

## UNDERSTANDING GENDERED POWER RELATIONS THROUGH TRANSECT WALK AND SPATIAL MAPPING

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### ABSTRACT

*This paper discusses the utility of spatial mapping in combination with transect walks as a part of ethnographic research on gender and family relations in Punjab, Pakistan. Transect walks refer to the practice whereby the researcher walks on defined walkways, such as existing mud trails, with local research participants to gain a deeper understanding of a locality and allowing for detailed charting of the shared resources. Building on feminist geographers, and deploying spatial data collection methods, this research explores the patterning of gendered power in the research community and specifically, within families from different castes. The findings emerging from initial spatial mapping exercises were confirmed during transect walks with different villagers. The paper analyses the benefits of using this combination of methods to build rapport and generate nuanced data on the gendered politics of community and family life, providing insight into, for example, who owns and controls what in the community, who works for whom, who has restricted access to certain resources and how these dynamics shape gender relations within families. The paper highlights the important contributions that spatial methods can make to feminist scholarship and specifically, more layered understandings of inclusive development.*

**Keywords:** Spatial Mapping; Transect Walk; Gender Relations; Power Relations; Feminist Research; Caste System.

### INTRODUCTION

How to research and analyse gendered power relations has long been debated, and there exists little methodological consensus as to how to best reveal such relations within communities (see Gerson & Peiss, 1985; Weber, 2001; Paechter, 2006). Understanding the functioning of the caste system and its importance has likewise been much debated (see Nightingale, 2011; Connell, 2014). This paper explores the potential of participatory spatial mapping combined with transect walks to understand gendered and caste-based power relations in a rural setting in District Chakwal, Punjab, Pakistan.

### REVIEW OF LITERATURE

Schwartz (1977) describes spatial mapping as means to gain greater insight into lived realities. Although spatial mapping is usually used in the fields related to Information Technology such as robotics, there has been a visible increase in the usage of this concept in social sciences (see Knowles & Sweetman, 2004; Brown, 2008; Parker & Asencio, 2009). Feminist scholars such as Kwan (2002) have deployed spatial mapping to 're-envision' Geographic Information System (GIS) research to make GIS research methods (more) 'compatible' with feminist research by re-visiting key arguments of GIS research through a feminist lens (also see Pavlovskaya & Martin, 2007). Available literature (for example, see Chambers, 2006) suggests that (participatory) spatial mapping has been used in different fields for multiple purposes, including:

- i. *Social Mapping*: To identify people, who does what, their livelihood, their social categories, wealth, and livestock etc. (see Paulston, 1996; Lissner et.al., 2000). Social Mapping has also been used to reflect on power, empowerment, and literacy (see Archer & Goreth, 2004).
- ii. *Health Mapping*: To identify health concerns of people, indigenous knowledge related to

health, disabilities, and special health concerns of people living in a certain geographical area (see Richards et.al., 1999; Lynn et.al., 2000; Eldredge et.al., 2016). Health mapping has also been used to identify water and sanitation conditions (see Gloeckner, Mkanga & Ndezi, 2004).

- iii. *Mobility Mapping*: to identify who goes where, to do what, and who is not allowed to go where, which children go to school, and for how long (see Govinda, 1999; Chaix et.al., 2012).
- iv. *Crime (Prevention) Mapping*: to Identify the spaces more prone to crimes like rape, molestation, and their degrees of risk (see Liebermann & Coulson, 2004).

There is also a growing trend of using spatial mapping techniques in combination with ethnographic methods of research, which, as argued by authors such as Matthews, Detwiler & Burton (2005) and Brennan-Horley et.al. (2010), ‘enhances’ the findings of ethnographic research.

Transect walks refer to the practice whereby the researcher walks on defined walkways, such as existing mud trails, with local research participants to gain a deeper understanding of a locality, and allowing for detailed charting of, among other elements, water resources, sanitation, wastewater flows, and available facilities, such as schools and clinics (see De Zeeuw & Wilbers, 2004; Gabriel, Sait, Kunin & Benton, 2013). A transect walk helps the researcher to get a deeper and wider understanding of the community; community members, and their lives (see Chambers, 1997). The World Bank (n.d.) discusses the utility of transect walk to yield favorable outcomes, including- among others- identifying and explaining different causal relationships in the community, for instance, water scarcity and (re)use of water, identifying different problems faced by different local groups or individuals, and triangulating data collected through other tools, etc.

