits social media and constantly moves in, out, and in between digital and virtual settings. For example, studying teens in Harlem, New York, Lane (2019) found that teens construct "digital streets," demonstrating their gangster identities and masculinity in social media. These tensions in social media between gangsters as they cross over to offline daily interactions, causing gangster conflicts on the street. Besides teens and youth, hybrid ethnography is somewhat unavoidable while studying professions such as coders, models, and journalists because they have to deal with online and offline communications in their work (Hallett and Barber, 2013; Christin, 2020; Seaver, 2017). Another common research subject is marginalized populations, who interact with each other on social media to avoid stigmatization in face-to-face settings. Following how Chinese immigrants adapt to the migrant country, Zani (2021) found that Chinese immigrants sold lingerie products online via WeChat, a communication app that immigrants use to buy or sell products. Following students online and offline to study their language use, scholars found that students adopted different communication strategies not only to enrich their learning but also answer each other's messages by emails or forum discussions simultaneously via digital tools (Messina Dahlberg and Bagga-Gupta, 2013, 2015, 2016). These studies trace marginal, professional, and young population to follow them moving in, out, and across digital and physical landscapes.

A second type of hybrid ethnography is what I call tracing places, which mostly appears in neighborhood and community studies. In this type of hybrid ethnography, researchers planned to study a neighborhood but found that as an old neighborhood disappeared, inhabitants reconstructed a digital place on YouTube (Crick, 2012).

To understand the features of real and fictional sites, researchers follow this "digital place" online and observe how a virtual space mirrors a physical space. In other studies, researchers use digital cameras to monitor criminal activities in a neighborhood (Brush et al., 2013). These studies shift the focus from research subjects to geographic or virtual places to examine how they mirror each other.

The third type of hybrid ethnography is what I call unveiling mechanisms and processes. To understand mechanisms of social exclusion, Dong (2016) designed her research as an offline ethnography and recruited Chinese elites in urban centers to address geographic mobility among elites. After realizing that elites had minimum interactions offline but used a hobbyist bulletin board system (BBS), a community-based website page, to redraw social distinction, she incorporated a digital platform. Similarly, many cultural studies analyze production and communication processes (Leander and McKim, 2003; Wohl, 2021), such as how artists adjust their work based on algorithms and online audiences and production of livestreaming and gaming. Without adding an online component, researchers may fail to see how the mechanisms of social exclusion and cultural production unfold.

Not all ethnographies should be hybrid ethnography. Instead, researchers may shift to hybrid ethnography at critical points when hybrid ethnography is unavoidable. Some researchers initially conduct a solely online or offline ethnography but turn to a hybrid ethnography. These new directions place negotiations at the center of the retooled processes when hybrid ethnographers extend their research sites into digital and physical settings and combine, integrate, and prioritize online or offline techniques throughout their research procedures.

Adapting an ethnographic toolkit into a hybrid flavor: Access, positioning, and data assembly

I draw on the notion of an ethnographic toolkit to discuss methodological adaptation and retooled processes. Drawing upon Swidler (1986) notion of the cultural toolkit, Reyes (2018) defined an "ethnographic toolkit" as a set of tools that researchers use to gain field access and establish rapport. The toolkit concept puts adaptation at the center of the discussion, indicating the continuous negotiations researchers employ to redefine the field and how they study it. While Reyes (2018) deploys a toolkit metaphor to explain how researchers highlight their visible or invisible social traits such as gender, race, and national identity, the toolkit framework can be used to understand how certain tools can be adjusted as researchers transition online and offline.

Although research has not explicitly addressed the retooled processes, a few ethnographers indicated how they combined online and offline techniques. For instance, Hallett and Barber (2013) conducted snowball samples of undocumented individuals to construct a life history study. The initial contact with an individual was turned into online access to respondents' Facebook accounts, opening opportunities to reach out to others through interviewee networks. In this case, the feature of offline access (the face-to-face personal relationship), and the feature of online access (loose social connections that can be tracked) are interrelated. On some occasions, however, different access points may lead

to opposite outcomes. Urbanik and Roks (2020) found that in reaching out to youth through local communication centers, it is harder to establish rapport than through social media accounts. Their study shows that even with the same research subject, different access points may result in successful or failed recruitment outcomes.

