Ethics, Power and Agency in Transnational Qualitative Methods: Remote Collaboration in a Refugee Camp

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Abstract

This methodological paper discusses the ethical and power-based implications of conducting remote and participatory research in a refugee camp in Malawi. This community-engaged project focused on education and technology. Half of the research team lives in Canada and half in the Dzaleka Refugee Camp. This paper reflects on this study, with a focus on remote partnership, team building with community researchers, and the use of digital tools to coordinate and manage data collection and analysis. We also identify where ethics and power are both disrupted and affirmed through participatory activities.

Keywords: participatory digital methods, refugee studies, education and technology, community-engaged practice

1. Introduction

This paper presents practical and ethical reflections on research design from a project called *Portraits of Educational Change: Refugee Education, Gender & Technology.* The project team includes four university-affiliated researchers in Canada and six Community Researchers based in the Dzaleka Refugee Camps in Malawi.

From 2020-present, we employed digital tools and developed digital methods to enable participatory, transnational research throughout the Covid-19 pandemic. This paper tells the story of how we **Community Researchers**

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engaged in participatory research in Dzaleka across geographies and travel restrictions at the time. In this paper, we frame the tensions and entanglements of ethics, power, and community researcher agency in the adoption of digital methods and in this international collaboration.

Our research design involved on site, participatory data collection conducted by Community Researchers (CRs). It also involved digital and remote elements to support this collaboration. This has included recruitment, hiring, training of CRs and team building, as well as tools used for data collection and data transfer to Canada, data management, and data analysis.

The six community researchers collaborated with four researchers in Canada to refine the focus of the study, research instruments, and collect data. Data collection involved audio recorded field notes, pictures and diagrams of research settings, and indepth interviews with community members. We all met online, on average twice per week, to iteratively move through every step of the process.

In this paper, we present this study as it unfolded. Our work contributes to existing methodological reflections and calls for more sharing of research experiences in a range of fields: primarily refugee studies, information science, education; and, additionally, technology and development studies, such as Human-Computer Interaction (HCI) and adjacent research fields, with a focus on refugee experiences where digital tools are both studied and used in research (Sabie et al., 2021, 2022; Talhouk et al., 2018, 2019). Existing calls include the need for transparency, local partnership, trust building, and researcher reflections on their own practice (Leal et al., 2021; Talhouk et al., 2018, 2019; Yerousis et al., 2015). In addition, we build on precedent works that highlight the importance of storytelling (Duarte et al., 2018), safe-spaces (Bustamante Duarte et al., 2021), dialogue (Talhouk et al., 2019), critical reflections on time and temporality (Ekmekcioglu et al., 2021) as forms of communication in participatory research. Together, these focal points emphasize relationships, trust building, and identifying power in/equities within teams that include community members as researchers.

In this paper, we outline how we built a remote, participatory project across Canada and Malawi, with minimal travel onsite to Dzaleka from the Canadian members of the research team. Our work shares in the participatory research practices and goals described by others working in refugee camps (Aal et al., 2014) and with refugee communities in resettlement (Duarte et al., 2018). In addition, the study has adopted digital research methods for data collection in a collaborative form, which are a focus of this paper.

Our contribution is focused on methodological learnings in qualitative and participatory research about existing technologies in education in refugee camps. With regard to results, we draw on one example from visual data collected to demonstrate the use of digital tools for collaborative data analysis and validation of findings. Full report on findings are forthcoming elsewhere. Finally, we interrogate critical theoretical underpinnings related to ethics, power, and agency that underlie this participatory, digitallyenabled work.

1.1 Foreground to study design

In 2019, as we conceptualized this project, we were evaluating the cost-benefit of Western researchers traveling to refugee camps for field work. Conducting academic research in refugee camps typically requires a number of details to be in place. There are the usual travel arrangements such as flights, hotels, and visas. Additional logistics include: (1) partnership with international non-government agencies (iNGOs) working in the region; (2) permission from host country governments where the camps are situated to conduct research; (3) permission or registration with the United Nations High Commissioner for Refugees (UNHCR) in the region to enter the camps; (4) secondary flights or transport from major cities to the camps; (5) personal security for researchers when working in areas designated as a security threat; and, (6) specially devised security protocols and/or security briefs to enter certain communities.