Various scholars, for example, Kanstrup, Bertelsen & Madsen (2004), Nyanzi et.al. (2007), and Porter et.al. (2010), etc. have been using transect walks in combination with other ethnographic methods to yield one or some of the above-listed outcomes. While transect walks have yet to gain traction in feminist scholarship, some (emerging) feminist researchers have started using this method in combination with other methods (see, for example, D’Silva et.al., 2016).

In (feminist) ethnographic research, the basic assumption is that gender, sexuality, class, nationality, or race, are ‘universal categories’, which are present in almost all settings (see Geller & Stockett, 2007). However, in these ‘universal categories’, there are differences due to different historical and cultural contexts, different (political) purposes these categories serve, different realities these categories shape, the different influence of these categories on social inequality, and the intersection of these categories (ibid). Quite evidently, these assumptions of feminist ethnography intersect with the above discussed usefulness of spatial mapping in different areas, particularly in ethnographic research, as well as the importance of transect walk as a participatory method.

In addition to the above discussed debate on the usefulness of spatial mapping and transect walk methods ethnographic research, the available literature shows that various researchers have employing (one of) these methods in combination with other ethnographic research methods to gain deeper understanding of their research community, but until now, there is no research which uses these two methods in combination. Therefore, this paper discusses the utility of spatial mapping in combination with transect walks as a part of ethnographic research on gender and family relations in Punjab, Pakistan, and highlights the important contributions that this combination can make to feminist scholarship and specifically, more layered understandings of inclusive development.

## **METHODOLOGY- THE TOOLKIT**

This applied toolkit has been developed through an extensive review of the literature, followed by its actual application in the field. The reviewed literature includes academic as well as programmatic literature, related to the keywords including ‘spatial mapping’, ‘transect walk’, ‘feminist ethnography’, ‘feminist geography’, ‘feminist research methods’, ‘ethnographic GIS’, ‘gender relations’ and ‘power relations.’ Initially, one hundred and sixty-five books, research articles, and project reports were gathered related to the above keywords. Firstly, they were skimmed based on their relevance to the keywords and research, and fifty-eight items were subsequently selected and reviewed. This paper contains references to around thirty-five of the most relevant publications.

This toolkit was designed after -in addition to the review of literature- discussing with colleagues having similar research background and interests. The findings emerging from initial spatial mapping exercises were confirmed during transect walks with different villagers. Following is

the detail of different steps that were followed in the field, and it goes without saying that the steps in this toolkit can be adapted according to the need and time in different settings for different purposes.

### **1. Designing the Research**

The first step is to design the research, which –among others- includes designing the research question(s) and objectives. As this research is a part of my broader PhD research, I only wanted to gather a part of my data through these methods. The objective behind using this combination was to explore the patterning of gendered power in the research community and specifically, within families from different castes.

### **2. Desk Research**

The process starts with desk research to gather secondary data about the field. The most important part of this step is finding a map of the village or the community, which is clear enough to be understood by the villagers. This can be done using different mapping software also, but because of the limited access to technology in the village, the researcher did this manually. This step can also be skipped and substituted with the participants drawing the map of their community themselves. For us, this step also included getting some data about the history of the village, locally and (inter)nationally well-known people, well known stories/ myths, indigenous literature, art, etc. These things are important to familiarize the researcher with the research community, and these data may give the researcher some idea about the norms of the village.

