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Domestication of the Cell Phone on a College Campus: A Case Study

Madhuri Shekar,
MSc in Global Media and Communications

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Domestication of the Cell Phone on a College Campus: A Case Study

Madhuri Shekar

ABSTRACT

This research project explores how cell phones are domesticated on a college campus in India. Students of Stella Maris College for Women (SMC), Chennai, are faced with highly limiting rules and regulations regarding how, when and where they can use their cell phone while on campus. While domestication studies have often focused on *implicit* restrictions that influence adoption of a technology (cultural norms, relationships, social expectations), this project investigates how formal rules in an institution can heavily impact the ways in which a technology is adopted, used and incorporated into daily life.

The study revealed how domestication process creates rituals and practices that allow students to subvert the institutional rules and carry on using their cell phone regardless. In fact, although the formal rules heavily modify the manner in which the cell phone is used, it ultimately does little to *limit* the use. It is a combination of implicit values (e.g. respect for the teacher) and other external factors (cost, practicality of using the cell phone) that actually limit the usage of the cell phone while on campus.

The term 'cell phone', which is most widely used in India, will be used throughout the project in place of 'mobile phone'.

1. INTRODUCTION

This research project is a small contribution to the ongoing debate of the role technology plays in our lives. Is the path of our lives inevitably directed by the trajectory of technological development, or do we as societies and as individuals stop, start and shape this momentum, moulding technological devices and even scientific ideas to fit into the contours of our everyday lives? It is the ongoing debate between Technological Determinism and the Social Shaping of Technology (Doyle, 1997; Williams & Edge, 1996).

This case study concerns the peculiar use of cell phones by students of SMC- a mid-size women's college in Chennai, India. The nature of the use is directly linked to the special nature of the environment and the users themselves, at least from the perspective of Western anthropological studies on cell phone usage so far. The restrictions of this environment- formal, physical and symbolic- together with individual choices shaped by cultural and societal forces, inevitably *shape* the technology of the mobile phone so as to integrate it as seamlessly as possible into everyday life. Technological Determinism may argue that the mobile phone itself, as a highly portable instrument facilitating instant communication, any time and any place, can bring about unforeseen changes in societies and social life. The results of this particular case study, however, reveal the extreme limitations of a technology, despite its apparent awesome potentials for revolutionising our lives, when technology comes in contact with social rules, mores and expectations.

The direction that this project finally undertook was one of many. This research was inspired by my personal experience with this field for three years, when I studied in this featured college in Chennai, and was among the first batch of students suddenly facing a ban on the use of cell phones in 2005. I saw classmates continue to utilise their cell phone in highly imaginative and subversive ways, flying under the radar of authorities who found they really could not tell whether a girl was sending a text message or merely rummaging through her purse. My classmates and I were undergoing that crucial transition many Indian women are experiencing today- taking tentative steps towards a more educated, more liberal and more emancipated future through the portals of higher education, inspired by Western liberalism in the media, while still negotiating the more conservative expectations of our families, communities, teachers, and sometimes even peers.

The starting point of this project changed from how Indian women are using cell phones as a tool of securing a sense of emancipation from both physical and symbolic boundaries, to how cell phones are domesticated, in and of themselves, in socially restricted circumstances. This change in direction better fits the scale and scope of this dissertation, while still hinting at the incredible changes that urban, educated Indian women are undergoing at the beginning of the new millennium.

This study also shifted from an examination of the Social Shaping of Technology and Technological Determinism to a focus on the process of Domestication in and of itself. Domestication allows for a deeper look into the conscious decisions that go into shaping the way a device is used and thought of. The case study of SMC allows for an enquiry into what happens when a device is domesticated under formal institutional rules that aim at strongly restricting its use.

It would not be a stretch to say the cell phone is revolutionizing India- technologically and socially. India is leading the world in cell phone growth along with China (InStat, 2008) and lowered prices of handsets means that the cell phone as a device is levelling Indian society in unprecedented ways. Not only are they allowing the working class to catch up in some measure to the privileges usually enjoyed by the middle class, but perhaps they allow for women to strengthen their place in society and expand their options as well.

In the end, I have attempted to shed some light on how social and cultural restraints- formal and informal- can radically alter the use, value and meaning of a technological device, especially in this particular cultural field (urban Indian youth/women), which has been relatively under-represented in techno-anthropological research.

2. THEORETICAL REVIEW

I will briefly overview the history and literature on Domestication studies, and the mobile phone in society, in order to fully understand the role of that the mobile phone plays in the process of domestication. In addition, I'll be exploring the tangential themes of technology as cultural commodities, Chavan's Counter-culture/Compensatory Model of ICT use, Women and ICTs, ICTs in Developing Countries, and the possibilities of using ICTs for individual and social empowerment.

DOMESTICATION

The concept of Domestication of Information and Communication Technologies (ICTs), proposed and developed in the 1990s by Silverstone, Haddon and later adopted by several other researchers (Haddon L. , 2003), is based on the social shaping of technology and studies how technological artefacts are incorporated into the everyday routines of the home. Domestication may be seen as a *dynamic process*, wherein individuals and groups negotiate the use of a technological device, trying to 'fit it in' or 'break it into' their own personal life structures and domestic space to best satisfy their needs and wants. Just as consumers modify the use of a device, the device in turn impacts and influences their daily life (EMTEL, 2004).

The 'four stages of domestication' delineated by Silverstone and his colleagues- Appropriation (*imagining* how the device will be used, and consequently buying it), Objectification (where the device is placed within the household), Incorporation (how the use of the device is temporally incorporated into daily life) and Conversion (how the device is displayed in the house, how it is talked about)- categorise the domestication process spatially and temporally, in distinct and successive stages of adoption. (Silverstone, Hirsch, & Morley, 1992) This framework has been criticized as not being empirically useful (Bakardjieva, 2006, quoted in Hack, 2007, p.9), as domestication cannot be categorized so distinctly, and such stages overlap constantly and do not occur in a linear fashion.

Domestication and Design:

Domestication is an integral part of the process of technological innovation and design. Technical development, individual use, and market forces all influence design. (Silverstone &

Haddon, 1996) The use of any technology comes with certain restraints, which will affect both how a technology is used and what the consequences of that use will be (Ibid).

Domestication outside the Home:

The concept of domestication, as the very term suggests, alludes to the *domestic* environment of the home and family, and was originally conceived to study 'fixed' technologies such as the landline telephone and the home computer, which remain confined to the home. However, domestication studies have been successfully applied to environments outside the home (See for instance, Hujiboom, 2005; Ling, 1997; Pierson, 2006).

Domestication studies in college campuses especially have been conducted (Habib, 2005; Potts, 2004; Wei & Lo, 2006; Ito & Okabe, 2005), which discuss how social relationships are impacted by technologies, and how public articulation and discussion of those technologies in turn impact the way they are used. However, these did not particularly focus on the campus itself as an influential factor, or how the devices themselves were modified to suit the culture of the environment.