All of this work happens for what are often brief visits to camps (sometimes counted in weeks or months). These visits impose a rapid pace of research that puts excessive pressure on the individuals involved and disrupts the temporality and pace of life in the community. People from these communities live in difficult geopolitical and economic conditions. When researchers travel to refugee camps, community members are asked to interrupt or pause their regular activities. Outsiders pass through quickly, for a short period of time, and the return on investment to the community is a long road to follow.

The initial design for this project did involve us traveling to Dzaleka for one or two trips at key moments of the study, such as to train our hired team of CRs and to start data collection. Even then, we wanted to minimize travel as much as possible and so had not yet scheduled any trips. In early 2020, we began recruitment of Community Researchers (CRs). With the initial onset of the Covid-19 pandemic, our research plans had to change. We moved entirely online and focused on upholding our commitment to participatory practice in this remote design.

2. Background

2.1. Dzaleka Refugee Camps in Malawi

Dzaleka Refugee Camp is located approximately 45 km north of Lilongwe, Malawi's capital city (see Figure 1). The area was transformed into a refugee camp in 1994, originally built as a prison detainee camp (Makhumula, 2019). It was built to house roughly 10,000 people. There are now around 50,000 registered refugees and asylum-seekers in the camp (Healy, 2012), and likely more who go unregistered in the region. The majority of the refugee population is from Democratic Republic of Congo (DRC) with large numbers of people also coming from Burundi and Rwanda, as well as other parts of sub-Saharan Africa. The camp is managed by the government of Malawi and the UNHCR with support from several humanitarian aid organizations.

The legal restrictions imposed by the 1951 Convention relating to the Status of Refugees on certain rights pose significant barriers to reaching educational and livelihood opportunities for refugee communities in Dzaleka (Healy, 2012). These include restrictions on the freedom of movement, wageearning employment, and public education.

2.2. Education and technology in refugee camps (research and practice)

Existing research at the juncture of education and technology in refugee camps is focused on teacher training and support (Motteram et al., 2020), online or blended higher education (Giles & Miller, 2021), and research investigating the relationship between education technology investments, corporate and government partners, and humanitarian aid (Menashy & Zakharia, 2020). There is also some research exploring the academic and social supports related to education, predominantly focused on social supports using mobile phones and information pathways over ICTs (Dahya et al., 2019; Dahya & Dryden-Peterson, 2017; Dryden-Peterson et al., 2017). Additionally, education and technology research are available in relation to the health sector, including health training opportunities in camps (Burkardt et al., 2019).

Our study has aimed to further grow research in the area of education and technology in refugee camps, exploring formal and informal ways technology is learned and used in one refugee camp setting. participatory methods are used to highlight local and community-based pedagogy and practice. Importantly, we have sought to contribute to the methodological domain of participatory research with refugees, exploring how we can conduct rigorous qualitative research *and* minimize our presence in refugee camps by using networked digital tools.

2.3. Participatory research and migration

Participatory research is commonplace in education, development, migration, and refugee studies, inviting community members to engage directly in studies focused on their lived experiences (Aal et al., 2014; Duarte et al., 2018; Talhouk et al., 2018, 2019). Rather than 'investigating from the outside,' researchers attempt to work more closely with participants in their lived environments. This is framed as a more inclusive way to conduct research, and one with more direct lines to support 'practice' (Talhouk et al., 2019) - though not without a critique (Kapoor, 2002).

In Science and Technology Studies (STS), participatory research has been primarily considered as a collaborative inquiry approach for producing scientific knowledge and making science policy choices with a diverse set of actors, including activists, amateur scientists, or social movement organizers commonly referred to as "citizen scientists". Studies have highlighted the type, quality, or scale of participation, as well as differences in goal setting and initiation of research can shape the relationships of power and control between institutional and noninstitutional researchers (Kimura & Kinchy, 2016).