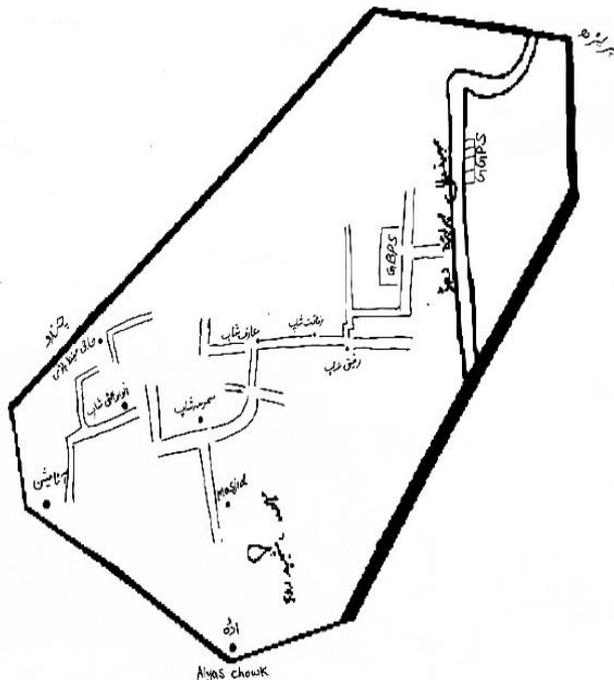
### **3. Participatory Mapping**

The third step requires the involvement of representatives from the community or your community gatekeepers to help in making the map easy to understand for the villagers. In case of the present research, because only 65% men and 44% women could read and write (statistics from Union Council Basharat, 2018, based on the 6<sup>th</sup> National Population and Housing census 2017), The researcher marked locally well-known locations of the village, for example, school, frequently visited shops, main road, well, mosque, bus stop, etc. Figure one shows the map of the village after participatory mapping.

**Figure 1 Map of the village after participatory mapping**

### **4. Spatial Mapping Activity**

The fourth step is to conduct the spatial mapping activity with different groups within communities. It depends on the research objectives what questions will be asked during the activity. For us, as the focus of this activity was to know the power relations between different caste groups of the village, the research participants (after their consent) were given the maps and were requested to mark the maps through different colours (coding) in term of in which certain areas people belonging to certain caste groups live, work, can go, and cannot go. The research participants were also requested to arrange the different caste groups (living in the village) in the order of most to least influential/ resource-rich caste. Different problems faced by the members of different castes and different resources owned by each of the castes was also asked. For this step, eighty research participants were selected through non-probability convenience sampling method. The selection criteria were based on sex, age, and marital status. The research participants belonged to different caste groups, but because a lot of



people (usually from ‘lower’ castes) did not want to reveal/discuss their caste in group settings, it was not an inclusion criterion. Table 1 shows the breakdown of the percipients of spatial mapping activity:

**Table 1:** Breakdown of spatial mapping participants

<b>Sex</b>	<b>Age Group</b>	<b>Number of Participants</b>
<b>Male</b>	Single- 18-30 years	20
<b>Male</b>	Married- 31 above	20
<b>Female</b>	Single- 18- 30 years	20
<b>Female</b>	Married- above 31	20
<b>Total</b>	80	

### **5. Draft Map(s)**

This is the data management stage. At this stage, the researcher looked at the maps marked by the research participants, and then arranged them in order of similarity. The responses which were the same or very similar were merged in one category. As a result of this basic analysis, the researcher arrived at three draft maps, which were final according to the research participants. This step is important as it relates to the broader idea of Inclusive Development, which is defined by Rauniyar & Kanbur (2010) as ensuring the participation of all marginalized and excluded groups as stakeholders in development. It was noteworthy that the groups of single men, married men, and married women had the same responses, while the group of young girls had different responses.

### **6. Transect Walk**

After the initial analysis and making draft maps, the first author took the three draft maps and walked through the village with several neighbours. The group kept inviting all the villagers they met along the way, and the author explained the purpose of the walk, that is. confirming the draft maps. The group became larger and larger with more people including children joining along the pathways, and the researcher kept confirming (and marking) the results of spatial mapping through this transect walk, besides hearing and making other informal conversations about the power structure in the village. The participants of the walk also included some of the spatial mapping activity participants.

### **7. Final Map and Analysis**

The last stage includes making the final map marked with (non)presence of certain caste groups in certain areas of the village. Through observation as well as discussion with the participants of the walk, the researcher and participants agreed one final such map of the village. The data on (non)presence of certain caste groups in certain areas, different resources owned by different caste groups and different problems faced by them was then analysed through thematic analysis.