Hybrid ethnographers also selectively position themselves via digital self-portrayals or physical social traits. In offline settings, the role of researchers is frequently tied to physical traits such as gender, race, and age (Armstrong and Hamilton, 2013; Calarco, 2018; Khan, 2011; Lareau, 2011; Young, 2004). Researchers can distance themselves, however, from physical traits by creating avatars or lurk behind a digital platform (Ferguson, 2017; Ritter, 2021). This process creates the moment when researchers can prioritize one role over another in the field. For example, Zani (2021), a white women studying Chinese immigrants, noted she failed to build rapport in physical settings because respondents felt uncomfortable in a coffee shop talking to her when other customers appeared. Noticing that her skin color and English accent may have discomforted Chinese migrants, she recalled written, screen-mediated conversations and emphasized her WeChat ID to relieve this tension because her role in the chatroom was equal, without highlighting the race and class tensions between herself and respondents. In this case, digital-mediated platforms and face-to-face communications highlight types of languages that may conflict with or complement each other.

The attempt to break down the distinction between online and offline could not be pursued only in theory. Instead, hybrid ethnographers speak to how each part of data mutually contextualizes other parts. In Orgad (2009)'s research on women suffering from cancer, obtaining online and offline data was crucial for uncovering complex connections between patients' online and offline experiences. Murphy et al. (2021) suggest that rather than presuming online data is inauthentic compared with offline observation, data generated by respondents validate and recontextualize researchers' interpretations.

Although many online-offline studies suggest strategies to navigate online and offline portions of the fieldwork, few have explicitly addressed this retooled process, the methodological choices made while integrating online and offline techniques, and how access, positioning, and data assembly relate to one another. Some research discusses a single tool but rarely addresses the interplay between tools. Researchers may use primary and secondary methods in research procedures, depending on the degrees of involvement and the integration of online and offline sites in their fieldwork. In what follows, I will use my hybrid ethnography as an example to address the retooled processes and how each tool intersects with another.

Hybrid ethnography in high school and on multi-media platforms

I use my hybrid ethnography, a year of school fieldwork and participant observations in multi-media platforms such as Google Meet, Instagram, YouTube, and Line chatroom to address the three tools I drew upon while transitioning between virtual and physical settings. To examine how Taiwanese high schoolers envision the future and how their parents, teachers, and counselors assist college admissions, I initially conducted offline fieldwork in Woodstone High, a school with a diverse student body including

middle-class and working-class students. I participated in events such as college outreach, workshops, counseling office hours, and campus visits. Yet the pandemic brought challenges to this initial research design. In February 2020, the Taiwanese government announced its strict policy to shut down every school and turn schools online if there were two cases that tested positive. Realizing that I was unlikely to continue visiting campus, because of rising Covid cases, I added Instagram, Google Meet, YouTube, and LINE (an equivalent to WhatsApp) as online components of the fieldwork to observe how teachers guided students, how peers searched for role models, and how students construct college dreams.

Table 1 shows the sites I visited, the participants at the sites, and whether the sites fall into physical, virtual, or hybrid categories. Physical sites included classrooms, school hallways, and the counseling office on campus. Digital sites included courses on Google Meet, class chatrooms on LINE, and public-facing accounts on Instagram. The hybrid events entailed activities that span online and offline platforms, such as the live-streamed graduation ceremony on YouTube at school; virtual Google Meet courses that were held on campus; and other occasions where participants moved in front of and behind digital and physical curtains. As these interweaving parts constituted the field site, the notion of the field was no longer bounded within a single site but entailed interweaving "digital" and "face-to-face" components of teacher-student, student-student, and parent-student interactions spanning across digital and physical landscapes.

Where the selection logic of this research departs from digital ethnography is that I did not gather data from every part of the Instagram, Google Meet, or LINE chatrooms. Instead, I followed forty-two middle- and working-class 12th graders to observe teacher-student and peer interactions on these sites. I cared not how media interfaces shaped social interactions but, instead, how social relationships emerged on Instagram, which spoke to how teens envision the future and their self-portrayals. Unlike offline ethnography, I did not constrain my observations to a single site on campus but added occasions based on events respondents experienced. Because nearly 97% of Taiwanese high schoolers have cellphones and unlimited 4G internet access, I was able to follow them throughout the college navigation process as this population mingled their online and offline lives, constantly switching between them.

I had multiple roles in the field, positioning myself as a counselor's assistant, helping counselors with administrative tasks, but most of my time was spent conducting research. I am an alumna who graduated and obtained admissions to an elite university. Being a researcher, an alumna, and a counselor assistant, I switched roles to establish rapport with teachers, students, and parents. Unlike many digital ethnographers who open a research account or fake account, I used my Instagram account which I rarely used to interact with high schoolers. I created an avatar, a picture of a little girl I loved from a Japanese drawing, as my ID, emphasizing my role as an alumna to showcase that I had experienced similar school journeys just like the students I followed.

The multiple roles in which I positioned myself facilitated different degrees of involvement in the field. Scrutinizing body gestures and eye contact, I observed implicit presumptions adopted by teachers and students when they guided students in deciding how "high" or "low" a university they should select. I observed an untold consensus

Table 1. Physical, digital, and hybrid sites.