Participatory research is constructed as a response to the inequitable power dynamics that unfold in traditional research settings. This focus is on responding to external researchers conducting extractive studies that do not involve community members. However, these practices can remain fraught with challenges (Duarte et al., 2018). Challenges include: uneven decision-making power; inter-community tensions related to trust in research; interpersonal challenges for community members interviewing their peers about sensitive information; and, financial pressures on community researchers that limit the degrees of their 'empowerment' to disagree or defy real and perceived authority within research teams (Duarte et al., 2018; Kapoor, 2002; Talhouk et al., 2019).

At the same time, participatory research with community researchers, also combined with qualitative and arts-informed methods (Guruge et al., 2015), like visual research, can create important bridges with vulnerable communities. Where tensions exist in the process, so too do benefits to build trust, develop greater knowledge, and construct better programs in refugee camps (Aal et al., 2014).

A critical component to conducting participatory research is to stay focused on why the research matters to the community and how it can benefit them. We asked this question repeatedly throughout the study. CRs informed us of the following realities. First, there is a valuable benefit to the individual community researchers who hold paid employment throughout this work and, importantly, gain research skills by participating.

Second, CRs involved in this study are interested in the topic of education and technology, and perceive a greater understanding of this topic to be of value for themselves and their community. Where theory/practice tensions arise in the context of research with vulnerable populations, our work supports existing research like Sabie et al. (Sabie et al., 2022) who identify refugee community members do also want to learn about, and think critically through, the realities of their own environments. This is true as an exercise in knowledge building (theory) even if the practical outcomes are unclear. Relatedly, the personal growth and development that ensues from CRs participating in this type of project results in knowledge and skills that can be used to support other local community initiatives over time - CR participation furthers their development as community leaders.

Finally, a strong draw to working as CRs remains to improve practice and programs in the community.

This happens by working with iNGOs and leveraging research to increase funding and programs in refugee camps. The path to practical outcomes is primarily located in relationships with iNGO partners. iNGOs carry the power to engage research findings and use that knowledge to inform or revise their current and future programs, or not. The outcome of this dissemination channel for research cannot always be seen within the time that the project is active, as also noted by others (Sabie et al., 2022), and community members themselves. Stronger feedback loops between CRs, research project teams at Universities, and non-profit partners warrant attention as a future research agenda, as noted by others working in this field (Aal et al., 2014; Talhouk et al., 2018, 2019).

3. Methods

3.1. A story in (digital) methods

Recruitment of CRs was designed to use the messaging application WhatsApp. In early 2020, we coordinated with our non-profit partner and created an informal job call to be distributed by email to students enrolled in online higher education programs available in the camps. This target group was selected to better ensure a certain level of technological competency. Our recruitment effort also targeted university enrolled students to complement their own academic growth and development, as hired CRs work closely with university Faculty and graduate students.

The job call asked for interested researchers to send in a 3-minute video via WhatsApp responding to three prompts: (1) Identify and describe a technology that you find important in your community and explain why; (2) How do you define learning, and why is it important in your community? (3) Who do you identify as a teacher in your community? This may include or go beyond school teachers.

The purpose of asking these questions was to gauge intellectual interest and observation skills pertaining to the community. We did allow paper applications or text-based responses by WhatsApp as well. This flexible approach resulted in 55 applications, with 45 applications from individuals perceived to be men and 10 from applicants perceived to be women. It is evident that those not already fitted with mobile phones, data, and the literacy needed to apply in this way, were excluded from applying. This gap in literacy and in visibility pertaining to those "without" in the camp has been a persistent question and concern throughout the study. How can growth in this 'digital divide' be mitigated? What role does participatory research have to play in this gap? From the submissions received, we selected two female-presenting CRs and four male-presenting CRs. As applications were welcomed in both English and French, we also ensured that two of the men selected were from French submissions. Five of the hired CRs are from the Democratic Republic of Congo and speak English, French, Swahili, Chichewa, and other local languages. The sixth CR is from Rwanda and speaks English, Kinyarwanda, Chichewa and other local languages. We talked openly about wanting to have representation across language groups, genders and sexuality in order to also have access to the range of sub-communities in the camp.