Most college environments in Western societies, however, are not anywhere near as formally regulated or restricted as this particular campus under study. Surprisingly, there have not been many domestication studies conducted with regards to formally regulated institutional environments, although studies have been conducted on the use of ICTs under restrictive/authoritarian government regimes (see for instance Gomez, 2004; Kalathil & Boas, 2001; Mudhai, 2006).

Haddon's outline of domestication for mobile telephony explores how the concept can be applied to technologies that are used outside the home, and are highly portable (Haddon L. , 2003). Haddon however focuses more on how domestication can provide insight into the longer term evolution of the cell phone as a device, and whether it can be applied to study the 'weaker' ties of youth friendships rather than familial bonds. One could argue that the challenge in studying mobile telephony is also understanding how the phone rapidly changes functions as rapidly as people change their 'roles' in their daily lives. On campus, the cell phone rapidly shifts in and out of sight and students switch roles from being members of a peer group to being scholars obeying the rules.

The basic aims of domestication, which are to study the processes by which a technology is adapted and made suitable for both one's temporal routine and spatial environment, make the concept ideally suited to this project. In addition to the extra efforts required to adapt cell phone use in light of the rules and regulations, college students experience a temporal pattern of classes, breaks and extra-curricular activities as well as a spatially bounded area of a college campus that factor into the adoption process. The college campus also resembles a home environment with hierarchies of authority, and particularly allocated spaces and times for students and teachers/management (much like children/parents, husband/wife). Silverstone's 'moral economy' of the household may be found in the cultural/moral values of the campus setting (Silverstone et al., 1992).

THE CELL PHONE IN SOCIETY

Fortunati (2002) has asserted that the cell phone not only changes aspects of social life, but alters even the framework that society functions under.

The cell phone is a unique device, and can rightly be called revolutionary to a certain extent. While the device itself is not a pioneer of wireless communication, the extreme portability of its design and relative affordability (as compared to say a home computer, or a laptop) resulted in its ubiquitous use and especially rapid adoption by populations of developing economies. (Townsend, 2000, p. 2)

Geser (2005) rightly states that the cell phone is a "multidimensional challenge for sociological theory and research " (p. 4). His classification of cell phone usage measurement into intensity, breadth and variety, provides a methodological starting point to define what 'usage' entails (p. 6).

Aspects of the cell phone that come prominently into play in this project are the device's ability to "[emancipate one] from local settings" (p. 9) and the importance of SMS (Short Messaging Service) as "a channel for low-threshold, non-intrusive contact initiation" (p. 18). Geser mostly speaks of the emancipatory potential of cell phones as acting as 'symbolic bodyguards', for instance, using your cell phone in an isolated or unfamiliar environment will signal to strangers that you are busy, connected, and not to be harassed. However, cell phones can also emancipate one from familiar and safe settings. They allow for students to actively carry on their 'life outside campus' while still physically on campus- by

communicating with their friends, boyfriends and parents, coordinating plans and activities, or simply distracting themselves from boring lectures.

SMS is highly suited for this particular environment where discretion is of utmost importance, and often real-time, extended voice conversations are impossible due to the increased possibility of being 'caught' in the middle of one. As Geser has explained, "the asynchronous mode is highly valued because it provides the opportunity of delaying the reception and the answering to a more appropriate time [...] This same non-intrusiveness makes it easier for the new technology to enter all kinds of institutions despite dense social controls (e.g. schools or even prisons)." (Ibid)

In addition, the tendency of the cell phone to create a 'virtual walled community' (Ling, 2004) enhancing familiar social ties at the expense of forming new ones, or connecting face-to-face with people who are *physically* close to you, is particularly pertinent to this case study. This concern has also been echoed by Rivere and Licoppe (Haddon, 2004, p. 82) and Fortunati (2002). However, this creates a bold causal link between cell phones and behavioural choices.. The principal of SMC in 2005 justified the ban on cell phones on campus by stating that students would rather spend their free time messaging their friends outside campus than form connections with their own classmates. This theoretical debate-whether or not cell phones adversely affect sociability- therefore can be seen to be played out empirically in this case study.

TECHNOLOGY AS A CULTURAL COMMODITY

Domestication draws upon the concept of technological 'biographies' as described by Kopytoff (Silverstone, 1994). If we examine the ways in which a technological device is used and appropriated within a certain cultural context, and also how that use changes over time as part of the devices 'biography', we gain valuable insight into the nature of the culture itself (Kopytoff, 1986). This is because each culture thinks of and uses the same device in different ways. Therefore studying the ways and means of consumption of a cell phone by a 20 year old urban Indian girl in a college campus gives us a portrait of a culture that is very different from a study of how a Norwegian teenager uses her cell phone in Oslo. For instance, Hijazi-Omari & Ribak's study (2008) on how cell phones are domesticated by Palestinian teenage girls reveals the inner workings of their cultural environment.

One key work on how use of technological devices are shaped by their culture, and in turn influence the behaviour of the consumer(s) is Chavan's particular model of 'counter-culture', which he defines as a 'compensatory model'. "A compensatory model looks at a given culture and its characteristics. It posits that these characteristics can cause people to behave in certain predictable ways but at the same time the characteristics can put pressure on people. This causes people to behave in accordance with their culture but also seek release to the consequences of the constraints of the culture, at least in subtle ways. This behaviour would be classified counter culture." (Chavan, 2007, p. 25)

This concept is highly relevant to this case, where students behave according to the rules of the college, and do not overtly challenge them, yet 'release the consequences of the constraints' in covert ways.

SETTING THE STAGE-YOUNG WOMEN, ICTS AND INDIA

Prior Research: Several studies have been done on **Women and ICTs**, focusing on the gendered use of technology and the differences in use and appropriation by women as compared to men. See for instance studies on women and the telephone (Rakow, 1992), women and the internet (Bakardjieva, 2005) and women and ICTs (Marcelle, 2004; Geser, 2006; Lin & Tong, 2007). Much research has been done on **ICTs and Development**- the use and growth of ICTs in developing countries and economies, and how ICTs can be used to galvanise and 'leap frog' individuals and communities in areas of information distribution and entrepreneurship. (For an excellent overview on different case studies relating to gender, development and ICTs, see Valk, Cummings, & Dam, 2005.)

When ICTs are used in developing economies, and by underprivileged and marginalized groups such as the women and the poor, the trajectory of research will naturally gravitate towards **ICTs and Empowerment**. Studies have been done on ICTs as a tool for women's empowerment (Huyer & Sikoska, 2003) as well as critiques of the notion that access to ICTs is an automatic guarantee towards a better life for women (Mitter, 2004).

These areas of research will not be directly pursued in this project, as the main focus will remain and be limited to the process of domestication in a college campus. Nevertheless, issues such as these are tangential to the case study, and provide the broader context behind this particular environment under observation.