Field sites	Events	Modes	Participants
Physical sites			
Classrooms	Classroom activities, career-exploring courses, and courses introducing admissions rules.	Physical	Teachers, students.
Counseling office	Individual counseling, workshop on how to write application materials, and choosing your college workshops.	Physical	Teachers, students, alumni, and college representatives.
Public areas on campus	Wishing-me-luck event, graduation ceremonies, school hallways, teachers' buildings, libraries.	Physical	Teachers, students, staff, and parents.
Digital sites			
Google meet	Online workshops and courses.	Digital	Teachers, students, and parents.
Instagram	Individuals sharing of significant moments of snapshots in their lives, peer interactions, networks and ties.	Digital	Students.
Line chatroom	Teacher–student communications and private conversations between researchers and participants.	Digital	Students.
Hybrid sites			
Google meet in classrooms	Students watched their Google meet workshops in classrooms physically together but interacted with teachers virtually.	Hybrid	Teachers and students.
Live stream via YouTube for the graduation ceremony on campus	High school graduates came to the classrooms to celebrate the live stream graduation ceremony.	Hybrid	Teachers, students, and parents.
Courses and algorithm demonstration	Students competing for admissions slots online in computer rooms.	Hybrid	Teachers and students.

emerging from teacher-student interactions about how they rank each university. In online settings, I observed: how conversations were "visualized" through informational exchanges; whether users had "read" messages; the hyperlinks passed on from another user; and cute emojis symbolizing emotions.

Through online and offline field observation, I collected a patchwork of online and offline data, including waves of interviews with 42 high schoolers (84 in total), 46 interviews with teachers and parents, thousands of field note excerpts documenting events

online and offline spanning a year, screenshots of public-facing accounts, multiple chatroom texts with participants and class groups (including two class chatrooms), and live stream video recordings of the graduation ceremony. I foregrounded three modified tools—multi-access, multi-positioning, and online-offline data assembly – that I constantly deployed to navigate fieldwork challenges and uncertainties.

Multi-access: Renegotiating entry and exit points when access is blocked

I define "multi-access" as maintaining alternative access points to (re)negotiate field entry when one access point is blocked. The multi-access concept suggests that access is not a one-time gain but a continuous negotiation over which activities researchers are involved in, how much they are involved, and for whom the access is granted or blocked. The multi-access concept refers to researchers who use one access point to facilitate another access, leverage alternative access points to renegotiate blocked access, and manage online and offline access points to decide the entry and exit timing for the fieldwork.

In my hybrid ethnography, I managed two types of access in school and on multi-media platforms. Teachers controlled access to campus, classrooms, and school activities. Students controlled access on Instagram. At the beginning of the fieldwork, I gained informed consent from the school principal at Woodstone High. I graduated from Woodstone High, and my parents, two retired teachers, knew Woodstone High's former principal. My relatives have connections with the school staff who led the teaching team at Woodstone High. I gained field entry easily through these key contacts. The school principal granted me one-time permission to conduct research in the counselor's office from August 2019 to August 2020. My former teachers granted me access to visit their classes. The school staff granted me access to administrative data. I used offline access to observe teaching and learning activities and how teachers guided students applying to college.

When offline access was stable, I came to school every day from 9:00 am to 5:00 pm and had my own desk in the counselors' office where I typed field notes and communicated with students. I distributed flyers and posters via the counselor's office and recruited 42 12th graders through a recruitment event. I built rapport with high schoolers and teachers through face-to-face interviews and classroom visits. In February 2020, two teachers added me to their class chatrooms to assist students in their college preparation. Although I lurked in the class chatrooms, students recognized my LINE ID and connected my "digital self" in class chatrooms with my "physical self" on campus.

But access to school activities on campus was somewhat limited. It highlighted how teachers design their pedagogy rather than how students understand instructions, such as how the ability grouping shapes students' self-esteems, how students envision their future selves, and the connection between their school placements and the type of future they envision. As a result, I got on Instagram to observe informal events organized by students. In contrast to scholars who suggest that online access is easy to obtain (Ferguson, 2017), my entry on Instagram was intimidating because students drew a line between "their spaces" from "teachers' spaces." Students neglected my friend invitation. I obtained "offline access" in school but was blocked online. Until February 2020, I went to a coffee

shop with Emily, Lisa, and Joe, and Emily tagged me on Instagram with a picture of a handmade cake. After I replied Emily's tag on Instagram, more and more students accepted my friend invitations on Instagram.[3]

As students accepted my invitation, I saw another part of school life from student perspectives, for instance, dancing parties, student election events, and school camp activities. These platforms and 24-hour-storylines report on students' incoming schedules, and I participated in occasional events organized by students by getting consent through text messages in advance. I went with student athletes when they took the national sports skill exam and traveled to exam places with them. I joined a writing activity run by Emily and Lisa to prepare college application materials. While adults granted offline access through institutions, online access was atomized, relying on individual relationships between researchers and respondents. Offline access was a one-time permission, and I had no need to monitor it. Yet online access was contingent, and I constantly monitored who unfollowed my follow or what access I earned. While I never obtained full access to students' private accounts on Instagram – Instagram allows users to edit how much their friends can see their online activities – I gain different types of access depending on my relationship with individual participants.