In April 2020, we sent a message to these six applicants. In October 2020, our non-profit partner was able to enter the camp, deliver phones, and sign contracts so we could begin our research training program online.

3.2. Reconfiguring methods for remote partnership and participatory data collection

We invited our team to join meetings individually from Dzaleka using the provided mobile phones. We met twice a week from October 2020-March 2021 with a 3-week break in December 2020. Our research training involved introducing the project and team, discussing the context of education and technology in Dzaleka, and training modules focused on our adaptations to the ethnographic method of portraiture (Lawrence-Lightfoot & Davis, 1997) and visual research (Mitchell, 2011). This included learning how to conduct participant observations, visual research methods, and interviews.

In this process, we began to reconfigure our approach to participatory methods, considering how we might both remain engaged collaborators, support and enhance CRs data collection and analytical skills, and establish sound participatory practices that enabled CRs to be the leaders of this work. Importantly, we also needed to build trust and relationships within the team, across roughly 8,000 miles and the Atlantic Ocean between us. Trust in participatory research is described by Sabie et al. (Sabie et al., 2022), Talhouk et al. (Talhouk et al., 2019), Duarte et al. (Duarte et al., 2018) and others as essential to the meaningful participation of community members in research. Developing a close bond of trust is crucial in this type of research and requires time and personal involvement from all parties. Building on the identified roles of storytelling (Duarte et al., 2018) and dialogue (Talhouk et al., 2019) in participatory research with refugees, we focused on practices embedded in remote research training to be

vulnerable, develop relationships with team members, and see trust build over time.

first exercise focused on conducting Our observations. We proposed audio recorded observations, guided by prompts focused on (1) describing the scene, (2) analyzing the scene, and (3)reflecting on yourself in relation to the scene. We included clear questions to objectively describe activities, subjectively interpret those events, and attend to dynamics of power in the scene and between the setting and researcher. This time was used to generate ideas about what constitutes a learning environment and to ask CRs where education and technology intersect in the everyday activities of the camps?

In turn, the Canadian research team completed the same exercise, to the best of our ability, from our homes and local communities. In doing so, we modeled examples of the practice of observations. Perhaps more importantly, we enacted a parallel and reciprocal engagement with the labor and work of doing research. Through these exercises, we saw into the world of Dzaleka through the voice recorded narratives of the researchers. Importantly, they also saw into our intimate worlds of home and community in Canada during this difficult time.

Our next training module was on visual research methods. This involved taking five pictures that represented "community" to each researcher. These were uploaded to Google Drive and paired with a voice recorded description of each picture and reflection. This exercise was also completed by the Canadian research team members. We used these pictures to literally show each other Toronto, Montreal, and Dzaleka. For example, one Canadian researcher took photos of her snow-covered neighborhood, barren of people except her young daughter, who was prohibited by government rule from entering a closed playground.

The exercise provided a snapshot of the meaning of the community in our own terms. This continued our relationship building across time, culture, and geopolitical distance. For the Canadian team, our homes and families were a part of the community portraits, given the reality that our worlds were restricted to these surroundings at that time. In a different context, it is easy to imagine conducting these exercises in Canada from university campuses or places of work. The pandemic forced us to be more intimate about our own lives in this way, engaging in vulnerable personal exchanges through research training from the beginning. In Dzaleka, CRs showed us the wider community and landscape of the camp.