Duality of experience: Young Indian Women in Higher Education: The students at SMC are part of a very unique group in their time and country- they are urban Indian women who are undertaking university education. As of the latest census, only 5.4% of the total female population in India graduated from college (Census of India, 2001). The students here are part of that elite group, with the potential to further their options in life further than their mothers and grandmothers. Indian middle-class, educated women have been making great strides in the past few years (Penn, 2007). They are occupying positions of real power both in the government and the private sector. Nevertheless, the condition of Indian women as a whole is still a depressing reality. Over half of Indian women are anaemic (Mehta & Shah, 2001, p. 19), only 53.7% of women are literate (Census of India, 2001), and rates of crimes against women- such as rape, human trafficking, dowry-related murders, child sexual abuse and domestic violence- are still appallingly high (Swayam, 2002).

“Indian culture forwards a broader and more stringent view of social responsibilities” than Western societies, particularly American culture. (Miller et al., 1990) In such an environment, it is looked upon as expected that young women would sublimate their desires for individuality and personal expression – whether through their style of dress or choice of a life-partner – to that which is deemed acceptable by their family and society. Nevertheless, the increasing exposure to Western media, be it through American movies or television shows, widens the scope of the young woman’s imagination, causing her to construct a “narrative of the self” that may conflict with the values that she has been brought up with. (Pande, 2007) And while a college education prepares them for a career and a productive life outside the home, they still find themselves not only confined to the walls of the campus but also instructed on what to where and how to ‘appropriately’ express themselves.

They witness a conflict between what education *should mean*, what ideals the Western media tells them they should aspire to and what their community expects of them as women.

The role of the cell phone: Empowerment? ‘Empowerment’ for women may be defined as “a process that leads women to perceive themselves as capable of undertaking decisions and making choices about their lives, which in turn requires sufficient levels of self-confidence and assertiveness.” (Huyer & Sikoska, 2003) Can the cell phone empower young women by providing them with a means to privacy, freedom of choice (as to who to communicate with,

and when) and a mode of individual expression, while allowing them to simultaneously live in accordance with their cultural environment? Or can this not be termed 'empowerment'- is it merely an illusory phase that ultimately does little to challenge the status quo? Do the process and end results differ based on a woman's socio-economic class?

This dissertation does not pursue those questions, as they are beyond the scope of this project. Nevertheless, understanding how young women utilize, appropriate and domesticate the cell phone into their everyday lives can provide a solid foundation from which one can extrapolate inferences and pursue research relating to women, the youth, ICTs and empowerment in India.

SETTING THE SCENE- A DAY IN THE LIFE OF AN SMC STUDENT

SMC is an Autonomous Women's college affiliated to the University of Madras, in Chennai, India. It enrolls a little over 3000 students a year, and has a 'minority quota' of 50%, which means that Catholic students make up half the student population. All classes are taught in English.

There are two sessions of college- day and evening. For a 'day' scholar, college timings are from 8 a.m. to 1 p.m. The day consists of five periods or 'hours' (of 50-55 minutes each), including a mid-day 'Break' of twenty minutes from 10.55 to 11.15. Students stay in the same classroom throughout the day for the most part, shifting classrooms primarily for inter-departmental electives. Once on campus, students are not allowed to leave until 1 p.m., unless they have a permission slip signed by a faculty member.

Students are expected to follow a strict dress-code, which in practice means no sleeveless tops, no tight clothes, no shorts or skirts above the knee, and tops must extend to below the back pockets of one's trousers. Students are also forbidden to take part in any professional or amateur modelling, fashion shows, print/screen commercials or television work.

The official rules regarding cell phone use have fluctuated in the past few years. From 2005-2007, there was a complete ban on the use of cell phones at any time or any place within campus boundaries. From the beginning of the 2007-08 academic year, the rules relaxed slightly to allow for permissible 'cell phone timings' three times a day where cell phones could be used in the designated 'canteen area'. The official rules as of the 2008-2009

academic year (when this project was undertaken) are not to use cell phones anywhere on campus during college hours (8.00 am to 5.20 pm) *except* for the following time periods- 10.50 am to 11.10 am, 1.00 pm to 1.25 pm, 4.15 pm to 4.25 pm, and only in the Canteen Area, an open-air eating area in the centre of campus. If a student was caught using the cell phone outside the allotted times/place, the cell phone was liable to be confiscated by the management.

3. CONCEPTUAL FRAMEWORK

The significant strength of the Domestication concept is that it acknowledges how technology is never static or neutral. A cell phone may potentially be an 'anytime, anywhere' device, but it is rarely so in reality, and is never used the same way by two different communities, families or individuals. "The same device, the same service, the same ICT, but radically different places in the lives of these different people (Anderson, 2002)."

Therefore, domestication in this case study will be particularly unique, due to the peculiar circumstances of the consumers, who are experiencing certain contradictions of culture as has been mentioned previously.

The framework thus draws upon the Domestication process, and is methodologically aided by Silverstone et al.'s four stages of domestication (1992). The links between Domestication and Design will be explored- Can the campus restrictions have any impact on design? Does the intrinsic design of a cell phone help or hinder the process of domestication in a formally regulated environment? It has been established that ethnographic fieldwork can play a key role in helping to develop the design of user-friendly and user-compatible technology, such as devising a 'concept' mobile phone based on the gift-giving practices of teens. (Berg, Taylor, & Harper, 2003) Therefore I will attempt to discover design potentials for the cell phone based on my investigation into this particular process of domestication.

I will look into how the concept itself holds up when applied to mobile telephony outside the home. Geser's sociological theory of the cell phone provides the valuable links between the technical potentialities of the cell phone and its impact on human behaviour.

Domestication is multi-disciplinary, and the socio-cultural implications of the process cannot be ignored. Chavan's model of *counter-culture* will be tested against the results to see if it offers an accurate summation of how the students both conform to and defy the official rules. Kopytoff's concept of technology as cultural artefacts will help us explore the cultural implications of cell phone use- what the cell phone's 'biography' and method of use implies about the social and cultural environment in which it is embedded.

4. RESEARCH AIMS

My basic research question for this project is **“How do the students of SMC domesticate their cell phones while on campus?”** This question takes into account the rules that severely curtail cell phone use on campus, and seeks to explore the process of domestication in this particular socio-cultural and institutional context.

I will more specifically seek to find information on:

- What technical features of the cell phone are used, on a
 - Spatial basis (Where is the cell phone located; in what locations are it used?)
 - Temporal Basis (When is the cell phone used and for how long?)
- In what ways do students intentionally modify their behaviour and methods of handling the cell phone, in order to accommodate and/or circumvent the rules?
- Why are cell phones used at all, when there is the serious risk of having them confiscated if the student is caught breaking the rules?
- Can any links be made between the process of domestication in this case study and future innovation/design of the cell phone?

5. RESEARCH DESIGN AND METHODOLOGY

In this chapter, I will detail the key choices I made regarding research design and methodology.

THE RESEARCH STRATEGY OF A CASE STUDY

As Yin (2002) has defined it, a case study is an empirical enquiry that investigates a contemporary phenomenon within its real-life context (p. 13). Therefore it is highly useful in this particular study, wherein I want to study the relationship between a phenomenon (domestication of cell phones) and the context within which it is occurring (a college campus that imposes several restrictions regarding cell phone usage).