Online access may be blocked by respondents. Tingyen "unfollowed" my follow on Instagram immediately after I asked him whether I could interview his parents after our second in-person interview. He said yes reluctantly but cancelled my Instagram follow because he worried I would divulge that he had a girlfriend to his parents. On these occasions, I kept coming to school to initiate conversations with students whom I saw in school hallways, using the unequal power held by teachers on campus to renegotiate blocked online access. After Tingyen won an admission offer from a prestigious university, I talked to him after the school celebration ceremony. He edited my access and changed the degree of involvement, following me again, but refused to allow me to observe his online activities. But we still casually chatted frequently on campus or texted each other via LINE.

The multi-access concept addresses not only the entry point but also the exit point of the field. Researchers (re)negotiate when and how to (re) enter the field and when to exit the field. I left school after August 2020 following my agreement with the school principal but maintained minimum social interactions with students on Instagram and teachers on Facebook. Being in the chatrooms, following students, and watching online activities held by my forty-two follow-up cases as well as replying to teachers' daily posts on Facebook helped me sustain relationships with students for further follow-ups as they entered college.

Multi-positionality: Code-switching between digital portrayal and physical appearance

With multi-positionality, researchers hold multiple roles in the field and strategically switch roles in online or offline settings. While position-taking is viewed as how ethnographers play different roles in the field and how others view them (Hammersley and Atkinson, 2007), researchers typically presume that researchers should take a consistent

position to facilitate stable relationships with participants. The disruption of position is viewed negatively in much ethnographic work. However, I want to note that position-taking can be inconsistent, and researchers can take advantage of disruption to redefine their roles in the field. Three dimensions constitute these positioning and (re)positioning processes. Researchers establish new roles while transitioning online and offline, expand one role to another, and manage online and offline self-portrayals by organizing primary and secondary social traits based on research purposes.

In the beginning, I served as a counselor's assistant, preparing workshop and course materials to high school seniors. Students called me a "teaching intern" because many intern teachers came to school for regular teacher training the same semester I was in the school. By assisting at events such as career exploration, introductory courses about admission rules, and essay writing office hours, I witnessed how teachers tailored college advice to different student groups. My initial role, however, created tension with working-class students because they viewed me as an authority figure and felt aliened from this role. Although I explained I came here to "observe" instead of "supervise" students, students saw my relationship with teachers, and it was hard to change the initial impression I left in the field.

Position-taking is relational. Even though researchers are aware of the constraints their initial positions entail, it is hard repositioning without changing relationships. Shifting to Instagram's digital platform, the audience structure shifted from teachers and students to students only. In February 2020, Emily, Lisa, Joe, and I went to a cute coffee shop during winter break and ate chiffon cake together. Emily posted a picture of the cake and tagged me on Instagram. I replied casually, "The cake was delicious!" The relationship with Emily and Lisa created a moment on Instagram in which I could distance my role from the school and establish my secondary role as an alumna. This repositioning alleviated tension with working-class students because they realized I did not intend to spy on them after school. Instead, my life was similar to theirs.

Position-taking evolves as researchers passively control and actively demonstrate some self-portrayals over other self-representations. Unlike offline ethnography in which researchers draw on key informants and their physical traits to establish rapport with participants, in online settings researchers use digital technology to represent themselves. I adopted "fly on the wall" strategies and rarely spoke at school because teachers presumed that I was an observer. But I was expected to post more pictures about myself on Instagram because students presumed that I was a heavy Instagram user. Thus, I revealed more information about myself, such as the restaurant I visited and pictures of my mother's dog. The pressure to self-reveal was not the same in online and offline settings.

A multi-positionality strategy enables researchers not only to establish different roles based on primary and secondary audiences in online or offline settings but strategically expands one of the positions they have taken online to another realm. Researchers can take advantage of this process to reestablish how others view them, a position that is closer to their initial research purpose. For me, it was the close relationship with students who were my main concern. Evidence about this repositioning came to light in March 2020 when several working-class students changed what they called me in school, from "teacher" to "school sister." My new name surfaced after I pressed "like," browsed their

24-hour storylines, and replied to their messages on Instagram. Yet I still assisted teachers, treating my assistant role as secondary. When chatting with teachers privately in their offices, I revealed "invisible" traits – my contacts with professors and English fluency – and exchanged opinions about the structure of student application essays to establish trusts with teachers.