Lastly, for our interview training, we interviewed each other. The Canadian team had initially prepared an interview guide for the study. The guide had not vet been piloted. First, the Canadian research team interviewed each of the CRs individually. Then, the CRs interviewed the Canadian research team members, understanding that some of the questions in the interview guide needed to be adjusted for this part of the exercise. Following this, we collaboratively discussed the process, analyzed the questions, and revised them significantly to represent the feedback provided from the CRs. Word choice, order and flow, and clarity of concepts were all flawed in the original draft and greatly improved through this process. In summary, these three methods were employed by the CRs following their remote research training: observations including voice recorded field notes, visual data (primarily photographs and some illustrations), and interviews. Importantly, we approached relationship building by designing exercises in the research training modules that allowed for reciprocity and vulnerability across team members. We worked with the available affordances of the technologies accessible to us all to facilitate these processes through the research training modules.

The training exercises were also important for refining the research agenda. CRs had input on research in real ways and we remained flexible in our expectations and design (Aal et al., 2014; Talhouk et al., 2018). In addition to revising the interview guide, we worked through the data provided in observations and interviews to discuss the settings at the center of the study. The CRs surfaced eleven possible settings to study, including agricultural technologies, car mechanics, e-commerce and technology black markets, sewing, and music production, to name a few. We asked the CRs to decide what they felt were the three most important or interesting settings. They collectively agreed to focus on sewing training classes and shops, online learning and technology classes, and the informal industry of music production and learning to be a DJ. CRs were paired and assigned to one of the three settings based on their own interest areas. Table 1 presents the data collected from March 2021-October 2021 by CRs in Dzaleka.

Table 1. Research Data Summary

Type of Data	Number of Data
Interviews	99
Visual Data	428
Observations	37

Memos about Observations & Interviews	59
Self-Reflections on Research Process & Activities	22

4. Power, Ethics, and Collaborative Methods

There are several examples of power dynamics circulating between the Canadian research team and the CRs. The two examples presented here demonstrate the (in)visibilities of where power lives, and the ways in which relationship building and research design interact with that power flow. We share these stories to demonstrate and document what we learned from these moments and what kind of work was done to rectify them. Taking an explicit look at our own methods from the start allowed for this critical reflection on processes throughout, from which we have learned a great deal.

Example 1: In March 2021, we were set to renew the CR employment contracts. The original contracts were created in consultation with our locally based non-profit partner. The contract offered 3-days' pay per week at the local pay rate. Pay rates in UNHCR refugee camps are restricted by what is called the incentive wage agreement, arranged between the host country and UNHCR (Morris & Voon, 2014).

At this time, the CRs convened offline and asked for time to speak during one of our regular meetings. One team member spoke as a representative, explaining that the issue had been discussed between them. In effect, they indicated that the pay structure was uncommon and did not align with the cultural employment norms of the community. Partial contracts did not provide enough earnings to cover the necessities of life for the CRs and yet took up enough time to make seeking other "full-time" contracts difficult.

The fact that the CRs asked the Canadian team for more money or for significant changes to an employment contract might be a sign of the quality of the relationship developed. This seems to mitigate slightly the power dynamics induced by the asymmetry of resources. The relationship building that had happened over the preceding six months, in addition to the existing self-advocacy and leadership skills of the CRs, made such an ask possible. The project PIs explained to the CRs how we had come to such contracts, largely driven by the limits of available funding. We also agreed to see if we could rectify the situation and sought out additional funds, requesting funds from our departments, and reallocating existing open research funds. We did create new employment contracts with fulltime pay for the CRs as requested. Our commitment to ensure the CRs were heard and that they felt valued and were, legitimately and adequately paid for their work, was our priority. This meant reevaluating other planned activities, expenditures, and/or taking the time to seek additional funds from our institutions. It also meant acknowledging, to the CRs and to ourselves, that despite consulting with local iNGO partners, we had done this incorrectly.

Example 2: Interviews were designed to follow Seidman's (Seidman, 1998) three interview method for in-depth interviewing. This method involves conducting three separate interviews with participants. The first interview is on focused life histories, the second on the details of experience, and the third a reflection on meaning. This rich, phenomenological approach complements the work of portraiture (Hay, 2014) and accepts the temporal and transitory reality of life experience. In addition, it draws on subjective understandings of self and others to enrich collective knowledge of culture(s) and place.

