

Gender, Technologies and Dhobi Ghats in Delhi

*Dissertation submitted to Jawaharlal Nehru University
in partial fulfillment of the requirements for the award of the degree of*

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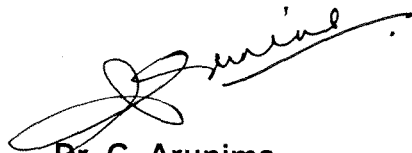
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Laundry- the cleaning and drying and pressing of clothing and linen- occupies a cultural and social aesthetic patterned by detail and disgust. Practical, utilitarian and ritualistic, the work surrounding laundry serves the binary polarities of secrecy and visibility...

...laundry is first of all a physical labour ... Yet, for all laundry's inevitable presence in daily life, both literal and figurative, it has been marginalized, sidelined, and disguised... Perhaps because laundry's task is to ease dirt, sweat and body effluents, its shameful necessity has led to its being relegated to conduit rather than coda...

~ Aritha van Herk ¹ ~

¹ Aritha van Herk, "Invisibled Laundry," *Signs* 27, no. 3 (2002): 893.

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List of Abbreviations

ASI	Anthropological Survey of India
DDA	Delhi Development Authority
DGSY	Dhobi Ghat Sudhar Yojna (Dhobi Ghat Improvement Scheme)
DJB	Delhi Jal Board
FTS	Feminist Technology Studies
GAD	Gender And Development
GAT	Gender And Technology
GOI	Government of India
GPS	Geographic Positioning System
JBIC	Japan Bank for International Cooperation
LPG	Liquefied Petroleum Gas
MCD	Municipal Corporation of Delhi
MOEF	Ministry of Environment and Forests
MOU	Memorandum of Understanding
NDMC	New Delhi Municipal Corporation
NRCD	National River Conservation Directorate
OBC	Other Backward Caste
PMC	Project Management Consultants (for DGSY)
SCOT	Social Construction of Technology
STS	Science and Technology Studies
USA	United States of America
WAD	Women And Development
WAT	Women And Technology
WID	Women In Development
WIT	Women In Technology
YAP-II	Yamuna Action Plan (Phase II)

Glossary

<i>Hindustani words/ phrases</i>	<i>Meaning</i>
<i>Achche ghar</i>	Good home (refers to households with relatively high economic and social status)
<i>Akhara</i>	Gym
<i>Angan</i>	Courtyard
<i>Baniyan</i>	Undershirt
<i>Basti</i>	Slum
<i>Beta</i>	Child, son
<i>Beti</i>	Child, daughter
<i>Bhari</i>	Heavy
<i>Bhatti</i>	Furnace/ boiler (consists of a large utensil in which clothes are boiled) over a fire
<i>Bhigona</i>	Soak (clothes)
<i>Biradari</i>	Community
<i>Dhandha</i>	Business
<i>Dhobi</i>	Washerpeople
<i>Dhulai</i>	Method of washing clothes
<i>Dhona</i>	To wash
<i>Dhrav</i>	Liquid
<i>Gandagi</i>	Dirt, filth
<i>Ghat</i>	Built environment or structure near a riverbed for human activities
<i>Halka</i>	Light (weight)
<i>Hauz</i>	Washing stone constructed with cement. Part of the built environment of Dhobi ghats in Delhi
<i>Haisiyat</i>	Economic and social capacity

<i>Hydro</i>	Machine for wringing clothes
<i>Izzat</i>	Respect in community
<i>Jati</i>	Caste
<i>Jajmani</i>	Caste system
<i>Kaam</i>	Work
<i>Kala sabun</i>	Black soap
<i>Kapde</i>	Clothes
<i>Kutchra rang</i>	Raw colour, refers to weak colour that runs from clothes when dipped in water
<i>Khatiya</i>	Bed made with jute and wood
<i>Kothi</i>	Large houses (bungalow)
<i>Mael</i>	Grime
<i>Mehnat</i>	Hard work
<i>Mota kaam</i>	Fat work, but refers to big, or substantial, amounts of work and income.
<i>Nazar rakhna</i>	To keep a watch
<i>Nichodana</i>	To wring (clothes)
<i>Samaj</i>	Society
<i>Samiti</i>	Committee
<i>Sauhilyat</i>	Convenience, comfort
<i>Sukhana</i>	To dry
<i>Usool</i>	Norm
<i>Vardaan</i>	Gift, blessing, fulfillment
<i>Vikas</i>	Development, progress
<i>Vyavasaya</i>	Occupation

Introduction

Laundry work is the traditional and hereditary occupation of Dhobi communities. In Delhi city, Dhobis largely work in built environments called Dhobi ghats. Technological, social and cultural contexts of Dhobi ghats and ways of life and work of Dhobis in Delhi are rapidly transforming in diverse ways. Drawing upon fieldwork and some debates on gender, technology, material culture and development, this dissertation explores the dynamic interface between Dhobis, gender and technology in Dhobi Ghats in Delhi.

Dhobi ghats form a unique site to study the interface between technology and local communities that have their own “traditional” occupation, ways of life and work. Laundry work worldwide is a part of women’s basket of chores that are undertaken as part of housework at home. Dhobi women, men and children are distinctively involved in laundry work.

Dhobis and Dhobi ghats in Delhi are in transition. Built environments of Dhobi ghats, laundry technologies, profile of workers and clients are transforming with speed. Dhobis are curiously displaced by laundry technologies created for domestic (home) use that takes away the family wash that Dhobis launder while they integrate new laundry technologies in the Dhobi ghats. Small scale Dhobis who previously laundered the leased out family wash are facing competition from domestic washing machines adopted by households. Clientele of Dhobis has shifted from households to commercial establishments such as hotels, hospitals and tent houses. The nature of clients has changed from patron cum clients that were a stable if minute source of income to the market where clients enter into business transactions with Dhobis.

Dhobi ghats have become increasingly competitive areas where Dhobi families compete for work and profits while sharing the built environment and resources of the Dhobi ghats for laundering clothes such as water, and laundry technologies that are cemented into the built environment of Dhobi ghats. Dhobis who identify cleaning and ironing clothes as their traditional and hereditary

occupation narrate that the methods and technologies for laundering clothes over time constantly evolve. “Traditional” laundry technologies are therefore hard to locate. Technological changes in laundry work undertaken by Dhobis prior to the creation of the built environments of Dhobi ghats were in detergents and materials used for laundry. Construction of Dhobi ghats stabilized certain laundry technologies for manually washing clothes. Dhobi communities are increasingly adopting new laundry technologies such as hydro machines (wringer/ dewatering machines) and washers (large washing machines) that are owned and operated by individual Dhobi families. The Dhobi Ghat Sudhar Yojna (henceforth DGSY) is a unique scheme of the Government of India that brings mainstream development to Dhobi ghats and introduces mechanization of laundry tasks that bring about changes in the ways of life and work in the Dhobi ghats.

The overarching objective of this exploratory research project is to explore the dynamics of gender, technology and labour inside the built environments of Dhobi ghats in Delhi. Dhobis and Dhobi ghats in Delhi with their ways of life and work including gender based division of laundry work and laundry technologies in Delhi are a relatively new terrain for social research.

Overview of the Dissertation

Introduction begins with the research concern and presents an overview of the document. It lays out the broad themes of gender and technology in the context of laundry work and development that form a grid for exploring technology gender interface in the chapters that follow. The chapter elaborates the methodology including conceptualization of the research area, the research questions, research objectives and approach.

Chapter One provides an overview of laundry work across time and space and paints a backdrop in which the Dhobis occupy a tiny niche. The literature on laundry that is closely linked with laundry technologies, age, race, and gender of the laundry workers is organized according to the sites where laundry work is performed and the people who undertake laundry work. Laundry work is largely

perceived as women's work within the home. Literature on commercial laundries ropes in a discussion on men and masculinities in non traditional occupations and highlights how men in laundry work create and perform their masculinity. In between the home and the commercial laundries are small scale workers who launder for a subsistence income for their local community.

Chapter Two introduces the Dhobis, communities of small scale laundry workers, both men and women whose "traditional" and hereditary occupation is cleaning and ironing clothes. The chapter provides a brief history of Dhobis and discusses Dhobi communities in Delhi. It shows transformations in laundry work (technologies and clients) for Dhobis in Delhi and profiles heterogeneous Dhobi communities community that is internally stratified along the lines of gender, age, economic and social status, number of years of settlement in Delhi, native place, place of residence and occupation. Dhobi ghats, the built environments where Dhobis live and work are also introduced in this chapter.

Chapter Three attempts to trace the reconfiguration of gender based division of laundry work in the Dhobi ghats with the entry of new laundry technologies. Drawing upon fieldwork in three Dhobi ghats in Delhi, the chapter discusses gender based division of space and laundry tasks in Dhobi ghats and the technologies that modify the small scale sociotechnical ensemble of these ghats. This chapter draws upon technological determinism, an approach to technology and includes the challenges that hired workers and washerwomen provide to the existing configuration of gender based division of work in Dhobi ghats.

Chapter Four draws upon theoretical approaches to technology ('constructivist approaches' and 'technology in use perspective') and attempts to understand the ways in which the 'hauz' (washing stone that is part of the built environment of Dhobi ghats) is a "gendered technology". The chapter documents diverse meanings that are attributed to the hauz by different groups of Dhobis including appropriate technology, an ornament, 'designer technology' and an obsolete technology.

Chapter Five focuses on the Dhobi Ghat Sudhar Yojna (DGSY) a scheme that brings development to and introduces a large scale sociotechnical ensemble

where laundry work is mechanized. The policy charts out the future of Dhobi ghats in Delhi and is interpreted as the future map of Dhobi ghats. The meanings of obsolete technology and appropriate technology are explored amidst the contents of the DGSY that is unpacked through ‘development thought’. Insights from all the previously used approaches to technology (‘technological determinism’, ‘constructivist’ and ‘technology in use’) are utilized for understanding the future blueprint of the sociotechnical ensemble of Dhobi ghats in Delhi.