A case study would allow me to extract the maximum possible information from a single, bound area- a college campus- turning my personal limitations on time and expense into the strengths of a case study approach.

The SMC campus: The SMC campus is surveyed in this case study. I attended this college from 2004-07, where I received by Bachelor's Degree. Choosing my alma mater proved highly methodologically advantageous- I was able to get easy access to most public areas of campus, and I was able to recruit participants with the aid of my personal network of friends and acquaintances.

SMC is a very interesting case study in its own right, setting aside the methodological conveniences. It is a Catholic institution and therefore tends to be highly conservative on several issues (such as imposing a dress code and forbidding students from modelling/acting professionally). My personal experience with the college has allowed me to observe how students use mobile phones on campus, despite the rules enforced against such use. Having been formerly immersed in this environment, I was able to take on the role of both an insider (as an alumnus) and as an outsider (as a researcher striving for an unprejudiced and unbiased approach).

METHODOLOGICAL CONSIDERATIONS WITHIN THE CASE STUDY APPROACH

A case study can employ the use of both quantitative and/or qualitative measures. However, a purely quantitative approach would be unsuitable for studying the process of

domestication. Quantifying the overall trends of cell phone usage would give us little insight into the conscious decisions that precede these styles of adoption, and the social, cultural, institutional and economic factors that lead to such decisions.

The nature of this study is a discreet one. Since the study concerns deviant use of the cell phone, students will need to admit to the researcher that they are essentially breaking the rules. To ensure the trust of the research participants, and to maintain their confidentiality, I would need to be sure that the management/faculty of the college would not come to know of the research project. A large-scale quantitative survey would be risky, as the more participants involved, the less control I would have over the process, and the chances for 'leaks' to the management, or even outright observation by the management, would increase.

Therefore, a qualitative approach would be more suitable for this case study.

METHODOLOGICAL CHOICES UNDER THE QUALITATIVE APPROACH

Domestication studies have traditionally employed the methods of interviews and participant observation/ethnography (Berker et al., 2005, p. 6). Being able to directly observe how students use cell phones throughout college hours on campus would require me being on campus for extended periods of time, including access to the classrooms. This would be impossible to achieve unless I informed the management/faculty of the nature of my research project, or mislead them as to my intentions and aims, neither of which I was willing to do.

My research design therefore focused on interviews and self-completion diaries. Interviews have been a tried and tested methodological tool in domestication studies, and self-completion diaries have been used to great effect in studies of cell phone usage/communication patterns among a select sample.

THE DIARY-INTERVIEW METHOD

I chose to pursue the 'Diary-Interview' method, wherein the participants would keep a diary or log of their activities for a certain period, which would be followed up with a detailed interview about the entries and the situational context. It is considered to be "one of the most reliable methods of obtaining information." (Corti, 1993)

Self-completion Diaries

Interviews could not be sufficient as the only method to collect data for this project, especially as a comprehensive ethnographic approach was not possible. I required a method that could supplement the flexibility of an interview with a more concrete recording of the times and means of cell phone usage on campus. The ideal method was therefore the use of self-completion diaries.

As Corti has stated, "diaries can provide a reliable alternative to the traditional interview method for events that are difficult to recall accurately or that are easily forgotten." (Ibid) Although one may have a general understanding of the frequency/nature of one's cell phone use throughout the day, such notions may be exaggerated or under-represented, intentionally or unintentionally, during the process of an interview.

Completion of a diary prior to the interview would entail two key advantages:

- I would personally acquire a written, concrete record of actual cell phone use on campus, with information including the time, place, duration, function and content of the communication.
- Keeping a diary would require the participant to be self-reflective on their own habits of cell phone use. Going over the diary with the participant before the interview would help them understand their habits of cell phone use in more specific terms, and their responses during the interview may therefore be more accurate and less vague.

I asked the participants to keep a log of their cell phone use on campus for two days. I supplied them with pre-formatted diaries and let them know that I would require a follow-up interview as soon as possible after the two days were over.

Semi-Structured Interviews

Interviews are among the most popular tools of qualitative research. (ten Have, 2004, p. 5) As mentioned previously, domestication studies have used interviews to great effect. Interviews allow the researcher to gain insight not only into the choices made in the domestication process but also into the justifications and conscious thought processes that precede those decisions.

I chose individual interviews over focus groups. I had sufficient time and resources to interview the research participants individually. Also, as the use of a cell phone is primarily an individual activity, I did not need delve into to the process of decision making and formulation of opinions as a group process, which would be aided by a focus-group approach. It made more sense to interview students individually.

Opting for semi-structured interviews allowed me to navigate the questions as befitted the flow of the conversation, and also to pick up on interesting asides and follow them up more comprehensively.

The design of the interview guide related directly back to my Research Question and the key sub-questions that I intended to follow up. The structure of the questions was organized by Silverstone et al.'s four stages of domestication- Appropriation, Objectification, Incorporation and Conversion. At the end of each interview, I asked students to describe design the 'ideal phone' that could most easily be used on campus, and also asked them to advise a hypothetical new student to the college on how they could 'practically' use their cell phone on college. The last question aimed at a response that would sum up the entire process of domestication on campus, from the participant's personal experience.

All the interviews were conducted on the SMC campus, after college hours, and all were tape-recorded.

SAMPLING PROCESS

My recruitment process was through the process of snowball sampling, which not only is a fast and affordable sampling method, but is especially useful when the confidentiality of the participants must be maintained (Heckathorn, 1997). I recruited friends and acquaintances who were still in college, and also recruited the students that they suggested would be interested in participating. Based on the time I had available, I recruited ten respondents to take part in both the diary-keeping and the follow-up interview. Half of the participants I was already friends with, and the other half I was introduced to for the first time.

All respondents were in their third and final year of their undergraduate studies, were between 19 and 21 years of age, and most had been using their cell phone from the first semester.

Aside from the practical convenience of recruiting using my personal network and consequent snowball sampling, there were definite advantages to interviewing people I knew personally. The participants who were my friends knew that they could trust me completely to keep their responses and diaries confidential. They were aware of the nature of my graduate studies and my personal views on both college life in India and on the cell phone rules on campus. Snowball sampling ensured that the participants I did not know personally were assured that I was trustworthy, as I had been vouched for by someone *they* trusted.

Since I was close to the participants in age, and had only recently graduated from their college, they looked upon me more as a peer and confidante rather than as a researcher. On occasion this proved to be a disadvantage, as they often did not elaborate on concepts they assumed to be taken for granted (for instance, why using the SMS function in college was preferable to making voice calls). However, if I needed elaboration I merely asked them to speak to me as if I was a researcher unfamiliar with the subject, and they complied.

All participants names have been altered to protect confidentiality.