From the time of our research training interviews within the team, the CRs informed us about a concern that the three-interview model would be difficult to implement. Seidman (Seidman, 1998) proposes at least a few days in between interviews so participants can reflect on their own responses and to avoid exhaustion in either interviewer or interviewee. CRs explained that for community members in Dzaleka, time and schedules can be fluid, interrupted, and uncertain. This is due to basic realities: a line-up at the borehole where families collect water; a long wait at the local clinic; food distribution, etc. It could also be that someone's phone runs out of batteries or data, not so easily replenished, and communication about scheduling fails.

As a matter of research design, the Canadian team was attached to the interview model, wanting to gather interview data in a way that would be considered both rich and rigorous. Changing the design and methodological approach to one of the primary data collection methods seemed like too big of a compromise. In this exertion of control over research design, the PIs requested we maintain the threeinterview model even if it was sometimes abridged, rather than discard it altogether. This meant that, in some cases, two or three of the interviews in a series were conducted in one sitting. In addition to some interviews happening in condensed sittings, the work of scheduling three interviews with each participant was arduous for CRs. As they had described from the beginning, there were many cancellations and rebookings that took place over many months of interview data collection.

We acknowledge here that as much as our process was participatory, and even though the CRs did successfully collect 99 interviews from 33 participants, the dynamics of power were revealed in the process. It became clear how much the Canadian research team failed to understand the movement and role of time in Dzaleka, and that we were not, at that stage, ready enough to involve the CRs in a redesign of our approach to interviews. This was also related to the time it would have taken to do so, or at least the perception of more time lost after such a delayed start already. Yet, it was the work of the CRs to then navigate the logistics of using this method. Of note, in their reviews of this paper, and our various discussions about its content, the CRs agreed that in the end the interview method was successful and interesting.

4.1 Collaborative analysis and validation of findings: a visual data example

Data analysis is a step in the research process where it can be difficult to maintain rich collaboration and participatory involvement of CRs living in a refugee camp. In our case, there are three main barriers to fully involving the CRs in data analysis. These encompass the tensions and incompatibility between good participatory research practices and institutional ethics, security practices, and research requirements.

First, data is meant to be stored in the university hosted Microsoft OneDrive account, to which CRs do not have access, and are not always easy to get. Second, Nvivo or other qualitative coding software licenses are expensive and/or unavailable to individuals not affiliated with our institutions. Third, CRs do not uniformly have personal computers that are their own to use consistently, pointing again to the protection of data. As a result, we had to consider alternative protocols to engage CRs in data analysis.

We present the case of the visual data set to exemplify some of what we did and what is possible. First, the doctoral research assistants (RAs) carefully cataloged all of the visual data. This includes 428 images, mostly photographs with a few diagrams, such as a hand-drawn local map or sketch of a classroom. Originally submitted over WhatsApp, the files were downloaded and saved to One Drive. Each image was given a detailed file name to locate it in relation to its attached observation and to the CR who collected the data. CRs and RAs then followed a deletion protocol to remove photos from phones and check that they were also removed from phone internal storage.

Second, one of the RAs took each visual data set and grouped them into Google Forms. This became a Google Form of pictures from each of the nine sewing observations, twenty-six online learning observations, and thirteen music production and DJing observations. Each form hosted 6-8 images and asked the following for each picture: (1) What is in this picture? (2) Why did you take this picture? (3) What is the role/significance of this place in your life and/or in your community? (4) What does this picture tell us about education and technology? They could respond to or skip questions as needed, particularly if a photo or their response became repetitive.

Four CRs answered these questions for each of the photo sets through the Google Forms. Two of the CRs responding were those assigned to the setting (who took the photos) and two were those assigned to different settings. This design offered both the subjective interpretation of the people who were embedded in the setting and two from community members arguably one step removed.