Overarching Themes

In a nutshell, the broad themes that anchor this research project are gender and technology. Dhobis, Dhobi ghats and laundry work contextualize this exploratory research. The discussion on the core themes of gender and technology in laundry work for this dissertation begins with a definition of technology after which the broad themes and theories are outlined. The discussion concludes with the definition of gender.

This dissertation works with a broad definition of technology and perceives humans and the technologies that they make and use as intimately linked. Trevor Pinch and Richard Swedberg use the concept of “sociotechnical ensemble” associated with Weibe Bijker introduced in 1995 to grasp material objects and people as mutually constituting one another.¹ Humans who make and use the technologies and different technological objects in a technological system that work together are seen as closely linked using the concept of sociotechnical ensemble. Eric Schalzberg writes that terms such as “useful arts”, “manufacturing”, “industry”, “invention”, “applied science”, and “machine” stood for what came to be known as technology after 1930s.² Leo Marx mentions that the semantic void created by “changes in society and culture marked by the

¹ Trevor Pinch and Richard Swedberg, eds., *Living in a Material World, Economic Sociology Meets Science and Technology Studies* (Cambridge and London: MIT Press, 2008), 3.

² Eric Schalzberg, “Technik Comes to America, Changing Meanings of *Technology* before 1930,” *Technology and Culture*, 47 no. 3 (2006): 486.

emergence of *technology*” was filled by the new concept of technology.³ Assembling a plethora of definitions, Val Dusek expands the idea of technology beyond “tools” and “machines” associated with modern science. He includes in this idea of technology, “stone tools of the earliest humans” on one the hand and incorporates the notions of technology as rules, as ways of organization of things and as “manipulation” of human behaviour, on the other hand. According to Dusek technology is “the application of scientific or other knowledge to practical tasks by ordered systems that involve people and organizations, productive skills, living things and machines.”⁴

Laundry is a mundane part of our everyday lives where gender and technology intersect. Broadly three perspectives regarding technology, insights from their application in existing literature on laundry work and their links with development thought are outlined in this section, these are central in this dissertation and form a basis for approaching laundry workers and laundry work in Dhobi ghats in Delhi.

The first perspective on technology is ‘technological determinism’, the idea that technology impacts society in a one way relationship while remaining isolated from society itself. Perspectives that view technology as a “neutral” force that changes society take this stand. For example Krishna B. Reddy and Aruna C. Kumari show that with the coming of modern science and technology manual labour performed by Washer people is eased as are the tasks of each of the caste groups in India. Reddy and Kumari view technology as an inherently positive force.⁵ Laundry work has been performed by women as a part of their household chores across time and space. Much literature on laundry work highlights changes in laundry work within the home with coming of technologies such as indoor plumbing, detergents, wringing machines and washing machines. From a

³ Leo Marx, “Technology: The Emergence of a Hazardous Concept,” in *Technology and the Rest of Culture*, ed. Arien Mack (Columbus: The Ohio State University Press, 1997), 25.

⁴ Val Dusek, *Philosophy of Technology, An Introduction* (USA, UK and Australia: Blackwell Publishing, 2006), 26-37.

⁵ Krishna B. Reddy and Aruna C. Kumari, “Impact of Technology on Jajmani System, Some Observations,” in *Science, Technology and Social Development* eds. Venkatramalah, S.R. and Sreenivasan, K (New Delhi: Discovery Publishing House, 1992), 81-92.

technological determinist frame, laundry technologies are perceived as always easing the labour of laundry workers and bringing exclusively positive changes in society. The idea of ‘technological determinism’ is often reflected in the Women in Technology (henceforth WIT) approach. A dominant approach in the pursuit of mainstream development that takes continuous improvements in material standards of living as its goal is the Women In Technology (WIT) approach. WIT recognizes the power of science and technology in creating effects on society and assumes these impacts to be positive. WIT highlights recognizing the contribution of women to, and including women in, the benefits of development by improving their access to technology.⁶ For low income countries, the debates on gender and technology are situated against the backdrop of development and therefore ‘development thought’ as a theme is subtly present behind many of the discussions in this dissertation. The last chapter on policy with its large scale changes in laundry technologies casts the spotlight on development and Dhobi ghats. ‘Development thought’ and the approaches to ‘gender in development thought’ also enable unpacking the policy surrounding Dhobi ghats.

A second way of approaching technology is through insights from the ‘constructivist approaches to technology’. ‘Constructivist approaches’ in contrast to ‘technological determinism’ emphasize the making, development and deployment of technologies. Social factors are in the limelight and they eclipse the technical aspects of material things in having real effects on people’s lives in this perspective. Christina Hardyment explores why laundry technologies took certain innovation trajectories and not others when she asks why domestic laundry technologies filled the “vacuum” created by the exit of “domestic servants” and not laundries outside the home.⁷ A dominant assumption of ‘constructivist approaches’ is that scripts are built into or encoded in material technologies by their designers who crystallize the ways in which the technology will be adopted and used. Feminist constructivist analysis focuses on making visible, the gendered

⁶ Judy Wajcman, “Reflections on Gender and Technology Studies: In What State is the Art?” *Social Studies of Science* 30, no. 3 (2000): 448.

⁷ Christina Hardyment, *From Mangle to Microwave, The Mechanization of Household Work* (Cambridge, Oxford and Massachusetts: Polity Press, 1988), 55-74.

scripts that often exclude women from technology. Ideas of interpretive flexibility and closure highlight how technologies that can be interpreted and adopted in diverse ways, come to be associated with fixed patterns of use. As the scripts are in focus and meanings of technologies frozen into the scripts, theorists who follow this perspective explore the design, invention and innovation of technologies and endeavour to discover the scripts that are encased within material technologies. M. Carme Alemany Gomez builds upon constructivist analysis of technology and conducts field work in a washing machine manufacturing factory. She finds the “scripts” that are built into washing machines by designers in Brazil. She shows that the male designers assume that the users of washing machines are women who have nimble fingers, few technical skills, and are clumsy.⁸ Constructivist approaches to technology overlap with the Women And Technology (henceforth WAT) approach to some extent. The Women and Technology (WAT) approach problematizes technology’s inherent and positive qualities and highlights its side effects from its premise in a strand of ‘development thought’ called ‘sustainable development thought’ that in turn is both an extension of (paradoxically) and a critique of mainstream development. ‘Constructivist approaches’ also critique the ‘technological determinism’ inherent in the WIT approach. ‘Constructivist approaches’ ascribe agency to the social and cultural aspects that get crystallized in material technologies and can in turn can be variously used and also critiqued from the perch of constructivists.⁹

A third way of approaching technology is ‘technology in use perspective’. In contrast to the idea of closure that ‘constructivist approaches’ build upon, the ‘technology in use perspective’ highlights that meanings of technologies are constantly created in its “use” and can be neither “stabilized” nor frozen.¹⁰ This

⁸ M. Carme Alemany Gomez, “Bodies, Machines and Male Power,” in *Technology and Society, Building our Sociotechnical Future*, eds. Deborah G. Johnson and Jameson M. Wetmore (Cambridge, Massachusetts, London, England: MIT Press, 2009), 389-405.

⁹ Keith Grint and Steve Woolgar, “On Some Failures of Nerve in Constructivist and Feminist Analyses of Technology,” *Science, Technology and Human Values* 20, no. 3 Special Issue: Feminist and Constructivist Perspectives on New Technology (1995): 288.

¹⁰ Wanda J. Orlikowski, “Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations,” *Organization Science* 11, no. 4 (2000): 411-412. Bryan Pfaffenberger, “Social Anthropology of Technology,” *Annual Review of Anthropology* 21 (1992): 493-509.

perspective emphasizes the ways in which different technologies are adopted by consumers and the ways in which they are integrated in the user's ways of life. 'Technology in use perspective' enables us to explore the gendered ways in which technologies are incorporated and used at home, in the workplace and in communities. Adoption and use of laundry technologies is documented by literature on laundry work within the home that women undertake. Elisabeth Shove and Inge Roke highlight the ways in which different technologies including laundry technologies are integrated by consumers and their environmental impacts.¹¹ Arwen Palmer Mohun's work also contributes to understanding the co-construction of a technology in use and gender of laundry workers. She shows that as men enter the domain of laundry work for commercial purposes, they grapple with the associations of laundry work as women's work.¹² Literature on men who enter occupations dominated by women shows how men negotiate their masculinity and their job by altering their own self-perception by viewing their jobs differently. Masculinities are closely tied up with sites where they are created, asserted, challenged and reinforced such as in the workplace. Many scholars have highlighted the ways in which masculinity is linked with certain behaviours, things and ways of work and life by different men and women. Variations amongst the heterogeneous groups of men highlight broadly two dimensions of masculinity- manual work and providing for one's family that are also documented in literature.¹³ While hierarchies of social and economic status are reflected in the hierarchy of masculinities, use and manipulation of technology and material objects as well as physical space also play a role in the construction of gender. Nina E. Lerman, Arwen Palmer Mohun and Ruth Oldenziel emphasize the need to focus on men and masculinities for understanding gender and

¹¹ Inge Ropke, "New Technology in Everyday Life – Social Processes and Environmental Impact," *Ecological Economics* 38 (2001): 403-442.

Elisabeth Shove, "Converging Conventions of Comfort, Cleanliness and Convenience," *Journal of Consumer Policy* 26 (2003): 395-418.

¹² Arwen Palmer Mohun, "Laundrymen Construct Their World: Gender and The Transformation of a Domestic Task to an Industrial Process," *Technology and Culture* 38, no. 1 Special Issue: Gender Analysis and The History of Technology (1997): 97-120.

¹³ Ben Lupton, "Maintaining Masculinity: Men Who Do 'Women's Work'," *British Journal of Management* 11, Special Issue (2000): 33-48.

technology¹⁴ Social norms that govern women and men's access to, and use of, technology are revealed when household technologies that ease the burden of housework for women are purchased after technologies for entertainment by families. This perspective is also congruent with the WAT approach that reveals that technology often marginalizes and deskills women and that mechanization (associated with 'technological determinism') is associated with unemployment. WAT has spurred studies on 'appropriate technology' for largely rural women in developing countries that focus on the innovation of environmentally friendly, domestic and small scale production technologies.