SUMMARY TABLE OF RESPONDENTS

Participant	Class	Diary Dates	Interview Date
Nandita	III Year History	15 th & 16 th July 2008	17 th July 2008
Priya	III Year Sociology	16 th & 17 th July	17 th July 2008
Miya	III Year Sociology	15 th & 16 th July 2008	18 th July 2008
Chetna	III Year English Literature	16 th & 17 th July 2008	19 th July 2008
Lavanya	III Year History	16 th & 17 th July 2008	19 th July 2008
Bhavna	III Year Chemistry	16 th & 17 th July 2008	21 st July 2008
Ananya	III Year Zoology	16 th & 17 th July 2008	22 nd July 2008
Tanusha	III Year English Literature	18 th & 19 th July 2008	23 rd July 2008
Smirithi	III Year Economics	17 th & 18 th July 2008	25 th July 2008
Harini	III Year Economics	19 th & 20 th July 2008	25 th July 2008

6. RESULTS AND INTERPRETATION

The findings of the research process, through the self-completion diaries and the interviews, are summarised and thematically outlined in this chapter.

The diaries were mainly a supplement to the interviews, and therefore I will be focusing the bulk of my analysis on the interviews alone. However, through the diaries I obtained a definitive log of cell phone activity for each participant across two days, while on campus. These diaries helped me classify participants as 'infrequent users' (<3 instances of cell phone use per college day, on average), 'moderate users' (3-7 instances), and 'frequent users' (>7 instances).

Infrequent Users	Moderate Users	Frequent Users
Chetna, Miya	Priya, Nandita, Tanusha, Harini, Smirthi	Bhavna, Ananya, Lavanya

These classifications proved useful, as the responses given by infrequent users in comparison to frequent users were markedly different with regards to handling the cell phone, and attitudes towards the cell phone overall.

ANALYSIS OF THE INTERVIEWS

Each of the interviews was transcribed, and the transcripts were then analysed through thematic coding (Aronson, 1994). The transcripts were sifted through to categorise various ideas into the four stages of domestication, and then once more analysed through the process of 'open coding' to allow for concepts that were either extraneous through the stages of domestication, or overlapped within those stages, to surface. Distinct recurring themes then emerged.

Thematic analysis helps one categorise and link ideas and concepts to sum up a collective experience. However, it also essentially problematic to use in Qualitative Research as it contradicts the research paradigm that "the differences between people and the contexts which make those differences are profoundly important" (Gibson, 2006). In interviewing ten students, I found ten individualized responses and outlooks not just on cell phones, but on

college life as well. Nevertheless, the approach of thematic coding did allow me to find some overarching themes that were present in each interview conducted.

REWORKING DOMESTICATION

The analysis made it clear that the four stages of Domestication as provided by Silverstone et al., which I used as my methodological layout for the interview guides, would not be sufficient to conceptualise the process of domestication that takes place for mobile technologies in a restricted college environment.

For instance, objectification refers to *where* the device is placed, but in this case study, the device is a mobile phone that frequently changes positions throughout the course of the day. The domestication of the phone (in this college campus) to a large degree is dependent on it being a small, highly portable device that can be rapidly hidden from view when necessary. 'Conversion', which refers to the way the device is displayed- a form of 'Impression Management' (Haddon, 1993, p. 8). This would be a superfluous category, as the Impression Management undergone in this case study- the basic need to hide the phone and disguise it- would be what essentially drives and underpins the *entire* domestication process. Categorising it separately would not be appropriate. In addition, the process of Appropriation is not of much relevance in this case. The mobile phone for each correspondent was bought before they started college (in some cases respondents were on to their second or third mobile phone, but in all cases they had begun using their mobile phones before college began). None of the participants had made purchases *keeping in mind* the restrictions they would face in college. And none of the participants had bought the cell phones on their own- they were either gifts from their parents/relatives, or purchased with their parents' money.

The results of the interviews therefore gave rise to new thematic concepts that would better tie in to the theme of domestication in this particular situation. I have therefore re-worked and re-approached the four stages, keeping in mind the functions they are meant to fulfil in the study of the domestication process. The results have been thematically grouped under the following categories. The categories are not *stages*, which would imply a linear ordering of the domestication process. They are instead factors that play a role in the domestication process, without any linear structure, and all are inter-linked to each other.

Handling the cell phone (Objectification)- How the cell phone is physically managed while on campus- where it is located, how it is moved about and operated.

The Daily Rhythm (Incorporation) - How the cell phones are worked into the daily college routine, and what factors influence the extent of their use.

Attitudes (Conversion) - What the students think about the cell phone rules applied on campus, and how the student body as a whole acts and functions in solidarity regarding those rules.

The Discrete Phone (Appropriation) - What the students imagine would be the ideal phone (by design and functions) that would fulfil the needs of domestication in this environment.

Hide, Disguise and Distract:

The basic factor underpinning the domestication of the cell phone in this particular environment was the need to *hide, disguise* or *distract* the faculty/management (F/M) from the use of the cell phone. As a result, the three stages of domestication that take place *on* campus- objectification, appropriation and conversion, are all influenced by the overriding need to keep cell phone use discreet. One function that was never explicitly brought up in the interviews, but which every student with a cell phone rigidly adheres to, is naturally keeping the cell phone on silent or vibrate mode while on campus, if they do not turn the cell phone off completely.

HANDLING THE CELL PHONE

Students therefore employ various techniques- peculiar ways and means of handling the cell phone- in order to use it without drawing attention to the phone or to themselves.

These include:

1. Positioning oneself out of sight from any F/M in the area (either in the classroom or in the public spaces on campus).
2. Positioning the *phone* out of sight from the F/M. The most common means cited was to keep the phone in one's bag/backpack, insert one hand into the bag, and use the cell phone, thus keeping it out of plain sight.
3. The use of friends/fellow students to *distract* F/M from one's use of the cell phone.

Tanusha: *Most effective one is to just pull another person in front of you. Or if you have really cool friends, you could ask them to distract whoever is coming towards you.*

Q: *(laughs) Have you ever done that?*

Tanusha: *No actually my friends have seen whoever was coming and sort of, yeah, jumped in front of me. (laughs)*

4. The use of behavioural techniques to distract F/M from one's use of the cell phone.

Q: *What techniques do you use to hide the cell phone while you're using it?*

Lavanya: *I'm still making eye-contact with the teacher, that's very important. I know the keys by heart. The cell phone is usually in my purse, in my bag, or in my book. I just pretend that nothing is happening. I mean... Eye contact is the most they can ask for as teachers. (laughs) I can make eye contact and message at the same time.*

Tanusha: *Sometimes you pretend like you're really tired and you're stretching your neck in class, but then you just drop down behind the table and use your phone.*

5. The use of clothing to disguise use/possession of the cell phone: Students tend to wear the traditional *salwar kameez* or a combination of loose *kurtas* with jeans to college. Students therefore make use of the loose *kurta* tops to hide the outline of cell phones in their jeans pockets (especially in the library, where bringing a cell phone inside is not allowed), and use the *dupattas* (the long scarves worn with a *salwar kameez*) as a means of disguising one's possession of the cell phone.