Multi-positionality speaks to how position-taking varies based on audience structure and time stamps. In mornings, my primary position in school was as an alumna, integrating other traits such as female and middle class. At nights, I partially edited messages about myself on Instagram, posting pictures about food while avoiding long posts about how I criticized the government and academic jargon. This impression management can be overwhelming but provides flexibility for researchers to prioritize their primary and secondary roles and code switch in different scenarios. Researchers manage impressions between different "front stages" and "back stages," depending on how a setting is constructed (Goffman, 1959).

Online-offline data assembly: Validating interpretations through multi-faceted data

Last is online-offline data assembly in which researchers recontextualize multi-faceted data to validate analytical interpretations. The central idea of online-offline data assembly is rejecting the presumption that online or offline data are less authentic. Instead, importance is placed on analyzing the consistency or inconsistency of respondent behaviors by using a wider array of data resources. Researchers recontextualize interpretations by capturing the complexity of respondent behaviors, speaking to the intertwining processes spanning online and offline, and supplementing data collection when facing schedule conflicts offline.

"A letter to myself three years later" addresses this re-contextualization process. Each year, school staff organized this event to build a school tradition and ritual moment to symbolize the transition to college as a crucial milestone toward adulthood. Students recorded their wishes in their first year. Staff deposited the letters in a box. Three years later, in May 2020, school staff returned the letters to each classroom and asked students to open the letters. When I was in the classroom, each student read aloud their letters and dreams; some laughed and applauded. Looking at student posts on Instagram, I realized most students in the lower-ability program saw the event as undesirable. They hid their names and regretted their compromises compared to their initial dreams. Had I not observed their posts on Instagram, I would have viewed the event as joyful. This inconsistency between online and offline observations recontextualized my interpretations of how students perceived their choices and dreams at the end of college navigations. Not all students have choices. Other than winners, few had choices or were forced to decide.

In addition to identifying inconsistencies between respondents' interpretations and researchers' analyses, hybrid ethnography allows researchers to examine how processes unfold across digital and physical platforms. In the classroom, student athletes talked about fancy scooters, information that may be easily ignored during classroom breaks. At night, student athletes posted pictures of their scooters on Instagram and recirculated other

posts to show their desires for money and masculine future selves. This online interaction allowed me to see how peer groups collectively dream of a type of future and how desires are diffused through social media. In contrast, middle-class students posted English slang and abstract, short sentences to showcase their desires for transnational mobility. In this case, subtle conversations in classroom settings between middle-class and working-class students were amplified and diffused on social media. Without seeing how the process crossed online and offline data, researchers could not vividly capture the diffusion process among peer groups.

Finally, when researchers have schedule conflicts and have to miss relevant events offline, online data can supplement a lack of physical presence. In April, I planned to follow 42 students to visit campus for oral interviews, a crucial stage of admissions screenings in Taiwan. Campus visits, however, conflicted with each other. As a result, I followed key cases offline but kept track of other students by texting them or browsing their storylines. These retrospective materials were crucial data to understand their emotions while pursuing their college dreams. They provided another venue to observe how students from different class backgrounds paved their paths to college and why their paths diverged. Some of these messages helped me distinguish group trajectories and turning points between middle-class and working-class students. Without collecting online and offline data, I might have focused on individual trajectories rather than the parallel trajectories of middle-class and working-class groups.

In summary, online-offline data assembly speaks to how researchers (re)contextualize findings through data generated by researchers and participants. Most importantly, it enables participants to challenge researchers' perspectives with online-representation and interpretation. While data assembly entails ethical decisions – for example, whether to screenshot the data and how to inform respondents during the ongoing research – from my point of view, it empowered respondents and equalized the power dynamic about who interprets and who is being interpreted.[4]

Conclusion: A new toolkit to navigate the hybrid world

This research suggests three ways in which hybrid ethnography can overcome the shortcomings of single dimension ethnography. By developing multi-access, multi-positionality, and online-offline data assembly tactics, hybrid ethnography enables researchers to use one of the realms to leverage another. In most online-offline research, each tool is interrelated and can be strategically combined based on research purpose. For example, multi-access is related to how researchers reposition themselves to gain access from another site, which is related to multi-positionality tactics. Similarly, multi-positionality requires researchers to reflect on the data they acquire and the reflexivity of their prior roles in the field. Furthermore, online-offline data assembly encompasses complex data gathering processes but requires researchers to modify access in order to gather new data that can validate their interpretation. In most hybrid ethnography, the three tools are closely related and frequently overlapped in a researcher's toolkit to transition online and offline flexibly.