'Constructivist approaches' and 'technology in use perspective' often focus on the effects and side effects of technologies both intended and unintended. Criticism of the side effects and unintended drawbacks of the interventions proposed by WAT such as solar energy and smokeless stoves for women find a place in 'post development thought'. 'Post development thought' then aligns with constructivist approaches and technology in use perspectives to technologies. It provides a critique of both 'mainstream development thought' and its part critic and extension, 'sustainable development thought'. But post developmentalists critique development from their perch within the realm of ideas and their suggestions usually fall short of tangible interventions. Critique of solar energy and smokeless stoves for rural women fits within this framework that emphasizes local resources, cultural diversity and tends to celebrate subsistence as affluence and romanticizes the past.

After discussing the perspectives on technology, laundry work and development, this dissertation outlines its definition of gender before introducing the methodology employed here. Catherina Landstorm introduces her heteronormative grid in the theoretical web of 'Feminist Technology Studies'(henceforth FTS) and exposes how "heteronormativity is reproduced in ethnographic case studies" as "gender identities of technology users and designers

¹⁴ Nina E. Lerman, Arwen Palmer Mohun and Ruth Oldenziel, "The Shoulders We Stand On and The View from Here: Historiography and Directions for Research," *Technology and Culture* 38, no. 1 Special Issue Gender Analysis and The History of Technology (1997):25-30.

are treated as stable traits that precede the creation of malleable technology.”¹⁵ Judy Wajcman brings out the pulse of earlier work on women and technology which theorized gender as fixed unitary phenomenon existing prior to technology which gets “incorporated in technology”. She draws upon Judith Butler to say that gender is constructed in interaction and men’s and women’s interests are not pre-given but made. However Wajcman like other FTS theorists does not question the social constructs of masculinity and femininity that get neatly constructed upon biological bodies whose sex is categorized as either male or female as Ann Oakley proposed in 1972.¹⁶ Ruth Schwartz Cowan drawing upon French feminists shares that “apparent differences between the sexes have been constructed by society” and that “powerful sections of society construct ideas of difference in order to further their own interests”. She elaborates that French feminists deny that there are inherent, or biological, or even fundamental differences between the sexes.¹⁷ However empirical studies on women and technology continue to assume an ‘essential’ difference between men and women. In congruence with previous empirical studies, this dissertation looks for gender that is actually fluid, overlapping and dynamic as two mutually exclusive constructs of masculinity that is concentric with male bodies and femininity that is concentric with female bodies. This definition of gender provides a practical tool for this exploratory research while it weakens the rigor of the research in the theoretical realm.

Conceptualization of Research Area (problem)

This study views material technologies, the ways in which they are used and the people who use them as closely linked, using the concept of ‘sociotechnical ensemble’ from science and technology studies. The research project explores the changes in laundry work undertaken in the built environment of Dhobi ghats in

¹⁵ Catherina Landstorm, “Queering Feminist Technology Studies,” *Feminist Theory* 8, no. 1 (2007): 9-10.

¹⁶ Cynthia Cockburn, “The Material of Male Power,” in *Social Shaping of Technology, How the Refrigerator got its Hum*, eds. Donald MacKenzie and Judy Wajcman (Cambridge, Massachusetts and London: Open University Press, 1985), 128.

¹⁷ Ruth Schwartz Cowan, “Technology Is to Science as Female is to Male: Musings on the History and Character of our Discipline,” *Technology and Culture* 37, no. 3 (1996): 574.

Delhi. Drawing upon literature on laundry work and laundry workers worldwide, gender, age and class based division of work in Dhobi ghats in Delhi is profiled and the gendering of laundry work and of technologies is explored. In congruence with the technological determinist assumption and the idea that women and local communities in developing countries encounter technology either as users or brace the impacts of its effects, this dissertation traces the transformations in the patterns of work (performance of various laundry tasks) and ways of life with the arrival of new technologies. Drawing upon insights from ‘constructivist approaches to technology’ and ‘FTS’, ‘social anthropology of technology’ and ‘material culture perspectives’ in particular; this exploratory research attempts to capture the ways in which various laundry technologies are incorporated, used and perceived by Dhobis. Transformations in the self perceptions of Dhobis regarding the idea of Dhobi and their work for understanding the transformations that the communities are currently undergoing are also captured. Documents of the Dhobi Ghat Sudhar Yojna are analyzed for understanding the policy framework surrounding Dhobi ghats in Delhi. The analysis attempts to unpack the scheme by using conceptual tools from ‘development thought’ and explores the possible implications of its prospective interventions by using insights from literature and from interviews of Dhobis. Research questions that guide this exploration of the interface of gender and technology in Dhobi ghats in Delhi and the research objectives that flow from the questions are:

Research Questions

- Who performs which laundry task in the Dhobi ghats?
- In what ways have new laundry technologies reconfigured gender based division of laundry work?
- In what ways do different Dhobis perceive and use the various laundry technologies and the built environment of the Dhobi ghats?

- What are the current and anticipated (future) transformations in laundry work and laundry technologies?
- What policy frameworks and development initiatives surround the Dhobi ghats in Delhi?

Research Objectives

- To explore changes in and the perceptions of Dhobis regarding gender based division of laundry work in Dhobi ghats in Delhi.
- To explore the use of, changes in and the perceptions of Dhobis regarding laundry technologies that are part of the built environment of Dhobi ghats.
- To understand the Dhobi Ghat Sudhar Yojna with/through frameworks from development thought and explore the current and prospective changes in sociotechnical ensembles in Dhobi ghats.

Approach Sample and Process

For addressing the research objectives, this project draws upon qualitative research methods and utilizes guidelines from ‘ethnography’ for undertaking fieldwork in Dhobi ghats in Delhi. It collects and analyzes material on Dhobi Ghat Sudhar Yojna that forms the blue print for development of Dhobi ghats. Literature on Dhobi communities in Delhi is sparse and this study refers to journal articles, book chapters, newspaper reports for supplementing the data collected from Dhobi ghats. My analysis is anchored in secondary literature around the themes of laundry work, approaches to technology and material culture and development. The literature and primary data are viewed through a gender lens for this dissertation.

Dhobi ghats and individual Dhobi families’ ways of life and work differ widely amongst and within the Dhobi ghats in Delhi. Ideas of ‘divergence’ and

'saturation' from literature on theoretical sampling for qualitative research steer the sample choice for this exploratory research. For this research, two Dhobi ghats that are unique and different from one another along the following criteria were identified: geographic location and history of the ghat, built environment of the Dhobi ghat, presence of hired workers, incorporation of laundry technologies and their use by women and men, scale of laundry work, clients of Dhobis, type of residential area, modes of transport used by Dhobis (as an indication of level of affluence) and links with government agencies.

Questionnaires were prepared for and administered to Dhobi families in the two selected Dhobi ghats. In No. 28 Dhobi Ghat in Minto Road area, questionnaires were filled for 30 out of a total of 50 Dhobi families during interviews. In Moti Bagh Dhobi Ghat questionnaires were filled during interviews with 10 out of the 12 resident Dhobi families. The site of 1 washing area of Majnu Ka Tila Dhobi Ghat in Civil Lines has been included for group interviews and discussions. Eight families in Delhi including previous, current and prospective clients of Dhobis and neighbours of Dhobis belonging to No. 28 Dhobi Ghat were interviewed. A few Dhobis from four additional Dhobi ghats (Lodi Road Dhobi Ghat, Copernicus Marg Dhobi ghat, Kalyanpuri Dhobi Ghat and Mahadev Road Dhobi ghat) were also interviewed and insights from these interviews are incorporated in the analysis.

This research was conducted through a series of unstructured interviews taken with individual Dhobis (across age, gender, employment status, residential status, scale and type of laundry work, ownership of laundry technologies), leaders of Dhobi organizations and groups (women, men, young adult women and Dhobi association). I also visited all the sites mentioned in the dissertation and analysed documents and reports of Dhobi Ghat Sudhar Yojna. Duration of fieldwork was one month (after selection of the two Dhobi ghats in focus). Data collection and analysis proceeded simultaneously and because of iteration, lines of inquiry changed during the period of research.

Chapter I: Laundry Sites and Laundry Workers Across Time and Space

Ubiquitous presence of laundry in human lives across time and space has contributed to a variety of arrangements for laundry work. This chapter presents a broad overview of literature on laundry work from across time and space and attempts to provide a backdrop for and position the Dhobi communities in, the literature on laundry work.

Laundry technologies and the age, gender and race of laundry workers are intimately linked with the ways and sites of laundry work. Arrangements of laundry work, the sites where laundry work is undertaken and the people who undertake it, form the frame that organizes this chapter. The first set of literature revolves around laundry work within the private, non commercial space of the home. Women take the lead and the burden of laundry work in the home. The second set of literature concerns laundry work undertaken by family members in a domain that is not quite home. Before entering the sphere of commercial laundries where men dominate, the theme of men and masculinities in the context of non traditional occupations is discussed. The third set of literature dwells upon laundry work undertaken by professional laundry workers in the commercial domain for a profit, outside the home. The fourth set of literature focuses on the leased out family wash. Here laundry workers and not family members wash clothes for commercial gains, the scale of laundry work is small and the site of laundry work is outside the home but not in the domain of large scale commercial laundries because the laundry technologies and scale of work are similar to laundry work undertaken at home.

1.1 *Laundry Work, Women's Sphere*

Laundry activities that are women's work within the sites of their homes form the first set of literature on laundry worldwide. Victoria Letto writes that "until the 1800s washing clothes was women's most demanding task, taking approximately a third of her work time."¹ She traces shifts in the sites of laundry work from natural sources of water, where women would interact while doing their laundry to the private domain of their homes where the coming of plumbing and electricity made laundry possible.