## **RESULTS AND DISCUSSION**

In this section, the paper analyses the benefits of using this combination of methods to efforts to build rapport and generate nuanced data on the gendered politics of community and family life, providing insight into, for example, who owns and controls what in the community, who works for whom, who has restricted access to certain resources and how these dynamics shape gender relations within families. The findings of the research show the presence of four caste groups in the village, with *Chaudary* (roughly 30 percent of the village population) as the most influential and resource-rich and rest three are *Bhatti* (roughly 30 per cent of the village population), *Mistri* (roughly 20 per cent of the village population), and *Khokhar* (roughly 20 per cent of the village population) as the second, third, and fourth most influential respectively.

To start with the findings of the research, *Chaudhary* was found to be the most influential caste because they own and have comparatively easy access to most of the resources, or vice versa. According to the villagers, they own (most of the) land, livestock, shops and businesses, and have easier access to jobs, education, road, and water. The only possible problem they might face was, according to the research participants, was a potential ‘non-curable disease, for example, heart problem or cancer’. One of the participants mentioned during the walk, “*we (Chaudhary) have no problem by the grace of God. We have everything we want. Nothing can harm us in the village... if a problem is in our fate anyway, we can get a non-curable disease... only this is what we cannot solve.*”

(19, Male, *Chaudary*). Through the spatial mapping and transect walk activity, it became clear that people belonging to this caste mainly live near the main road coming to the village, and most of the shops, well, school, and the mosque is in their neighbourhood, which makes their access to the facilities easier. Young girls and boys belonging to this caste group usually attend school and college, and some of them also go to for higher education in other cities. However, to maintain their 'purity' women of this caste usually do not go out for jobs. One of the research participants said, "I have completed my university level education in Urdu, so I give tuitions to children at home... I wanted to teach in a government school, but my father does not like it... he says it will be a dishonour for us because we are Chaudary and we do not want our girls to be roaming outside..." (26, Female, *Chaudary*). It is a common perception in a community that if a woman is doing (paid) job outside the house, it is a matter of shame or 'dishonour' for the men in her family, because if they were real men, 'mard' they could have 'controlled' their women and made them 'sit' at home.

The second most influential caste is *Bhatti*, who own some land, livestock, shops and businesses, and small restaurants outside the village. They also have easier access to schools. According to the research participants, the problems this caste faces include lack of access to water and gas, and unemployment among young men. The map shows that people belonging to this caste live closer to the school, in the middle of the village where there are more land and fields. They also live closer to the area where *Chaudhary* caste members live, and they "always maintain good terms with Chaudarys by inviting them to their houses, and sending good food and crops" (32, Male, *Chaudhary*). Maintaining good close relations with *Chaudarys* makes *Bhattis* 'powerful', as according to one of the participants, "no one messes with us (*Bhattis*) because people know if they want to involve Chaudary to settle a dispute, they will favour us" (27, Male, *Bhatti*). It is very usual in the village that people of other caste groups involve some elderly man (or men) from *Chaudhary* caste as the judge to resolve disputes, therefore having good terms with *Chaudarys* tends to be very helpful according to the participants. People of this caste also prefer to send their girls and boys to schools, but it is not very usual that their girls go to college and university. However, among the few women who are doing paid jobs outside the house, most belong to this caste group.

According to the data, the third most resource-rich caste is *Khokhar*, who usually work on the (rented or on contract) land owned by the *Chaudarys*. They also work outside the village (for daily wages) or as construction laborers, or in shops. The research participants mentioned that they face a lot of problems including lack of access to water and gas, unemployment. Additionally, due to their proximity to sewerage and bad sanitary conditions, members of this caste are reportedly affected by a range of diseases. One of the research participants also mentioned, "You see we have many abnormal (disabled) children in our family. Once someone told me that this is due to the practice of marrying first cousins since many generations. But our elders don't listen to us... My daughter is also abnormal since birth, her brain is like a child..." (30s, Female, *Khokhar*). This quote not only shows an issue faced by the community, but also throws light on the patterns of decision-making within the community, where all the potential stakeholders, especially women, are not involved.