The three tools can be separated in the toolkits, and researchers do not need to conduct hybrid ethnography to deploy each tool. For example, researchers can use multi-access strategies to recruit respondents online and offline without conducting participant observation, distinguishing multi-access tactics from multi-positionality. Researchers can gather online and offline data but only conduct offline fieldwork, separating the online-offline data assembly tactic from multi-access strategies. Multi-positionality is perhaps mostly closed aligned with hybrid ethnography because deep immersion in online and offline settings is key to conducting online-offline ethnography simultaneously.

As the three tools are identified and deployed, researchers also acknowledge the uncertainty happening in the field, particularly after Covid. While researchers are presumed to have a clear-designated research plan before entering the field, such designs are frequently changed. The toolkit I constantly deploy reflects the uncertain feature of ethnography, unstable and short-term relationships we try to build with respondents, and how we better acknowledge this process instead of pretending all things can be controlled and planned. Putting negotiations at the center of the process, multi-access, multi-positionality, and online-offline data assembly provide better ways to navigate uncertainty and contingency for future ethnographers.

Although Covid was an impetus for researchers to conduct online-offline research, the benefit of hybrid ethnography is well suited for some questions and populations regardless of the pandemic. Future research can be extended to degrees of hybridization, the combination of online and offline techniques that researchers use, and their methodological decisions; research should also be applied to the tensions that may arise while conducting online-offline ethnography and how different media interfaces shape social interactions offline.

Acknowledgements

Declaration of conflicting interests

ORCID iD

Ruo-Fan Liu https://orcid.org/0000-0002-0342-0903

Notes

1. Although I use the term of hybrid ethnography developed by Przybylski (2021) to refer to online-offline research that researchers immerse themselves in and conduct participant observations via technologically mediated interfaces and face-to-face settings, this does not mean no online-offline studies have been done before the term was invented. Instead, the term refers to the conceptual shift of how we take account of these new studies methodologically. In this article, I use hybrid ethnography when referring to this methodological pedagogy, and online-offline ethnography when referring to simply online-offline research.
2. To clarify, hybrid ethnography differs from simply collecting data on Twitter or text-mining. Collecting retrospective data and texts is closer to discourse and content analyses, which do not necessarily entail interacting with people either online or offline.
3. Online access and this repositioning process raises ethnical questions. According to IRB, I recorded only the 42 follow-up cases from whom I obtained written informed consent forms from parents. I wrote e-fieldnotes but eliminated all identifiable information about other students who interacted with my follow-up cases. I did not screenshot those private accounts, but to sustain individual privacy I documented only public-facing accounts.
4. Not all observations conducted online or offline can be turned into data. Given that I mainly observed minors and teens, I only capture public-accounts but did not screenshot private accounts. According to IRB, researchers are required to get informed consent from minors and their parents if following or gathering data that requires their private permissions. But this does not apply to public-facing accounts such as event pages or activity pages. This is debatable because informed consent is an ongoing process even though I have obtained consent already. I chose not to screenshot but only took field notes when I cannot inform respondents in advance.

References

Akemu O and Abdelnour S (2020) Confronting the Digital: Doing Ethnography in Modern Organizational Settings. *Organizational Research Methods* 23(2): 296–321.

Armstrong EA and Hamilton LT (2013) *Paying for the Party: How College Maintains Inequality.* Cambridge, MA: Harvard University Press.

Bagga-Gupta S (2017) Going beyond oral-written-signed-irl-virtual divides. Theorizing languaging from mind-as-action perspectives. *Writing & Pedagogy* 9(1): 49–75.

Bagga-Gupta S and Dahlberg GM (2021) On studying peoples' participation across contemporary timespaces: Disentangling analytical engagement. *Outlines. Critical Practice Studies* 22: 49–88.

Bayre F, Harper K and Afonso AI (2016) Participatory Approaches to Visual Ethnography from the Digital to the Handmade. An Introduction. *Visual Ethnography* 5(1): 5–13.

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

Beneito-Montagut R (2011) Ethnography goes online: towards a user-centred methodology to research interpersonal communication on the internet. *Qualitative Research* 11(6): 716–735.

Beneito-Montagut R, Begueria A and Cassian N (2017) Doing digital team ethnography: being there together and digital social data. *Qualitative Research* 17(6): 664–682.

Bluteau JM (2019) Legitimising digital anthropology through immersive cohabitation: Becoming an observing participant in a blended digital landscape. *Ethnography* 22: 267–285. DOI: 10. 1177/1466138119881165.