Christina Hardyment documents history of technological change in housework and mentions that the 'washboard' was the 'best known pre machine washing aid'. She traces the success of the washing machine to the electric motor developed by Fisher in America in 1908.² Victoria Letto quotes Giedion who writes that "of all housework laundering has received the most technical attention, with more patents than for any other process". The first patent in laundry was granted for wringing clothes in 1846. Thereafter, the first automatic washer arrived in 1851 "which eliminated the hand process of feeding clothes through a wringer" and the production of such washing machines that used expensive steam laundry equipment but not electricity doubled from 1870-1890.³ After electricity, gas and mass plumbing reached the households, the home laundry machinery industry grew alongside other household technologies in 1920s and the commercial laundries eventually "disappeared" according to Letto who writes in 1988. She mentions that commercial laundries "never competed for housewife's total laundry job since usually only men's shirts and flat pieces were sent out." Further, Letto writes that household experts like Christine Fredrick warned not to trust delicate items to commercial launderers due to possible unsanitary conditions and loss or damage to clothes. The finding is also corroborated by Ruth Schwartz Cowan and Joan S. Wang as the latter puts the spotlight on the kind of clothes that laundries wash-

¹ Victoria Letto, "Washing, Seems It's All We Do: Washing Technology and Women's Communication," in *Technology and Women's Voices Keeping in Touch*, ed. Cheris Kramarae (New York and London: Routledge and Kegan Paul, 1988), 162.

² Christina Hardyment, *From Mangle to Microwave, The Mechanization of Household Work* (Cambridge, Oxford and Massachusetts: Polity Press, 1988), 55-74.

³ *Ibid.*, 161 and 165.

largely “flats”, “linen” and “men’s clothes” from which we infer that a bulk of laundry work remains with the women within the home.⁴ Susan Levine in her review of Arwen Palmer Mohun’s *Steam Laundries: Gender, Technology and Work in The United States and Great Britain, 1880-1940*, traces a similar argument in Mohun’s work who approaches laundry work from the point of view of commercial laundries that compete for the family wash of their clients.⁵ According to Jean C. Robinson washing machines and other electrical appliances in China are associated by policymakers with women’s liberation and feed into the commitment for developing science and technology in China and thereby reinforce individual women to connect with domestic work in their home.⁶ Ruth Schwartz Cowan’s work shows how coming of domestic technologies has increased women’s burden of housework, keeping the time spent on housework intact and taking away helpers that women in America previously had under their supervision.⁷ According to Lerman, Mohun and Oldenziel Cowan, “reframed the household as a site of meaningful technological activity and women as technological actors whenever they interact with technology.”⁸

Joy Parr shows how income and age differences amongst women guide their choice of the specific combinations of domestic appliances they purchase, including washing machines of different types in Canada (1950s and 1960s). She shows the complex set of decisions that went behind choosing a laundry technology and that woman did not always prefer fully automatic washers to manual wringers because investing in an expensive washer meant not accessing a different domestic appliance. Also cultural ideas of cleanliness and what constitutes a proper wash as

⁴ Joan S. Wang, “Race, Gender and Laundry Work: The Roles of Chinese Laundrymen and American Women in the United States, 1850-1950,” *Journal of American Ethnic History* 24 no. 1 (2004): 58-99.

⁵ Susan Levine, “*Steam Laundries: Gender, Technology and Work in The United States and Great Britain, 1880-1940*,” *Journal of Interdisciplinary History* 32, no. 2 (2001): 334-335 [Review of the book by Arwen Palmer Mohun, *Steam Laundries: Gender, Technology and Work in The United States and Great Britain, 1880-1940* (Baltimore: John Hopkins University Press, 1999)]

⁶ Jean C. Robinson, “Of Women and Washing Machines: Employment, Housework, and the Reproduction of Motherhood in Socialist China,” *The China Quarterly* no. 101 (1985): 45-46.

⁷ Ruth Schwartz Cowan, “How We Get Our Daily Bread, or the History of Domestic Technology Revealed,” *OAH Magazine of History* 12, no. 2 Science and Technology (1998): 9-12.

⁸ Nina E. Lerman, Arwen Palmer Mohun and Ruth Oldenziel, “The Shoulders We Stand On and The View from Here: Historiography and Directions for Research,” *Technology and Culture* 38, no. 1 Special Issue Gender Analysis and The History of Technology (1997):19.

well as the opportunity cost of investing in alternative domestic appliance (not necessarily a laundry technology) govern the adoption of laundry technologies in Canada. Simultaneously Parr shows that the costs of manufacturing automatic washers in Canada exceeded the costs in America where they were mass produced. Parr looks at sales data and advertisements to trace the desiring female subject that the advertisers of laundry technologies sought to create. She emphasizes that advertisements were exclusively targeted for women till the 1950s when advertisements for automatic washers started including men as patriarchs who must assure that their brides were spared the drudgery of laundry.⁹

Laundry work and domestic workers are closely linked in societies where income inequalities reign as seen from Katherine French Fuller's and Elisabeth Silva's portrayal of middle class women, maids and washing machines in Chile and Brazil respectively.¹⁰ Fuller shows how the washing machine that symbolizes modernity is advertised for and purchased by middle class women. The machines are either used by the maids or the maids manually wash clothes, preserving the washing machines for their symbolic value. Studies also corroborate that that washing machines are the least preferred of domestic technologies by local communities since they exclusively ease women's domestic work.¹¹ According to Helen Meintjes, "good women" in Soweto are expected to hand wash their family's clothes and washing machines are associated with "lazy women".¹² Xiu Jie Wu's narrative of domestic appliances in rural China shows that domestic technologies that are used by a majority of family members are purchased before laundry technologies that are used exclusively by women. Wu highlights the importance of plumbing, electricity and the costs of washing machines while depicting its symbolic value for

⁹ Joy Parr, "What Makes Washday Less Blue? Gender Nation and Technology Choice in Postwar Canada," *Technology and Culture* 38, no. 1 Special Issue: Gender Analysis and The History of Technology (1997): 153-186.

¹⁰ Katherine French Fuller, "Gendered Invisibility, Respectable Cleanliness: The Impact of the Washing Machine on Daily Living in Post 1950 Santiago, Chile," *Journal of Women's History* 18, no. 4 (2006):79-100.

Elisabeth Silva, "Maids, Machines and Morality in Brazilian Homes," *Feminist Review* 94, no. 1 (2010): 20-37.

¹¹ Jean C. Robinson, "Of Women and Washing Machines: Employment, Housework, and the reproduction of Motherhood in Socialist China," *The China Quarterly* no. 101 (1985): 44-45.

¹² Helen Meintjes, "Washing Machines Make Lazy Women' Domestic Appliances and the Negotiation of Women's Propriety in Soweto," *Journal of Material Culture* 6 (2001): 325.

household members in terms of prestige.¹³ She also shows how the space where the washing machines and electric bulbs are placed alter power relations between members of a household and how electrical appliances bring about shifts in the sites where family members gather inside their houses. Drawing upon social construction of technology approaches, Wu shows that the needs of rural women are not addressed by designers of the domestic appliances who target the needs of men who purchase the domestic technologies. She mentions that companies of washing machines that seek to expand their customer base in rural China focus on marketing and advertising the washing machines for a rural folk while not considering the specificities of rural environments and households such as intermittent electricity supply and water supply for modifying the designs of washing machines for use in rural regions.

A second set of literature dwells upon arrangements for laundry work in which family members undertake laundry work outside their home. Rosen Ulla writes about apartment house laundry rooms that are “unique to Sweden”. She shows the historical movement of laundry work (1930s to 1970s) from being women’s household chore to a “population issue” and a “housing issue” in 1940s when the State funded (through grants and loans) collective laundry rooms as part of housing facilities and laundry entered discussions on designs of buildings and layout plans for housing. She notes that in Sweden domestic washing machines took the place of collective laundry rooms in 1970s. Ulla tracks the transformation in what she calls the laundry issue from hand washing at home (performed outdoors by women throughout the year) to collective laundry rooms that were made possible by women’s groups, Swedish state, industry and academia. According to Ulla, while laundry work shifted out of the home in Sweden, research, science and technology that were applied to understand laundry work came back to influence women’s attitudes regarding laundry work. A factor that contributed to collectivized laundry was the 20 kilograms plus capacity of available washing machines in Sweden. Ulla

13 Xiu Jie Wu, “Men Purchase Women Use: Coping with Domestic Electrical Appliances in Rural China,” *East Asian Science, Technology and Society: An International Journal*, no. 2 (2008): 211-234.

mentions that technological solutions to the “laundry issue” “preserved the established gender order surrounding laundry work” as men’s networks connected to academia and industry developed technologies while women’s networks implemented them and kept in touch with women launderers. Ulla in Sweden like Wu in rural China highlights that women launderers did not have direct access to planners and decision makers whose actions impacted their everyday laundry work. In Sweden “domestic advisors” connect the women and the “experts”.¹⁴ Sweden’s laundry rooms were partly owned by users while in laundrettes, the person doing the washing is a customer.¹⁵

The self serve laundromat emerges as an option for laundering. Letto mentions community laundries, where poor women set up water boilers and soap kettles which could be used for a penny by clients. Some of these laundries employed workers, bridging in some capacity, the community with the commercial laundries. The community laundries did not however survive in western countries as “communalization was seen as socialistic and un American.”¹⁶ The absence of “community run laundries” and collectivized housekeeping also figures in Jean C. Robinson’s article that discusses washing machines and women in China. She mentions that few of the existing service centers staffed by retired workers and the unemployed help families in high income neighborhoods with laundry and housework, and that the centres are more numerous in low income neighbourhoods where families are often unable to utilize their services due to financial constraints.¹⁷

Advent of the laundromats (self service laundry facilities) has once again driven the family wash outside the site of the home but it has retained workers from within the home in many western countries. The first self serve, coin wash in United Kingdom opened in 1949 but has declined in the past twenty five years.¹⁸ Benjamin von Stuckrad-Barre describes the social experience of visiting the

¹⁴ Rosen Ulla, “Rational Solution to the Laundry Issue: Policy and Research for Day to Day Life in the Welfare State,” *CESIS Electronic Working Paper Series*, paper no. 133 (2008):1-18.

¹⁵ *Ibid.*, 17.

¹⁶ Letto, *Technology and Women’s Voices*, 50-167.

¹⁷ Robinson, *The China Quarterly*: 46.