Miya: *Ya, [I used my dupatta] today. On the way back from bathroom, held it like 'this'. [shows how she wrapped up her cell phone in her dupatta]*

Tanusha: *Dupattas are quite a good thing. You could wrap your dupatta around your head, because some people do that for the sun and then you could... would still be difficult to hold your phone there, but that could be done.*

Q: *Miya was telling me how she would wrap [the cell phone] up in her dupatta and walk around-*

Ananya: *Yes! I did that just now, as I was walking here [...] Or under this [indicates her kameez] is also useful.*

6. Familiarity with, and mastery over, the functions of the cell phone: Being discreet with the cell phone means being able to rapidly and easily manoeuvre it in and out of

sight depending on location, time and proximity of F/M. As a result, the participants were extremely comfortable with the physical handling of their cell phones. It was here that a marked difference could be seen between the low-frequency users and the high-frequency users. High-frequency users routinely used the cell phone hidden out of sight not only from the F/M, but from themselves. Using the cell phone while it's in their bag, or under the chair or table, and using it while taking notes/making eye-contact with the teacher requires a high level of mastery over the functions of the cell phone and the keypad and assorted buttons. High-frequency users were very comfortable with using the cell phone while not actually looking at it, while low-frequency users stated that they needed to look at the cell phone while using it, and could not type out SMS messages as rapidly as some of their friends.

Low-frequency users:

Miya: *I need to see [the phone], because I am not 'savvy', as to message without knowing where 'A' is and 'B' is. I have to see and message. Which is why, I have a lot of problems, because every time I glare at my bag for two minutes, people get suspicious. "What is she doing"? (laughs) So yeah. Which is probably why another reason my messages are really short, is because I have to see. I have friends who'll be like tak-tak-tak-tak-tak [mimics messaging rapidly on a cell phone], and I'm like, "wow".*

High-frequency users:

Q: *How comfortable are you with messaging? Like, can you do it without seeing the keypad?*

Ananya: *Yes, I've become... my brother's amazed at my messaging. I've had my phone for one year. I didn't have one before that. I've become very proficient at messaging.*

Harini: *[I] don't even need to look... I'm accustomed to where the keys are. I can just look somewhere else and message at the same time.*

Bhavna: *I can [message] without looking at the keypad. And not slowly, either. (laughs)*

Q: *Can you do it while taking notes? Can you really focus on two things at the same time?*

Bhavna: *I can. I mean, obviously my messaging becomes slower. I'd probably focus more on the notes but yeah, I can do both.*

Indeed, one memorable feature about Bhavna's interview was the she not only fiddled with her phone throughout the interview, but even messaged *while* responding promptly and lucidly to my questions.

THE DAILY RHYTHM

Incorporation refers to the process by which a technology is integrated into the temporal and spatial patterns and rituals of everyday life. The interviews shed much light on how the students fit the cell phones into the temporal 'gaps' contained within and between their classes, and how they exploited the physical features and locales of the campus to reconfigure them as cell phone 'zones'.

'Colonization' of public spaces

The participants listed different locations on campus that both they and their friends tended to gravitate towards, to use their cell phones. The 'canteen area' was the officially permitted location on campus wherein students could use their cell phones during permitted times, but the responses from the interview indicated that students rarely limited their cell phone use to that particular location.

Two locations most frequently mentioned were a. the participant's own classroom and b. the bathrooms. The classroom was a 'safe' place, as it was very familiar, and occupied mostly by one's peers. It was easier to hide the cell phone when there was only one teacher to watch out for, and one did not have to be on the alert for a teacher from a 360 degree perspective as would be necessary in an open space like the canteen area. The toilets were frequently used when it was necessary for a student to make a call during class hours.

Lavanya: *Sometimes, when it's urgent... Ya... when I needed to call my mom [I go to the toilet]. I use it inside the cubicle... standing outside the cubicle is just stupid. People can still walk by.*

Q: *Would you say there's are cell phone 'zones' on campus?*

Chetna: *Yeah, the toilets.*

Q: *Inside or outside the cubicles?*

Chetna: *(laughs) Both.*

The other locations that usually were mentioned tended to be secluded areas of campus that were rarely frequented by either the faculty or the management. The means by which the students 'took over' these spaces, as a place to use their cell phone and, as an extension, a means by which to enjoy some privacy in campus, away from the extremely public and visible 'canteen area', could be termed as a 'Colonization of spaces' on campus in the course of domesticating the cell phone.

Corollary: As a corollary, there were also spaces on campus that were avoided by students at all costs. These included the administrative building, where the principal and senior administrative staff had their offices, and the two 'OAT's (Open-air auditoriums) from where students would be highly visible to many of the staff rooms and the Student Dean's office as well.

Overwhelming preference of the SMS function.

From both the interviews and the diaries, it is obvious that students overwhelmingly communicate through SMS while on campus, and indeed is their primary use of the cell phone.

It is possible to surmise from the data that the successful domestication of the cell phone on campus is *contingent* on the SMS function. SMS offers several advantages as a means of communication: It is highly discreet, if one masters how to message with one-hand and multi-task, as has been previously discussed. It is inexpensive when compared to a call on most pre-paid SIM cards, which are what students generally opt for. And SMS, as has been observed before, is simply a technologically updated version of passing notes in class (Thurlow, 2003). Only now, the notes are not limited to those within the class.

Q: *So you prefer to use SMS while in college?*

Smirthi: *Yes, but that's just with respect to class. I mean, when I'm outside I prefer calling. In class you can't possibly make a call with the teacher right there [...] SMS is fast... communicating in monosyllables is the best. (laughs)*

Cell phones as a means of escape

Geser has formulated the ability of the cell phone to symbolically extrapolate us from our immediate environment as 'The Emancipation from Social Settings'. (2005, p. 9) The students at SMC tend to use their cell phones as a form of emancipation as well, only not because they feel isolated, self-conscious or threatened, but because they feel bored.

By using their cell phones, students take a serious risk of getting caught and having their phones confiscated. Nevertheless, all the students admit that their communication/activities on the phone are not so important and urgent that they cannot wait till the approved times/places. When asked why they then use their cell phones in their classrooms, often even while the teacher is in the classroom, the participants responded, "Because I'm bored."

Q: *What kind of messages do you send?*

Nandita: *Some are important, some just for time-pass.*

Q: *Why do you send 'time-pass' messages?*

Nandita: *Because I'm bored yaar... I get bored like once an hour. When there's lots to write [in class], and you just lose it... you want to just sit and message someone to keep you company. [...] Sometimes when you desperately want to talk to friends in the middle of class because you're bored, you use your cell phone.*

Harini: *When I'm bored, I just text someone. [...] [The cell phone] helps in killing boredom in college, sometimes. (laughs) I mean most of the time.*

The responses varied significantly depending on the department that the student was in. Students from the Sociology department (Miya and Priya) tended to enjoy their classes more and feel less inclined to use their cell phones while in class, while students from the Science departments (Bhavna and Ananya) mentioned dissatisfaction with their academic life in college and used their cell phones more often during class hours.