Finally, the data indicates that the least influential caste is known as *Mistri* or *Mussalli*, who are traditionally known as the people who converted to Islam from another religion. The rough translation of *Musalli* is the one who spends (most of) their time on a prayer mat (see Martin, 2015), but the people of this caste have always been struggling for a better standard of living all over Pakistan (see Gazdar, 2007; Gazdar & Mallah, 2012; Mumtaz et.al., 2014; Bittles & Small, 2016; Khan, 2018). According to the participants, people belonging to this caste group are usually not educated (at all), so they work as construction labourers inside and outside the village, and since there are a lot of natural coal mines in the village and the surrounding areas, the people of this caste also work in coal mines for daily wages. According to the research participants, they face the same problems as *Khokhars*, except disabilities as they are not very strict about marrying with first cousins only. According to the map, people of this caste usually live in the outskirts of the village - where the village adjoins the next village. As people of this caste live far from the school, they usually do not send their 'grown up girls' (after primary school according to one of the participants) to school.

As gender relations form a critical aspect of this research, it is pertinent to discuss the notion of 'feminization of poverty', which is one of the main findings of the present research. Chant (2008) defines feminization of poverty as among men and women of the same income groups and social statuses, the level of poverty is different with women being the 'poorest of the poor'. The same goes

for male and female-headed households also. The findings of this research also confirm this phenomenon, as, during the transect walk, the researcher could easily observe *Mussalli* women and children living in extreme poverty, hunger, and dirt, while their men were (usually) out of the village for work. These women also work as household help in the houses of *Chaudhary*, where they get food (and sometimes money also) for them and their children.

Drawing on the data discussed above, it can be concluded that the *Chaudarys* are the main powerholders in the village, which is mainly because of the land and wealth they own. Their wealth and social status also make them able to send their children to school in the village, and later to college and universities outside the village. Once they are educated, they get better-paid jobs, and the cycle goes on. This is similar for the *Bhatti* caste also, as they also have land and money to afford the education for their children. People belonging to the other two castes are usually struggling to meet their day-to-day needs, so they can/do not put the education of their children on their priority list, and thus the circle of poverty and low(er) status goes on for generations. The findings of this research conform to the notion of 'cycle of poverty', which is discussed by Marger (1999) as the families who have limited or no resources are trapped in the cycle of poverty, as they face several disadvantages collectively working in a circular process, thus making it nearly impossible for the families to break that 'cycle'.

As this paper also aims to discuss the usefulness of using this combination of methods on efforts to build rapport in the research community, the researcher had requested the research participants to give their feedback on this participation experience. As the first author was already in the community since a few months when these activities were conducted, (most of) the participants had already interacted with her at some point of time. According to one of the participants, "my mother has participated in two interviews including one for a television show, but yesterday (after transect walk) she was saying that you are doing very interesting research because in interviews people (sometimes) ask very personal questions and then play the recording on television, but this (walk) is good because there is no recorder so we can tell everything" (29, Male). Active participation of community members in these research activities also develops a sense of community ownership among the participants and makes them feel good that their knowledge about the community is worthy. One of the participants mentioned, "I did not know that I know this much about the village... and I had never thought that our muddy streets will be of interest to someone... laughing..." (50s, female). Besides these benefits mentioned by the research participants, these activities also served the purpose of introducing the first author to the whole village at once.

## CONCLUSIONS

The objective behind doing this research was to get nuanced data to explore the patterning of (gendered) power relations in the research community and specifically, within families from different castes, which was accomplished using this toolkit. Therefore, it can be concluded that this applied toolkit based on the combination of spatial mapping and transect walk as ethnographic research methods can be very useful to bring into light the less obvious dimensions of lived realities of different members of the research community, such as the varying access to and control over different resources among different caste groups based on their social status and geographical proximity, and how people belonging to different caste groups perform gender. These methods are also very useful for rapport building in the field, as it makes it easy to interact with maximum people in one activity. Doing spatial mapping and transect walk at an early stage of fieldwork can also help the researcher understand the community earlier and in a better way.

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