¹⁸ Yasmeen Khan, “The Rise and Fall of the Laundrette,” 13 August 2010, *BBC News Magazine*, <http://www.bbc.co.uk/news/magazine-10957093>

laundromat, a mundane routine activity where he dwells upon what kinds of laundry loads people bring and what they wear as he wonders about the lives of people who visit the laundromat.¹⁹ Literature on this feature of laundry work in contemporary western countries is limited. Two laundromats entered Delhi city in 2011 and their effects and long term impact remain to be explored.²⁰ This section summarized the literature on laundry work within the home and laundry work undertaken largely by women for their families needs in sites of laundry work made for this purpose. Next we move to literature on commercial laundries and the leased out wash where the laundry workers are men as well as women.

1.1 Men, Masculinities and Laundry Work

Laundry work is clubbed in women's basket of chores and the entry of men into this female spheres of work is what has given rise to the debates on masculinities, men and non traditional occupations. The stereotype of masculinity or the construct of male gender identity is constructed in opposition to the stereotype of femininity or female gender identity. Components of masculinity and femininity vary and are contextual. The stereotypes of masculinity include attributes of autonomy, assertion, physical strength and prowess, ability to provide for ones family, logic and rationality. Stereotype of femininity in contrast includes dainty, caring, meek, docile, emotional, irrational, dependent, relatively physically weak women. While femininity and masculinity are culturally constructed to be and are presented as essentialist, mutually exclusive and opposing constructs, and are often wrongly interpreted as "genetic things". Gradations and overlaps of masculinity and femininity are seen in the behavior of both women and men that provide evidence for the existence of a continuum where stereotypical masculinity and femininity occupy the two poles. Drawing upon Kavande, Ben Lupton emphasizes that

¹⁹ Benjamin von Stuckrad-Barre (Trans. Darren Lett), "Laundromat," *Chicago Review* 48, no. 2/3 (2002): 300-302.

²⁰ Neha Pushkarna, "This Dhobi Ghat is a Hotspot," *Times of India*, January 15, 2011, online edition, <http://timesofindia.indiatimes.com/city/delhi/This-dhobi-ghat-is-a-hotspot/articleshow/7293176.cms#ixzz1BPMbFFOw>

“masculinity can be performed by men and women, is subject to change over time” and can be studied through “observation of action and interpretation of discourse.”²¹ Variations of masculinity are also acknowledged by Robert Connel who writes about the politics of masculinities and acknowledges the idea of hegemonic masculinity.

Scott Coltrane writes that masculinity is “even more dependent upon not doing the things that mothers do”. His study on gender and household work in dual earner families who reported trying to achieve gender equality with regard to house work within their homes, show that gender is routinely created and performed by the tasks that men and women do. Husbands in his study were more likely to take on the role of helper and run errands that involved mobility while women took responsibility for taking decisions, planning and executing household tasks such as cooking and laundry.²² In congruence with Coltrane who considers work in the site of the home, Roger Horowitz explores the meatpacking industry that is also perceived as a place where men do not work. Women’s jobs according to him carry less power and social status. He explains this with the example of a job that was initially perceived as unfit for women by a meat workers’ union for preventing the substitution of male workers by female workers. Due to technological changes and horizontal expansion of the job profile of workers cleaning and processing “discarded” organs for processed meat, the particular job became secondary to the important meat processing departments that were dominated by men.²³

The workplace is widely studied as a site for “defining” and “reproducing” masculinities.²⁴ Lupton elaborates the challenges and threats to masculinity in women dominated occupations for men. He shows that men “re-gender” the

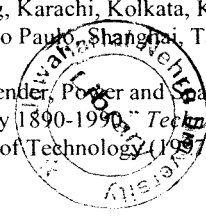
²¹ Ben Lupton, “Maintaining Masculinity: Men Who Do ‘Women’s Work’,” *British Journal of Management* 11, Special Issue (2000): 33-48.

²² Scott Coltrane, “Household Labour and the Routine Production of Gender,” in *The Gendered Society Reader second edition*, eds. Michael S. Kimmel and Amy Aronson (Auckland, Bangkok, Brunoes Airs, Cape Town, Dar es Salaam, Hong Kong, Karachi, Kolkata, Kuala Lumpur, Madrid, Melbourne, Mumbai, Nairobi, New Delhi, Nairobi, Sao Paulo, Shanghai, Taipei, Tokyo, Toronto: Oxford University Press, 2004), 186-206.

²³ Roger Horowitz, “Where Men Will Not Work”: Gender, Power and Space and the Sexual Division of Labour in America’s Meatpacking Industry 1890-1990,” *Technology and Culture* 38, no. 1 Special Issue: Gender Analysis and The History of Technology (1997): 187-213.

²⁴ Lupton, *British Journal of Management* 11: 38.

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workplace because it does not provide the income, prestige and place for behaviour to “reproduce a sense of masculinity” unlike more traditional workplaces. Men also deal with “feminization” and “stigmatization”. Stephen Meyer who studies workers grievances and culls out two types of masculinities- manual labourer’s “rough working culture” and the skilled craftsmen’s “respectable culture” describes the features of masculine culture as “malingering”, “horseplay”, “fighting”, “output restriction” and “contesting managerial authority.”²⁵ He shows that with automation, the masculinities of both types of workers were challenged, women entered the workforce and then work and skill were no longer associated with “brain” and “brawn” but with monotonous, routine work. The workers adapted to the changed environment by remasculinizing a new variant of their semi skilled manual work.

Victor Agadjanian writes that “men’s entry into low income and low prestige women’s occupations”, “questions the broader hierarchy and stereotypes and transforms gender relations.”²⁶ He shows how street vending in Maputo is re-gendered by men who prefer to sell construction materials than food stuffs and ascribe to women a work style that is “emotional”, “verbally offensive” and “prone to squabbles”. Male vendors socialize and spend leisure time in traditionally masculine activities such as “hanging out”, “drinking” and “sports”. Agadjanian also shows how male street vendors simultaneously de-gender their work by participating alongside women in credit schemes and dealing with police harassment and pilferage along with women. In Maputo male street vendors unlike their female counterparts, see their work as temporary. Younger men tend to avoid peddling routes where they might meet people they know since this is embarrassing for them and older men who had to forgo their proper jobs due to recession rationalize their situation by economic hardship. Similarly, Lupton brings out the ways in which men manage their masculinity and draws upon Pringle’s empirical work that shows how male secretaries “reconstruct” their job to “avoid perceptions

²⁵ Stephen Meyer, “Work, Play and Power, Masculine Culture on the Automotive Shop Floor,” *Men and Masculinities* 2, no. 2 (1999): 115.

²⁶ Victor Agadjanian, “Men Doing “Women’s Work”: Masculinity and Gender Relations among Street Vendors in Maputo, Mozambique,” *Journal of Men’s Studies* 10, no. 2 (2002): 329.

of its negative associations with women” by not calling themselves secretaries and emphasizing the planning, troubleshooting and organizing aspects of their jobs that are not considered feminine.²⁷ Lupton also shows how men in women’s occupations play down their masculinity while at work. Another way of managing masculinity is by constructing the occupation as a masculine one and rationalizing away the presence of women. Men working in personnel management tended to present their work as hard, involving decision making and taking tough stands such as telling workers that they are retrenched. Men in personnel departments also conveyed that women are mistakenly entering a career in personnel management.

The third set of literature discusses laundry work outside the site of the home where commercial laundries involve men. All contributions on male workers engage with the masculinity of the male workers who practice an occupation that continues to be practiced by women and seen as women’s work within the domain of the home. Sketches of laundry men involved with emergence of steam laundries who constructed their occupation as a masculine one and of Chinese laundrymen who were pushed into the laundry trade for lack of better options are presented below and form the second set of literature on laundry that takes the commercial sphere, outside the home as its site. Steam laundries in United States of America and Britain have involved men since their emergence in 1890 till around 1910s. Arwen Palmer Mohun analyses the ways in which laundry men in United States of America and Britain “culturally construct” their space in the emerging arena of steam laundries. She analyses laundry journals that helped in creating and reinforcing the entrepreneurship and management of steam laundries as a masculine profession. The journals show how the cultural ideas related to technical skills and physical labour required by laundry workers were made and practiced.²⁸ Lupton, building upon Collinson and Hearn also emphasizes that “masculine identities like other identities constantly have to be constructed, negotiated and reconstructed in

²⁷ Lupton, *British Journal of Management* 11: 42.

²⁸ Arwen Palmer Mohun, “Laundrymen Construct Their World: Gender and The Transformation of a Domestic Task to an Industrial Process,” *Technology and Culture* 38, no. 1 Special Issue: Gender Analysis and The History of Technology (1997): 97-120.

routine social interaction."²⁹ According to Mohun, laundry men portrayed laundry work for laundry workers (whom they employed) as a masculine or feminine profession in accordance with their labour requirements and the available pool of labor. In Britain where labour was scarce laundry work was sketched as appropriate for unmarried young women as it required few technical skills and was compatible with their feminine roles in society. In contrast the large pool of migrant labour in America allowed the portrayal of laundry work as men's work that was inappropriate for women. British steam laundries created a post for a male technician who would repair laundry machines, a post that was absent in America where men would do the job.³⁰ British laundrymen adapted and modified the traditional symbols of laundry such as the 'dolly' to match their masculine identities and build upon traditional symbols for attracting women workers.

In an article on West America from 1850 to 1950, Joan S. Wang also shows how men in smaller commercial laundries in America negotiate their masculinity within an occupation that ranks low in prestige and is associated with women's work in the domestic sphere of the home.³¹ Men who were pushed into or opted for laundry work were marked by race (the men were Chinese) and stigma and had the least opportunity cost. The tale of coexistence and competition from Comstock, Nevada (USA) in the 1860s also presents the dynamic picture of laundries where Laundrymen differed in age and motivation. Younger Chinese men laundered clothes for a monopoly over the market and older Chinese men and Irish women laundered clothes of their immediate neighborhood for their own survival.³² Inexpensive and speedy laundry services by Chinese laundries declined as racism strengthened and Chinese laundries increasingly came to be perceived as

²⁹ Lupton, *British Journal of Management* 11: 36.

David L. Collinson, "'Engineering Humour': Masculinity, Joking and Conflict in Shop-floor Relations," *Organization Studies* 9, no. 2 (1988): 181-199.