Corollary: When questioned, all the participants stated that if they genuinely enjoy a class and/or respect their teacher, they are far less likely to use their cell phone, or even glance at it during that class.

Ananya: *[...]If there's a teacher I respect, I won't use my cell phone in her class.*

The Time Lag of Domestication

Domestication is a dynamic process that continues over a period of time. In this case study, incorporating the use of the cell phone into the student's daily routine begins with a period of observation and experimentation, to see 'what works' best for their own particular needs and routines.

Q: *Did you follow the rules at the beginning?*

Harini: *Yeah I actually did. I didn't bring my cell phone to college for quite some time. And then I realized... ok, no one's really saying anything, and my department's pretty cool about it, and everyone else was using it.*

Smirthi: *I brought my cell phone but switched it off initially... then I saw the ways in which other people were using theirs, so I also started using mine.*

Q: *What would you advise a new student [regarding cell phone use]?*

Priya: *Don't take any risks in the first sem, because they [the teachers] keep checking on you in the first year. In the second sem you can start gradually applying some tricks. (laughs)*

Harini: *I'd tell her... as soon as she joins, just take it easy. And then later, you know... you slowly learn what you can do, what you can get away with.*

None of the participants used their cell phones as often as they currently do from the very beginning of their college days. All participants spoke of a gradual process of trial-and-error, where they mostly assessed their teachers to see which teachers would turn a blind eye to the cell phone rules, and which would be sure to confiscate their phones if caught.

"The rules don't matter"- The only truly prohibitive deterrents:

At the end of the interview process, students had mentioned four *actual* deterrents to use of their cell phone, with the official rules being seen as nothing more than minor roadblocks. The first was very close proximity to a F/M (for example sitting in the front row of the classroom, being near the staff rooms/administrative offices). One implicit deterrent to using their cell phone inside the classroom would be what they personally feel about the class in progress.

The other two deterrents were *external factors* that originated outside campus grounds and class hours. One major deterrent was the cost of using the cell phone. The last deterrent

was peculiar to only two participants in the study (Chetna and Priya), as they lived in students' hostels in the city. They were not provided with plug points or electrical outlets in their rooms to charge their cell phones, and therefore limited their cell phone use to preserve their phone's battery.

These deterrents imply that the official rules do not make as big a difference to the actual use of the cell phone in college as the management may hope for, since students have developed a variety of techniques to avoid detection. This was further established as participants spoke to the 'pointlessness' of the rules, as we shall see.

ATTITUDES- THE RITUAL OF PRETENCES

The participants' views on the rules themselves- their effects, their value and the justification behind it- spoke to a sense of complacency. Although none of the participants welcomed the rules or felt they were justified, they did not seem in any way actively upset with the rules. Neither had they ever confronted the faculty or the management with their personal views.

Q: *What would happen if, hypothetically, one day the college installed a signal-jamming device?*

Harini: *I don't know... I mean, I'd be cheesed off. But, whatever, I'd get used to it. Just another rule.*

Overall, the participants reiterated the theme of the rules being 'pointless', in one way or another.

Bhavna: *It's pointless to have rules because we're breaking them left right and center. Whether they're there or not doesn't matter to us, does it.*

Q: *Yeah but... it still makes you put up this appearance of not using.*

Bhavna: *Yeah but that's just being hypocritical in a way. I mean they know we're using our phones, we know we're using our phones. But we're pretending we're not using our phones and they're pretending they don't know we're using our phones. So what's the point?*

The 'pointless' rules nevertheless are never openly flaunted by the participants. The 'Impression Management' on campus appears to be an almost universal participation in the *ritual of pretences* that they have developed along with the F/M. Although no teachers or administrators were contacted for this research project, it would be highly unlikely to assume

that they are unaware of the student body's continued use of cell phones. What has developed instead is a don't-ask don't-tell policy by the F/M, which allows the student to use their cell phone as long as it's done covertly. Each teacher, depending on their own point of view regarding the situation, chooses either to ignore cell phone use, or to reprimand the student in question, or to confiscate the cell phone, either temporarily or permanently. Therefore the domestication process varies drastically depending on *which* teacher the student has to deal with, and the student then uses their cell phone accordingly, or does not use it at all.

Q: *But don't you think the teacher realizes-*

Priya: *Well yeah of course, she'll know, but she can't do anything no, without proof. Unless we're openly using it in front of her.*

As a whole, the student body is bound together by an unspoken code, a pretence of ignorance, which is about never 'telling on' your fellow student when you spot them using a cell phone.

Ananya: *I would [never tell], because that would be really hypocritical of me.*

Only one participant, Lavanya, recalled an incident where a student had reported her classmate to a teacher for cell phone use.

Lavanya: *But that was in the first semester, and you know... there were all those cliques and groups that hated each other. (laughs) Nothing like that happened after that.*

The Discrete Phone

The process of appropriation did not prove to be considerable relevant in this case study. None of the participants bought a cell phone, or made any cell-phone related purchase, keeping in mind the rules of college. All appropriation in this particular sample took place before the start of college. However, students did describe what they felt would be the ideal cell phone to use in discreet circumstances.

To sum up their responses, a phone that would best serve their particular needs would be slim, in a dark or dull colour, so as to avoid it catching the eye of a teacher. It would have a big screen, so that students who send messages while keeping their phones in their bags, or at a distance from their bodies, would be able to glance at the screen and easily read the

text. Finally, the keypad would be soft and make a minimum of noise. Tanusha suggested small and inconspicuous ear phones/headsets for the phone, so that students could easily make calls while on campus without the tell-tale sign of holding a phone to their ear.

SUMMARY OF THE RESULTS

Although I had initially started out with Silverstone et al.'s stages of domestication (2002), the results could not fit into those categories, and indeed revealed how the categories were not sufficiently relevant to the subject at hand. I therefore addressed the concept of domestication in slightly reworked categories that nevertheless were drawn from the basic premise of the original framework- 'Handling the cell phone' drew from the stage of Objectification, and referred to the physical positioning, manoeuvring and manipulation of the cell phone. 'The Daily Rhythm' focused on how the cell phones were incorporated into daily life temporally and spatially. Since cell phone use was not openly spoken about, the theme of Conversion was instead addressed through the Ritual of Pretences, which would sum up the underlying theme of Domestication in this case- usage of the cell phone was fine as long as the *pretence* was maintained on both sides, as an implicit agreement- the students would not draw obvious attention to their use, allowing the teachers to turn a blind eye to their activities. And finally, I tackled Appropriation slightly backwards- *if* students were to purchase a device specifically for this environment, what kind of device would they like it to be?

The central, most important factor that influenced the domestication process were the rules and regulations imposed by the college limiting the use of cell phones. But the rules are easily subverted, and use is more *consistently* limited by other influences that are both implicit to the college experience- such as respect for the teacher, and personal involvement in a class or contrary boredom- and factors external and unrelated to college, such as the cost of using a cell phone, and practicalities such as charging its battery.