Brush AB, Jung J, Mahajan R, et al. (2013) Digital neighborhood watch: Investigating the sharing of camera data amongst neighbors. In: *Proceedings of the 2013 Conference on Computer Supported Cooperative Work*. New York, NY: ACM, pp. 693–700.

Calarco JM (2018) *Negotiating Opportunities: How the Middle Class Secures Advantages in School*. New York, NY: Oxford University Press.

Caliandro A (2018) Digital Methods for Ethnography: Analytical Concepts for Ethnographers Exploring Social Media Environments. *Journal of Contemporary Ethnography* 47(5): 551–578.

Christin A (2020) *Metrics at Work: Journalism and the Contested Meaning of Algorithms*. Princeton: Princeton University Press. 1 online resource.

Colom A (2021) Using WhatsApp for Focus Group Discussions: Ecological Validity, Inclusion and Deliberation. *Qualitative Research* 22: 452–467. DOI: 10.1177/1468794120986074.

Crick M (2012) Social media use in the Bronx: New research and innovations in the study of YouTube's digital neighborhood. *Journal of Technology in Human Services* 30(3–4): 262–298.

Dong J (2016) Chinese elite migrants and formation of new communities in a changing society: An online-offline ethnography. *Ethnography* 18(2): 221–239.

Ferguson R-H (2017) Offline 'stranger' and online lurker: methods for an ethnography of illicit transactions on the darknet. *Qualitative Research* 17(6): 683–698.

Fleischhack J (2019) Changed Conditions of the Social. A Methodological View on Digital Anthropology/Digital Ethnography. *Zeitschrift Fur Volkskunde* 115(2): 196–215.

Flewitt R (2011) Bringing ethnography to a multimodal investigation of early literacy in a digital age. *Qualitative Research* 11(3): 293–310.

Gabriels K and Bauwens J (2015) Lost in transition?: conducting a hybrid ethnography 'in'and 'out'second life. In: *Revitalising audience research: innovations in European audience research*. New York; London: Routledge Taylor & Francis Group, pp. 13–28.

Garcia AC, Standlee AI, Bechkoff J, et al. (2009) Ethnographic Approaches to the Internet and Computer-Mediated Communication. *Journal of Contemporary Ethnography* 38(1): 52–84.

Goffman E (1959) *The Presentation of Self in Everyday Life*. Garden City, NY: Doubleday.

Gyor AF (2017) Digital ethnography: principles and practice, 1st edition. *Corvinus Journal of Sociology and Social Policy* 8(1): 132–138.

Hallett RE and Barber K (2013) Ethnographic Research in a Cyber Era. *Journal of Contemporary Ethnography* 43(3): 306–330.

Hammersley M and Atkinson P (2007) *Ethnography : Principles in Practice*. New York: Routledge.

Hannerz U (2003) Being there. and there. and there! Reflections on multi-site ethnography. *Ethnography* 4(2): 201–216.

Hine C (2000) *Virtual Ethnography*. London; Thousand Oaks, CA: SAGE.

Jordan B (2009a) Blurring Boundaries: The "Real" and the "Virtual" in Hybrid Spaces. *Human Organization* 68(2): 181–193.

Jordan B (2009b) Introduction: Blurring Boundaries: The "Real" and the "Virtual" in Hybrid Spaces. *Human Organization* 68(2): 181–193.

Kavanaugh PR and Maratea RJ (2020) Digital Ethnography in an Age of Information Warfare: Notes from the Field. *Journal of Contemporary Ethnography* 49(1): 3–26.

Khan SR (2011) *Privilege: The Making of an Adolescent Elite at St. Paul's School*. Princeton, NJ: Princeton University Press.

Kudaibergenova DT (2019) The body global and the body traditional: a digital ethnography of Instagram and nationalism in Kazakhstan and Russia. *Central Asian Survey* 38(3): 363–380.

Lane J (2019) *The Digital Street*. New York: Oxford University Press.

Lareau A (2011) The Hectic Pace of Concerted Cultivation: Garrett Tallinger. In: *Unequal Childhoods: Class, Race, and Family Life*. 2nd Edition. California: University of California, p. 38.

Leander KM and McKim KK (2003) Tracing the Everyday 'Sitings' of Adolescents on the Internet: a strategic adaptation of ethnography across online and offline spaces. *Education, Communication & Information* 3(2): 211–240.

Levine FJ, Nasir NS, Rios-Aguilar C, et al. (2021) *Voices from the Field: The Impact of COVID-19 on Early Career Scholars and Doctoral Students*. Chicago, IL: Spencer Foundation.