³⁰ Arwen Palmer Mohun, "Why Mrs. Harrison Never Learned to Iron: Gender, Skill and Mechanization in the American Steam Laundry Industry," *Gender and History* 8, no. 2 (1996): 231-251.

³¹ Joan S. Wang, "Race, Gender and Laundry Work: The Roles of Chinese Laundrymen and American Women in the United States, 1850-1950," *Journal of American Ethnic History* 24 no. 1 (2004): 70.

³² Ronald M. James, Richard D. Atkins and Rachel J. Hartigan, "Competition and Coexistence in the Laundry: A View of the Comstock," *The Western Historical Quarterly* 25, no. 2 (1994): 164-184.

unhygienic. Chinese laundries in Comstock were tiny spaces where laundry workers lived and worked for long hours, cooked and slept under ironing tables. From “big” commercial laundries we now move to small scale-laundry workers and the leased out family wash.

1.3 Leased out family wash and small-scale laundry workers

Literature on laundry intermittently mentions that large table cloths were sent to commercial laundries and not laundered at home.³³ Laundering the leased out family wash is the focus of the fourth set of literature on laundry. The site of such laundry work is a domain in between the terrain of the home and small commercial laundries. The technologies and methods used as well as the scale of work are simple and small scale, similar to laundry work undertaken at home. The laundry workers however undertake laundry work for a livelihood similar to the domestic helps within the site of the home. The lives of women laundry workers who laundered clothes for clients in exchange for money in Victorian England are captured by Patricia E. Malcolmson. She shows how women combined housework and laundry work within their homes, roped in the labour of their children and converted their homes into washing, wringing, drying and ironing area.³⁴ Elderly Chinese laundrymen and Irish women in America laundered a portion of the leased out family wash of families in their local communities who were often of the same race as them. They largely washed men’s shirts for a subsistence income in their small scale laundries that were based in their home cum workplace.

Keletso E. Atkins writes about the Zulu Washermen’s guild (1850-1910) that directly competed with and took over from domestic workers and used simple methods, stones and water for washing clothes.³⁵ Amawasha, the Zulu Washermen’s guild in Natal, South Africa emerged washing clothes near the Natal

³³ Parr, *Technology and Culture* 38: 173.

³⁴ Patricia E. Malcolmson, “Laundresses and the Laundry Trade in Victorian England,” *Victorian Studies* 24, no. 4 (1981): 439-462.

³⁵ Keletso E. Atkins, “Origins of the Amawasha: The Zulu Washerman’s Guild in Natal, 1850-1910,” *The Journal of African History* 27, no. 1 (1986):41-57.

River. According to Atkins, the Amawasha men used skills for washing clothes that resembled their previous work of cleaning animal skins with stones. The skins were used for draping the human body. Laundry work did not seem to clash with the masculinity of the Zulu men since rubbing stones together was previously a prestigious male activity, there was no need for washing clothes in the men's traditional circumstances and since Zulu women stayed in villages and were not in the town where laundry work was undertaken. The monopoly of Zulu Washermen's guild over laundry withered as plumbing flourished, water taps entered individual houses and as racism soared and the state clamped taxes on the Zulu men's dwellings on the riverside and alternative laundries mushroomed closer to houses than the river bed. The unique case of the Amawasha aligns closely with the Indian Dhobis who as migrants to South Africa contributed to the competition that helped in breaking the monopoly of the Amawasha over laundry in 1910 in Natal, South Africa.

Dhobis like the Amawasha wash the leased out family wash near rivers. Like the women laundresses in Letto's article moved away from the rivers with the arrival of plumbing and alternative construction of laundry facilities in 19th century across the world, so have the Dhobis. While the literature on laundry across time and space shows laundry to be women's work that is re-gendered and de-gendered by laundry men to suit their masculine identities in commercial settings, the Dhobi men are unique because laundry work is their traditional occupation. Though laundry work is undertaken by women and domestic workers in homes in Delhi, laundry work performed in Dhobi ghats is perceived as men's work. The following chapter concentrates on Dhobis and Dhobi ghats, and discusses different aspects in relation to them.

Chapter II: Dhobis and Dhobi Ghats in Delhi

At the heart of this dissertation's research concern are Dhobi communities who practice the occupation of laundry work in Dhobi ghats in Delhi. Dhobis could be categorized as small scale traditional launderers when situated within a global framework analyzing laundry work. According to the Anthropological Survey of India, Dhobi is a "community" of "Washermen who have the washing and ironing of clothes as their hereditary occupation".¹ This chapter provides a brief history of Dhobi communities and sketches a profile of Dhobi communities in Delhi drawing upon literature, and interviews with Dhobis. Various categories of Dhobis who differ along the lines of economic and social status, place of origin, sub communities, residence, livelihood sources and scale of work are described. Transformations in laundry work undertaken by Dhobis including technological changes, are discussed. Dhobi ghats, the built environments where Dhobis live and work are introduced and profiles of two ghats are sketched out.

2.1 Dhobi communities

Suresh Kumar and Suresh Kanojia highlight that "a dhobi washes away dirt". They emphasize that even their forefathers were Dhobis. This is our work just as the other castes do their own work. This is all the skill we have in our hands. We do the best cleaning and the best ironing.² The word Dhobi may be traced to the Sanskrit word for liquid- *dhrav* and the Hindi word *dhona* which means to wash.³ "Traditional launderers", as Andrea Menefee Singh describes the Dhobis, wash

¹ S. Channa, "Dhobi (Sheheri Hindu)," in *People of India Delhi*, XX eds. T. K. Ghosh and Surendra Nath (New Delhi: Anthropological Survey of India, Manohar, 1996), 183.

² Suresh Kumar and Suresh Kanojia, "Washing The Dirt, Being The Dirt," in *Finding Delhi Loss and Renewal in the Megacity*, ed. Bharti Chaturvedi (New Delhi: Penguin Viking, 2010), 156.

³ K. S. Singh, ed., *The Scheduled Castes*, Revised Edition, *People of India National Series 2*, (New Delhi: Anthropological Survey of India, Oxford, 1993), 442.

clothes.⁴ Dhobis are amongst the agents of purity who are located near the lower end of the *Jajmani* caste ladder.⁵ The *Jajmani* system differentially distributes privileges to various groups of people based on their birth. Different caste groups are internally endogamous and exogamous in relation to other caste groups. Each caste group has its own hereditary occupation. Dhobis like other agents of purity have been historically discriminated against, and socially and economically marginalized, in Indian society. Currently, the Dhobis come under Scheduled Castes category under the Indian constitution that guarantees them certain protections.⁶

Studies of the caste system across India reveal that the location of Dhobis in the local hierarchies of the *Jajmani* system and the specific roles of Dhobis in different contexts differ. Category of Dhobis is also internally stratified. Kathleen E. Gough mentions that those Washerpeople who wash clothes soiled by menstrual pollution rank lower than those who do not.⁷ Various studies that are preoccupied with the exotic and with that which is culturally unique, highlight ritual and traditional roles of Washerpeople. Ritual tasks include performing specific tasks during occasions of birth, death, menstruation and marriage in addition to cleaning clothes. Regionally the specific tasks vary and include preparing bodies for funeral pyres, carrying fans during the funeral procession, painting houses of the deceased in white and informing the relatives and informing relatives of first menstruation. Dhobis in India are also assigned functions during festivals and marriages. They provide music with their own melodies, sing vulgar songs when required or pay musicians. Apart from arranging music for celebrations, the Dhobis make a canopy over the bridal pair, provide cloth for the bridal pair to walk on during a wedding and carry the

⁴ Andrea Menefee Singh, "Women and The Family, Coping with Poverty in the *Bastis* of Delhi," in *The Indian City: Poverty Ecology and Urban Development*, ed. Alfred d Souza (New Delhi: Manohar Publishers, 1983), 78.

⁵ Richard L. Brubaker, "Barbers, Washermen and Other Priests: Servants of The South Indian Village and Its Goddess," *History of Religions* 19, no. 2 (1979), 128-152.

⁶ Sukhdeo Thorat (with assistance from Prashant Negi, M. Mahamallik and Chittaranjan Senapati), *Dalits in India, Search for a Common Destiny* (New Delhi, California, London, Singapore: Sage Publications, 2009), 1.

⁷ Kathleen E. Gough, "Female Initiation Rites on the Malabar Coast," *The Journal of Royal Anthropological Institute of Great Britain and Ireland* 85, no. 1/2 (1955):70.

wedding palanquin over long distances. Cutting the head of sacrificial offerings, decorating temples during festivals and carrying images of goddesses during processions are also undertaken by Dhobis. Such examples indicate that Dhobis in various parts of India are an integral part of the village communities. The ways of life of Dhobis in villages involve roles and relationships that overlap with and entrench their occupation of washing clothes. Service castes such as “Washermen” have always been “widely dispersed” and are present in each village in proportion to their need in that village.⁸ According to Marian W. Smith each caste group in a Panjabi (north Indian and Pakistani) village is tied to others for its own maintenance and relations amongst the groups are “defined in customary law” and “often included in village records”. Smith writes that “the cleaner a man wants his clothes, the better must be his personal relationships with the Washerman, for he neither washer his own clothes nor changes the Washerman”.⁹

Jajmani relationships that tie the different caste groups to each other have transformed over time and the annual payment in kind, and in land, has changed with integration into the cash economy.¹⁰ In 1972 “traditional service relations among castes have almost gone, except as an ideal to be revived at festivals” near Bangalore (Karnataka, South India), mentions Mark Holmstorm as he observes that Barbers and Washermen were paid in cash, at piece work rates.¹¹ Dennis B. McGilvray describes the transition as a change from a relationship of command and subordination to one of “connection requiring diplomacy and negotiation”. He elaborates that in Sri Lanka Washermen and Barbers continue to find their occupations lucrative in the town and are dropping their hereditary, *jajmani* type

⁸ Barbara R. Joshi, ““Ex-Untouchable”: Problems, Progress and Policies in Indian Social Change,” *Public Affairs* 53, no. 2 (1980):196.

N. Srinivasan, “Village Government in India,” *The Far Eastern Quarterly* 15, no. 2 (1956):202.

W. H. Newell, “The Brahman and Caste Isogamy in Northern India,” *Journal of The Royal Anthropological Institute of Great Britain and Ireland* 85, no. 1/ 2 (1955):106-109.