Hide, Disguise, Distract: The Ritual of pretences. The underlying aim to the domestication process was to use the cell phone *without* revealing to any authority figure that the phone was being used. So every move while using the cell phone was to hide the phone or oneself, disguise the phone or one's behaviour, or distract the authority figure, or wait till they were distracted. However, these actions are not truly successful, as the lax attitude that many of the faculty seemed to have regarding cell phones (which were mentioned frequently by the

participants) imply that while the faculty is very much *aware* of the subversive use going on, they pretend not to notice it, possibly because they do not mind it enough to confront the student and go through the trouble of confiscating the phone.

Counter-culture usually refers to anti-establishment political movements within a society (see for instance Roszak, 1969) and this is of course not overtly political or in any way large-scale. Nevertheless, it does show great relevance to Chavan's 'compensatory model' of counter culture, wherein the individualist needs and wants of the consumer are met, running counter to the collective norms and expectations (of the college), but in a very covert and subtle way, so as not to directly challenge the status quo.

7. CONCLUSION

I undertook this project initially because I had lived in an academic and social environment for three years which was radically different from the environments I experienced in the U.K. I realised that I was in a unique position to delve into my 'home' environment and narrate its particular social and technical peculiarities from an academic, techno-anthropological point of view.

RESEARCH GAPS:

Researching an area of such familiarity to oneself is of course fraught with certain complications. I personally hold strong opinions regarding the subject (that female college students must enjoy certain personal and social freedoms and that censoring use of the cell phone only adds to an oppressive and stifling environment on campus) which crept into the research process. Whether I articulated them or not, the fact that I was interviewing people I knew personally meant that the participants most likely were already aware of my views, and therefore may have altered their tone or opinions to fall more into line with mine.

My personal experience as a student in this particular campus may also have led me to make generalizations and assumptions that may not have been made by a researcher more personally detached from this setting. My research sample was inevitably biased, due to the recruitment method of snowball sampling, and was limited to students from one particular socio-cultural group in college. All participants communicated primarily in English within college, which indicates a more privileged upbringing and private school education. All participants also ran in the same social circles within college and came from socially liberal households, which did not repress or control their cell phone use at home. While this sample proved to be homogenous to an extent, thus allowing for a sample more representative of a certain socio-economic strata within campus, it has limited insights to offer on how students from other socio-economic groups, or students from very conservative households, might domesticate their cell phone in college.

I therefore propose that while my research project does project some interesting observations that may provide a starting point for follow-up questions and research, it is significantly limited both by the personal approach of the researcher and the narrow range of

the participant sample. Any assessment of this project as a whole must take these limitations into consideration.

REVISITING THE CONCEPTUAL FRAMEWORK:

Domestication

Domestication can be problematic. Much akin to the breaking in of a wild animal, some devices just cannot be tamed to fit into one's personal life context (Berker et al., 2005, p. 3). The process is also not linear, orderly or easily observable- it can be chaotic and unpredictable. The results of the study did not fit into the categorise posited by Silverstone and his colleagues (1992), and better fitted into themes that originated from the situation of the campus and the nuances of mobile telephony. This case study revealed the interesting forms domestication undertakes when it encounters explicit hurdles, as opposed to the implicit limitations imposed by familial norms, values and expectations. Students went over and around the rules, and at times charged right through them, revealing that often implicit feelings of respect and boredom proved more consistent predictors of use than the official deterrents. The process also revealed the importance that students placed on the cell phone as a device as they risked a confrontation with their teachers and confiscation of the device itself every time they used it.

The cell phone as a device

The cell phone's impact on social life has been enumerated at length, from its impact on communication at different levels of interaction (Geser, 2005), to the formation of 'virtual walled communities' (Ling, 2004), to the phenomenon of 'hyper-coordination' among teenagers (Ling & Yttri, 2002). One aspect that however has not been focused on is its potential as a highly subtle and inconspicuous mechanism for communication. It is possible to embed the cell phone so deeply into everyday life that it almost "disappears as a technology" (Anderson, 2002), not only in everyday language, but in this case quite literally as well. The cell phone's physical design- it's small size, light weight, contoured keypad- allow for it to be shifted and manipulated easily to keep it out of sight, and the keypad allows for it to be used without even looking at it. The LCD screen facilitates use even in the dark of one's purse or bag. Most importantly, the SMS function allows for communication to be silent, asynchronous, quick and unobtrusive, as has been touched upon by Geser (2005).

Can this potential of the cell phone translate into marketability? The participants in this study all had ideas towards making the cell phone more 'campus friendly', in their particular case. Their suggested designs could definitely enhance the cell phone's ability to be domesticated in a restricted environment. However, in terms of marketability, aside from the questions of whether the consumer market is large enough or possesses sufficient capital to justify a new line of 'campus' phones, there is also the question of ethics. Although I have clearly remained sympathetic towards the students in this case study, the bottom line is that they are regularly breaking the rules of their institution. The unobtrusiveness of the cell phone has proven to be problematic, particularly in the case of camera phones (Srivastava, 2005, p. 117). The questions of *should* this behaviour and domestication process be encouraged and exploited commercially must therefore be addressed.

The cell phone as a cultural commodity.

The discreet domestication – the ritual of pretences- is not only seen in cell phone use, but in how young Indian women conduct their lives. They may be unhappy or frustrated with the rules imposed on them, but their frustrations are rarely actively expressed. Instead they are accepted as a part of life, as part of an exchange for something else they're getting (Chetna: "SMC is okay... see, at least it's better than most"), and instead they work *around* the rules to achieve their desired objective. It is a tricky balancing act, indicative of the changing times these women in particular are facing. They are undergoing college education, something less than 6% of Indian women enjoy. They have achieved legal adulthood, and yet are not provided with the freedoms and responsibilities that higher education and maturity might naturally indicate. Their means of resolving this dichotomy is to satisfy the authority figures in their lives by not openly rebelling, but by taking the effort and time to find loopholes and develop techniques that will allow them to express themselves in alternative ways.

The 'compensatory model' posited by Chavan (2007) – speaks of how cell phones- a primarily individual device- give rise to conflicts and issues of negotiated use within a collective culture such as that of India. The method of domestication on campus – the way cell phones are both used unofficially, and *not* used officially – can speak to how young Indian women both conform to their culture while challenging it implicitly.

Looking to the future

Not only has literature on use of ICTs in formally regulated environments been relatively scarce, but so has research work on young Indians and their use of ICTs. Research into this particular demographic would make an excellent starting point for exploring an entire generation poised between conservatism and modernity, negotiating their way out of the past – marked by poverty and stagnation- into the future of mobility and wealth, promised by India's fast growing economy and the influx of western liberal values. The cell phone- a tool that allows for anytime/anywhere communication, which is still yet affordable to the majority of the middle class- plays a crucial role in both this material and symbolic transformation of India's youth. This research project is merely a small contribution to charting and studying this ongoing transformation, a transformation which this researcher happens to be personally swept up in as well.

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