One of the RAs then compiled all of the answers into a spreadsheet in OneDrive and constructed a single summary based on the CR responses to the questions. These summaries take the written analysis of the CRs from the Forms as part of the description we have tried to literally use the CRs own words as part of the analysis. At this stage, the pictures in Google Forms and that version of the data is deleted.

As a next step, various members of the Canadian research team are then involved in turning those summaries back into cohesive analytical memos for each of the observation settings. Finally, these onepage analytical memos are shared back to CRs using Google Drive for their review and clarification. CRs are asked to read the anonymized analytical memos, to return to the physical setting it represents if possible, on to comment the accuracy and and representativeness of the memo vis-à-vis the observation location in Dzaleka. These memos will serve as the start of our descriptive portraits for sewing, music, and information and communication technology classes.

Below is an example of an analytical memo that has been through the aforementioned process through to completion, reviewed and approved by the CRs. This is one small data point that will be combined with other analytical memos from visual data, observations, and interview analysis to construct full portraits of each setting.

4.1.1.Visual data set example: Sewing Training Center DESCRIPTION: This sewing training center offers sewing classes that are offered to both men and women with many assets and equipment available. This includes sewing machines, a chalkboard, wooden cupboards, and clothing designs. There are also small objects scattered around the room like measuring tapes, rulers, and scissors. There are pieces of fabric on the ground and piles of clothes on tables spread throughout the room. On multiple occasions, the room shows the remains of recent activity with drawings on the green chalkboard and charts of designs on the walls. They are facing each other, they are using the chalkboard, posters, and behind them a display table. *More precisely, there is a big table in the middle of the* room and smaller desks around the perimeter. On this table, we can see an object which looks like a phone. This table also has a Singer mechanical sewing machine which is used to teach sewing. These machines are very common in the camp and part of the common visual landscape of the sewing sector. Despite the prevalence of mechanical machines, this center also has some electrical machines. Indeed, the presence of a switch to the right of the door tells us that the classroom has electricity.

ANALYSIS: The room displays a pleasant disorder that suggests that some form of active learning is taking place, suggesting a lively environment full of activity and animated by fabrics and posters around the room. The layout of the room suggests a collaborative approach. The big table could indicate a place in the class for collaborative learning; however, there is only one chair at the table, so this might not necessarily be the case. The presence of a phone on the big table could indicate that students use their phones during class as a learning tool. There is movement embedded into the layout of the room. The sewing machines present are used to build sewing skills as students can learn and practice on these machines - they are practical and easy to use.

RESEARCHER REFLECTION: This class helps to improve self-reliance and advances tertiary education in the Dzaleka community. The presence of mechanical and electrical sewing machines helps refugees learn how to use and potentially repair different types of machines. The electrical machine seems to have more impact on the students because it is advanced and easier to use. This training offers the opportunity to those who want to further their sewing career. Many students who graduate from sewing training buy their own Singer sewing machine to use in their homes to generate income and improve selfreliance.



Figure 1: Training Center (Photo: Berger Badere)

Through this process of visual data analysis, we can see how resources (e.g. personal computers) and institutional regulations (e.g. university regulations around data storage and sharing) asymmetrically reinforce pre-existing power dynamics in the data analysis process. Although we have put immense effort into finding ways to involve the CRs in data analysis without breaching university data management protocols, there are many intermediary steps where the Canadian research team engages in interpretive analysis as well.

This kind of collaboration is perhaps the goal and to be celebrated. In effect, the analytical memo above is agreed on by the entire team to represent the setting; it is a good summary description and analysis of the photos that were taken of the setting. However, the impositions and imbalances of the process are still worthy of note because the process is scattered with easy-to-miss locations where power continues to circulate. Balancing insider/outsider unevenly perspectives, checking and reflecting on Western researcher analysis and interpretation, and continuing to teach and collaborate with emerging researchers in the community is a challenge. It is only by naming these power structures that we can work to find strategies to minimize their influence on the outcome of the research, or at least to acknowledge that they are there, embedded in the final words printed on the page.