⁹ Marian W. Smith, “The Misal: The Structure of Village Group of India and Pakistan,” *American Ethnologist* New Series 54, no. 1 (1952):50-51.

¹⁰ Nirmal Kumar Bose, “Some Aspects of Caste in Bengal,” *The Journal of American Folklore* 71, no. 281 Traditional India- Structure and Change (1958):399.

¹¹ Mark Holmstorm, “Caste and Status in an Indian City,” *Economic and Political Weekly* 17, no. 15 (1972):770.

links with high-caste households and are opening more dignified and universalistic barber saloons and laundry shops along the main roads.¹² All through the literature on Dhobis, the term Washermen that stands for all people belonging to the category of Washerpeople overshadows the category of Washerwomen that is rarely used. Vinod Chandra Sharma writes that “it is doubtful whether the women were working as independent Washerwomen or merely helping their husbands.”¹³ Susan Seymour mentions that “the Washermen women helped their husbands to do the laundry in Orissa.”¹⁴ Sentences such as the above blur Dhobi women’s contribution to laundry work.

2.2 Dhobi communities in Delhi

“The work of Dhobis is important to people who live in Delhi, because they get fresh clean clothes thanks to us,” say Kumar and Kanojia. They elaborate that Dhobis unlike most people can put starch on clothes because of their caste.¹⁵

Population of Dhobis in Delhi varies from 3.5 lakhs to 4 lakhs in 2011 according to the Dhobi Ghat Sudhar Yojna for Delhi (henceforth DGSY). The DGSY is a government of India scheme that ropes in socioeconomic upliftment of Dhobis in its goal of curtailing pollution abatement of the river Yamuna. It estimates the population of Dhobis on the basis of discussions held with representatives of Dhobis that were undertaken as part of surveys and triangulated through interviews with office bearers of Dhobi associations. According to DGSY for Delhi under Yamuna Action Plan-II that comprises of the most recent compilation of data on Dhobis by the State, “no authentic census is available to refer demographic data regarding population of Dhobis” and “ration cards issued to Dhobis” working in Dhobi ghats “are the only authentic document to be referred to for their presence”. According to a survey of “Dhobis involved in

¹² Dennis B. McGilvaray, “Paraiyar Drummers of Sri Lanka: Consensus and Constraint in an Untouchable Caste,” *American Ethnologist* 10, no. 1 (1983): 107.

¹³ *Uttar Pradesh District Gazetteers*, 1959: 194.

¹⁴ Susan Seymour, “Determinants of Sex Role in a changing Indian Town,” *American Ethnologist* 2, no. 4 Sex Roles in Cross Cultural Perspective (1975):766.

¹⁵ Kumar and Kanojia, *Finding Delhi*, 153-156.

washing clothes” under the Dhobi Ghat Sudhar Yojna, a total of 2413 Dhobis in Delhi depend on “traditional way of washing clothes at the ghats.”¹⁶ Stephen P. Blake in writing about Shahjahanabad or Delhi between the years 1639 and 1739 mentions that Washermen and other non agriculture workers lived in towns, cities and villages nearby.¹⁷ According to the DGSY, out of 847 respondent Dhobis, 69% reside in their own homes, 26% have rented accommodation and 5% live in Government allotted or Dhobi ghat premises.¹⁸ Currently, the Dhobi’s largely live and work in the 97 constructed Dhobi ghats in Delhi. Dhobis and Dhobi ghats are discussed later in the chapter.

According to the 1981 census the population of Dhobis in the union territory of Delhi was 59,675. The sub castes of Sheheri, Marwari, Campowari, Maharathi, Bundele and Kanaujia govern marriage alliances.¹⁹ Anthropological Survey of India profiles the Dhobis in *People of Delhi* in 1996 in two sections, Dhobi (Muslim) and Dhobi (Sheheri, Hindu). The Dhobis of both categories are further internally subdivided into different *biradaris*, or “geographically localized endogamous groups” that regulate marriages, constitute a community of people who participate in rituals and festivities together, have reciprocal relationships based on mutual trust and render help to each other.²⁰ The Muslim Dhobis include two subsections- Sheheri Muslims who trace their origins to the city of Shahjehanabad and the Agharias who come from villages near Hapur and Meerut in Uttar Pradesh.²¹ Hindu Dhobis in Delhi according to the ASI’s documentation of informant interviews are the Sheheri Dhobis who are residing in Delhi in since 1857 and some of them have connections with *Purabias* or villages in Uttar Pradesh. Hindu Dhobis according to the 1996 survey by ASI are dispersed across Delhi after the Hindu-Muslim riots in 1947 prior to which a majority of Hindu

¹⁶ Dhobi Ghat Sudhar Yojna, *Second Draft Master Plan*, 3.7.

¹⁷ Stephen P. Blake, “Urban Economy in Premodern Muslim India: Shahjahanabad, 1639-1739,” *Modern Asian Studies* 21, no. 3 (1987): 452.

¹⁸ DGSY, *Master Plan*: 6.17.

¹⁹ Singh, *The Scheduled Castes*, 448.

²⁰ S. Channa, “Dhobi (Muslim),” in *People of India Delhi*, XX eds. T. K. Ghosh and Surendra Nath (New Delhi: Anthropological Survey of India, Manohar, 1996), 176-182.

Channa, *People of India*, 183-191.

²¹ In contrast, three Akhria families residing in 28 No. Dhobi Ghat on Mahavat Khan Road in Delhi who trace their origins to Hapur and Meerut report their religion as Hindu.

Dhobis lived in the walled city. Muslim Dhobi communities are clustered in the old city, scattered in Civil Lines and Seelampur. ASI estimated the number of Dhobi households (Hindu) to be 350 in Delhi in 1996.²²

The two groups outlined by ASI diversify further when migration histories of the Dhobis in Delhi are included. All Dhobis in Moti Bagh Dhobi ghat belong to Kanaujia caste and have come from Meerat region in Uttar Pradesh in the previous two decades. Dhobis in No. 28 Dhobi Ghat in Minto Road area migrated from primarily Rajasthan, Uttar Pradesh and Madhya Pradesh between 1911 and 1947.²³ Percival Spear writes that Delhi was proclaimed as “the capital of British in India in 1911” and Dhobis of No. 28 Dhobi ghat recall that their grandparents migrated to Delhi for working under British officers. Andrea Menefee Singh draws our attention to Kaharpur *basti* (slum) in Central Delhi that had 16 Rajasthani Dhobi families and Hasanpur *basti* with 87 households that had 7 families of Dhobis from Uttar Pradesh in 1983. Regional differences amongst Dhobis in attitudes towards work are also highlighted by Singh who mentions that Dhobis from Rajasthan prefer to iron clothes and consider washing as comparatively polluting, while Dhobis from Uttar Pradesh wash and iron clothes and assign the task of washing to women Dhobis.²⁴

According to interviews with Dhobis in Lodi Road Dhobi ghat and Princess Park Dhobi ghat, Dhobis in Delhi today differ not just by religion, caste and region of origin but also by their duration of residence in Delhi and place of residence in Delhi. The particular assortment of livelihoods of a Dhobi family also indicates their social networks (including *biradari communities*) and economic status which also carve for them a certain place in the Dhobi *samaj* in Delhi. People’s self perceptions of the meanings and their adaptations of the idea of Dhobi, including their preferred marriage patterns that provide an insight into Delhi’s Dhobi communities are outlined below. This section is based on

²² Interviews with Dhobis in Delhi’s Dhobi Ghats in 2010 (November-January 2010) revealed a dominance of Kanaujia, subset.

²³ Percival Spear, “Delhi: Interrupted Growth,” *The City in South Asia: Pre Modern and Modern*, Collected Papers on South Asia no. 3, eds. Kenneth Ballhatchet and John Harrison (London and Dublin: Curzon Press, 1980), 62.

²⁴ Singh, Women *The Indian City*: 65-66, 78.

interviews with Dhobis in No. 28 Dhobi ghat on Mahavat Khan road, Moti Bagh Dhobi ghat and Majnu Ka Tila Dhobi ghat in Civil Lines. To people who identify themselves as Dhobi, “Dhobi” means a caste (*jati*), a community (Dhobi *samaj* and *interlinked circles of biradaris*), an occupation (*vyavsaya*), a second name and identification. Dhobi is a “*vyavasaya*” or occupation according to a man in Moti Bag Dhobi ghat who clarifies that “anybody” can practice the occupation. A person in No. 28 Dhobi ghat distinguishes the “*vyavsaya*” (occupation) from “Dhobi *dhandha*” (Dhobi business), a phrase that is frequently used for referring to work, business, self employed status of the Dhobis by Dhobis themselves. However everyone who introduces herself/ himself as Dhobi does not practice the occupation of washing and ironing clothes and many Dhobis pursue alternate professions.²⁵ According to ASI Dhobis in Delhi apart from their traditional occupation of washing clothes are employed in government and private services and some are involved in trade, commerce, transport and storage.²⁶ For Dhobis who use cars as well as for those who use bicycles for fetching clothes in different ghats in Delhi, marrying a person who practices Dhobi *dhandha* is not as lucrative and positively regarded in the Dhobi community as marrying a person who is a Dhobi, whose belongs to the Dhobi *Samaj* and has Dhobis in her/ his family but does not practice the occupation of cleaning and ironing clothes. Dhobis who belong to urban areas tend to have a higher economic status. The number of years spent in Delhi by a Dhobi family enhances the prestige of that family in the Dhobi *Samaj*. Delhi’s Dhobis who are relatively older settlers convey a sense of pleasure in belonging to “Delli proper” (Delhi). Dhobi families who have lived in the city for around three generations are a part of the Dhobi *Samaj* in Delhi which is their larger community after their immediate *biradari* community. Dhobis who have lived in Delhi for more than one generation prefer to marry Dhobis who belong to Delhi city and are a part of the Dhobi *Samaj* in Delhi. Norms of the Dhobi *Samaj* are different for diverse Dhobis. An elderly man who has lived in Saudi Arabia

²⁵ Humayun Kabir notices that every member of a caste does not practice that occupation exclusively and therefore the translation of Dhobi a caste to Washermen is inaccurate. Humayun Kabir, *Gazetteer of India* (New Delhi: Indian Union, 1965), 506.