Luhtakallio E and Meriluoto T (2021) Snap-along ethnography: Studying visual politicization in the social media age. *Ethnography*: 146613812211158. Online ahead of prind.

Marcus GE (2012) Multi-sited ethnography: Five or six things I know about it now. In: *Multi-sited Ethnography*. New York: Routledge, pp. 24–40.

Marcus GE (2021) Ethnography through thick and thin. In: *Ethnography through Thick and Thin*. Princeton, NJ: Princeton University Press.

Messina Dahlberg G and Bagga-Gupta S (2013) Communication in the virtual classroom in higher education: Languaging beyond the boundaries of time and space. *Learning, Culture and Social Interaction* 2(3): 127–142.

Messina Dahlberg G and Bagga-Gupta S (2015) Learning on-the-go in institutional tele-collaboration: Anthropological perspectives on the boundaries of digital spaces. In: *Researching Language Learner Interactions Online: From Social Media to MOOCs*. Texas: Texas State University, p. 259.

Messina Dahlberg G and Bagga-Gupta S (2016) Mapping languaging in digital spaces: Literacy practices at borderlands. *Language Learning & Technology* 20(3): 80–106.

Murphy AK, Jerolmack C and Smith D (2021) Ethnography, Data Transparency, and the Information Age. *Annual Review of Sociology* 47(1): 41–61.): null.

Murthy D (2008) Digital Ethnography. *Sociology* 42(5): 837–855.

Numerato D (2016) Behind the digital curtain: Ethnography, football fan activism and social change. *Qualitative Research* 16(5): 575–591.

Orgad S (2009) *How Can Researchers Make Sense of the Issues Involved in Collecting and In-terpreting Online And Offline Data?* Los Angeles: SAGE.

Pascoe CJ (2012) Studying young people's new media use: methodological shifts and educational innovations. *Theory Into Practice* 51(2): 76–82.

Pink S, Horst HA, Postill J, et al. (2016) *Digital Ethnography: Principles and Practice*. Los Angeles: SAGE.

Przybylski L (2021) *Hybrid Ethnography: Online, Offline, and in between*. Los Angeles: SAGE.

Reyes V (2018) Ethnographic toolkit: Strategic positionality and researchers' visible and invisible tools in field research. *Ethnography* 21(2): 220–240.

Ritter CS (2021) Rethinking digital ethnography: A qualitative approach to understanding interfaces. *Qualitative Research*: 146879412110005. Online ahead of prind. DOI: 10.1177/14687941211000540.

Sade-Beck L (2004) Internet ethnography: Online and offline. *International Journal of Qualitative Methods* 3(2): 45–51.

Sanjek R and Tratner SW (2016) *eFieldnotes: The Makings of Anthropology in the Digital World*. Philadelphia: University of Pennsylvania Press.

Seaver N (2017) Algorithms as culture: Some tactics for the ethnography of algorithmic systems. *Big Data & Society* 4(2): 205395171773810.

Swidler A (1986) Culture in Action - Symbols and Strategies. *American Sociological Review* 51(2): 273–286.

Tagg C, Lyons A, Hu R, et al. (2017) The ethics of digital ethnography in a team project. *Applied Linguistics Review* 8(2–3): 271–292.

Tummons J (2020) Online, offline, hybrid, or blended? Doing ethnographies of education in a digitally-mediated world. In: *Handbook of Qualitative Research in Education*. Cheltenham: Edward Elgar Publishing.

Urbanik M-M and Roks RA (2020) GangstaLife: Fusing Urban Ethnography with Netnography in Gang Studies. *Qualitative Sociology* 43(2): 213–233.

Wohl H (2021) *Bound by Creativity: How Contemporary Art Is Created and Judged*. Chicago ; London: The University of Chicago Press.

Young AA (2004) *The Minds of Marginalized Black Men : Making Sense of Mobility, Opportunity, and Future Life Chances*. Princeton, NJ: Princeton University Press.

Zani B (2021) Shall WeChat? Switching between online and offline ethnography. *Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique* 152(1): 52–75.

Zeller F, Ponte C and O'Neill B (2015) *Revitalising Audience Research: Innovations in European Audience Research*. New York; London: Routledge, Taylor & Francis Group.

Author biography

Ruo-Fan Liu is a Ph.D. candidate in Sociology at the University of Wisconsin-Madison. Her work illuminates the role of culture in social inequality and how it evolves in various processes, including individual decision-making, status competition, and university strategies. She conducts online and offline ethnography on multi-media platforms and on campus. Particularly, she focuses on mechanisms that speak to how reproduction persists and when it can be interrupted in a college-for-all society. Her work has appeared in *International Studies in Sociology of Education* and *Ethnography*.