5. Discussion

There are a number of discussion points that warrant further attention in this paper. In line with other critical work in this area e.g. [1, 2, 3], we want to highlight a few and discuss the larger scope of doing participatory research, using digital tools, in a refugee camp. The pressure points described in this project are ever-present, working to consistently jettison some of our most collaborative research designs.

The first and most evident factor is simply one of money. Who controls the money, and the process of acquiring funding, will hold some degree of power. This problem starts with funding agencies and binds us all to a hierarchical system not easily shaken. Funding agencies and universities determine how money can be spent and on what items, including for example purchasing necessary devices like mobile phones for community researchers.

Relatedly, even deeply inductive research design starts from a preset place; researchers construct a proposal and research questions to get the funding. Inertia is set in motion early and is sometimes difficult to change. Some combination of open research funds, often coming from internal institutional funds or private research gifts, can facilitate financial freedoms to some degree. In our case, such funds allowed us to increase our employment contracts and find more money to pay for broken phones and expensive data plans. These more flexible funds also allowed us to move budgetary items across lines without approval from funders, which can take time.

A second point of interest pertains to the pressures related to productivity in universities. Academic researchers are expected to work in a fairly fast pace and high-pressure environment, where research outputs are the marker for success. Annual merit review, competitive grant writing, and tenure are all dependent on producing ample research outputs (of which winning competitive, external grants is one form). In reality, building community relationships and trusted networks, as well as training community researchers, takes time. The work of relationship building is not always easily fundable because grantors often seek direct research activities when writing the budget justification, as previously reported in (Leal et al., 2021; Sabie et al., 2021). These realities make it difficult to find the balance between meeting the expectations of the academic profession and taking the time, care, and costs needed to build rich international partnerships.

In tension here is, of course, the parallel urgent need to ensure that research outputs are relevant and available to communities, practitioners, and other stakeholders as quickly as possible. In this case, the academic process - as fast paced and high pressure as it feels - is not always fast enough. University research teams typically comprise faculty and graduate students who are working on multiple projects at once. These include conferences, writing for grants and publications, taking classes, and various forms of service to the university. These responsibilities mean that most research projects are a fraction of each team member's time, which can impact the pace at which project work progresses. Even when working as fast as possible, peer review processes can slow down the final output and publication of work. That is not to say that the peer review process is unnecessary, only that it is a time-consuming process. Publication can ultimately take 1-3 years after a draft manuscript is complete, sent out to peer reviewers, returned many months later with revisions, and later resubmitted.

For many researchers working in settings with vulnerable, marginalized, or under-resourced communities, a return on investment for community partners and community researchers is crucial. Oftentimes, researchers working in these settings will prepare internal reports to NGO partners, write white papers that are made available online, or organize public outreach and knowledge dissemination events prior to formal and peer-reviewed research papers being published (Kruger, 2016). Our team, for example, spent several months preparing for an on-site half-day conference in Dzaleka, organized and facilitated by the CRs. This is time spent from all team members that are essential to community engagement and dialogue. These meaningful contributions back to communities and other stakeholders directly serve communities, though they count for little (or nothing) in the eyes of the academy.

6. Conclusion

The questions at the forefront of our participatory approach is: How can we work more ethically, reduce power dynamics, and work remotely to channel funds directly to communities? How can we maximize community engagement and be more aware of our impact on communities? Part of this involves constructing meaningful opportunities for community researchers or other community participants in research to have agency over research activities. This includes the foundation of research at times, such as research instruments and the subject of study itself. Although we are entangled in the hierarchy of the university and its associated funding structures, it is essential to resist and refashion the structures we work within. This is in service of better supporting research that can directly benefit communities in need.

Academics can exert and influence power over and within the university until institutional barriers bend. This type of reform can happen over time with collective action to challenge the structural barriers that influence research. At the same time, individual researchers and research teams also have to do the personal work of self-checking our own positions of influence. It is our work to name, locate, and interrupt our own exertions of power and privilege through research design, partnership, and analysis.

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