²⁶ Singh, *Scheduled Castes*, 448.

for over a decade stresses that “No. 28 Dhobi Ghat has an *usool* (a norm) that daughters can only marry within the Dhobi *Samaj*, they can not and will not marry outside. Boys are free to marry as they please.”

Holding a divergent perspective are a few Dhobis from Lodi Road Dhobi ghat and Princess Park Dhobi ghats who have more clothes to launder and run around three separate laundries each for catering to established branded hospitals in Delhi (and are marked by a higher economic and social status than Dhobis elsewhere). They would marry their children according to their *haisiyat* (economic and social capacity) and consider the level of education, social and economic standing of the prospective groom or bride in the larger urban society of Delhi. These criteria for them can overshadow and may even negate the need for linkages with Delhi’s Dhobi *Samaj*. People, who have more recently migrated to Delhi occupy relatively fewer material possessions and are not as rooted in Delhi and in Dhobi *Samaj* in Delhi as the older settlers. New migrants to Delhi opt for going back to their native villages (mostly in Uttar Pradesh) for cementing arranged marriages. A twenty five year old man in Moti Bag who migrated to Delhi in the last decade and whose sisters are attending school back home in his village in Uttar Pradesh replied that “if we do not marry our sisters in Dhobi, how will we show our face in our *biradari*?!” with an alarmed look on his face. He shared his worries about the high costs of marriage and dowry which he had to bear for his two sisters. Dowry is a well accepted and taken for granted practice at the Dhobi ghats with small children proudly relating that the double bed, referigerator, hydro machine, washing machine or television came into their homes as their mother’s or paternal aunt’s dowry. Many transport vehicles in Minto Road Dhobi Ghats have materialized through dowry. Young girls happily share that they have a certain standing in society, in particular urban Dhobi *Samaj* where people have spent generations in Delhi and that they, like most well to do people in Delhi give dowries.

Dhobi’s also differ on the basis of their links with the 97 official Dhobi ghats in Delhi. Drawing upon DGSY reports Dhobis can be further categorized along the criteria of their place of residence with regard to the officially recognized

Dhobi ghats. Dhobis who are displaced from their Dhobi ghats where they previously lived form the first group. “Dhobighats which were lying at the Yamuna river bank were demolished in the year 2006” after a Supreme Court order banned laundry activities on, and till “around 300 meters away from the Yamuna river bank.”²⁷ Dhobi ghats such as Dhobi ghat No. 64 in Daryaganj, Dhobi ghat at Morigate and Dhobighat near ITO Bridge have been “demolished during the past couple of years.”²⁸ Dhobis who do not have papers for the land on which they have built their houses are also being displaced and relocated by the Delhi High Court. 44 Dhobi families who shifted to Rouse Avenue adjoining No. 28 Dhobi ghat three generations ago were relocated to Dwarka on the outskirts of Delhi city between 2010 and 2011.

Displaced Dhobis such as people from the “vacated” Dhobi ghat at Yamuna Pushta continue searching for “avenues and opportunities to restart their work”. Dhobis have also “diverted to other jobs” and or are “demanding Dhobighats” “near their residences.”²⁹ A sub category of the displaced Dhobis work in the constructed ghats other than their own such as 20 Dhobis from the demolished Dhobi ghat at ITO who work in No. 8 Dhobi ghat in Minto Road area.³⁰ Similarly 4 Dhobis working in No. 26 Dhobi Ghat in Minto Road came after their Dhobi ghats in the Yamuna riverbank were demolished.³¹ Darya Ganj and Chandni Chowk also accommodate the “evacuees” of Yamuna River site.³²

The second group of Dhobis comprises of non displaced, self employed Dhobis who reside outside Dhobi ghats but come for washing their clothes in the constructed Dhobi ghats such as 21 Dhobis who come to wash clothes in No. 26 Dhobi ghat in Minto Road from nearby areas and have membership through Delhi Dhobi *sabha*.³³ Additionally, the DGSY reports capture the category of around 400 Dhobis who “have no Dhobi ghat in their area” and are “getting no place in

²⁷ Dhobi Ghat Sudhar Yojna, *Feasibility Report for Model Dhobi Ghat*, 2.3.

²⁸ DGSY, *Master Plan*: 3.3

²⁹ DGSY, *Feasibility Report*: 2.2-2.3.

³⁰ DGSY, *Master Plan*: 5.119.

³¹ *Ibid.*, 5-128.

³² DGSY, *Feasibility Report*: 2.2.

³³ DGSY, *Master Plan*: 5.128.

the existing Dhobighats” and who continue to wash clothes in river Yamuna at Okhla in Ward 205, despite the Supreme Court’s orders.³⁴

Workers who are hired for various tasks at the Dhobi ghats comprise the third group Dhobis and their existence is also acknowledged by the DGSY reports. It is difficult to interview hired workers who are constantly busy in the Dhobi ghats and because their employers actively bar their contact with outsiders and interviewers. Dhobis who employ hired workers usually have “*mota kaam*” (translated as fat work, but refers to big, or substantial, amounts of work) and income. Local Dhobi communities are internally competitive and secretive about their business especially the scale of their family’s laundry work that can be assessed through the details of their clients and numbers of workers they employ. While all Dhobis report that Dhobis who have *mota kaam* employ workers, few Dhobis report employing them. This contrasts with the sheer numbers of hired workers in some of the Dhobi ghats and my observation of hired workers and their employers who denied employing workers. Drawing upon interviews in Delhi’s Dhobi ghats, the following profile of hired workers emerges. Workers are mostly male migrants from Uttar Pradesh and few other North Indian villages in Jharkhand. Families of the migrant workers stay back in their villages. Migrant workers largely come from Dhobi communities though the employers place no premium on workers coming from Dhobi communities but look for skill sets such as knowledge of laundry work as it is undertaken in Dhobi ghats, physical strength and the ability to carry out laundry work. Many of the workers are young adults who work twelve hour shifts including night shifts when using mechanized laundry technologies. Workers or hired persons temporarily reside and work in Delhi’s Dhobi ghats and their wages range from one thousand rupees per month to four thousand rupees per month mostly including living expenses in kind (food and lodging). Dhobis report that hired workers frequently run away as one of the challenges of expanding their scale of laundry work and involving large scale laundry technologies.

³⁴ DGSY, *Feasibility Report*: 3.127.

Dhobis are included in the economically weaker sections of the society and “belong to the Other Backward Castes (OBC) category”.³⁵ Delhi city’s Dhobis altered their positions in the *jajmani* relationships that tied them and their clients and began washing clothes for the British officers and households in Delhi after 1947. Dhobi families in urban Delhi had fixed households for whom they washed clothes once or twice a week for some houses and every alternate day for others. Though the bonds of *Jajmani* system weakened in the movement from the villages to the city, the new clients of Dhobis continued to be patron cum clients and the clients saw the Dhobis as part of their assortment of “servants” to whom they give gifts on festivals and pass on their old clothes.

Remnants of the *jajmani* relationships remain however are found in the working lives of few Dhobis such as the 16 Dhobis in the Tilak Bridge Dhobi Ghat who reside in servant quarters of the Railways, and continue to “wash staffs clothes free of cost” while including clothes from Railway and other guest houses for eking out their livelihood. Kanojia also mentions the plight of Dhobis who also perform services such as taking care of domestic chores, fetching children from school, washing clothes for railway quarters residents without payment in cash.³⁶

Dhobi women who visit wealthier households for washing their client’s clothes say, “we wash only clothes since we are Dhobi”. They shirk away other types of paid domestic work that can supplement their income. “Cooking is not our work”, they share while indicating that cleaning kitchen utensils of other houses is below their dignity.” Thus the association of caste and occupation subtly continues in the sphere of paid domestic work for Delhi’s families and Dhobis continue to wash clothes.

Clients of some Dhobis have changed from households to commercial establishments such as hotels, hospitals and tent houses.³⁷ Dhobis report that there is an increase in what Dhobis see as a professionalization of their work that has

³⁵ DGSY, *Master Plan*, 3.5.

³⁶ Kumar and Kanojia, *Finding Delhi*, 156.

³⁷ “MCD Focuses on “Green” Initiatives,” Press Trust of India, December 09, 2010, msn news online, <http://news.in.msn.com/national/article.aspx?cp-documentid=4674938>

come with changes in their clientele in the past two decades. While Dhobis continue to launder the family wash for some of their previous clients there has been a general decline in the leased out family wash from families. Clothes from commercial establishments that have also mushroomed in the previous two decades are increasingly cleaned in Dhobi ghats.

Statistics on clients of Dhobis according to the Dhobi Ghat Sudhar Yojna that has surveyed Dhobis in Delhi are as follows. 79% of Dhobis in Delhi wash clothes for households and commercial establishments while 8% wash only commercial clothes and 13% wash exclusively household clothes.³⁸ According to DGSY's detailed interview schedules of 1421 clients who lease clothes to Dhobis for washing, the major clients of Dhobis are tent houses (54%), hotels (23%), any other such as bands (15%) and hospitals (8%).³⁹

Commercial establishments require Dhobis to meet tight deadlines. Relationship of the new clients to the Dhobis is similar to business liaisons that differ from the contact of Dhobis with patron cum client families. The new clients of Dhobis are not fixed as the households previously were. Dhobi families currently compete amongst themselves for lucrative deals with clients. Clients approach those Dhobis who offer the cheapest services for the best wash that meets certain minimum standards of quality and is speedily undertaken. Entry of the market has transformed *Jajmani* relationships for most Dhobis, but has also crucially linked them with competition and ambition by materially rewarding Dhobi families who launder more clothes. This in turn has spurred investment in laundry technologies by Dhobis and changed their way of life and work.

Technological change in laundry work moves in tandem with changes in the standards of and expectations from laundry work. Meanings of cleanliness have differed historically and culturally. According to Dhobis laundry machines save time and involve *sauhilyat* (they are convenient to handle). However Dhobis

³⁸ DGSY, *Master Plan*, 6.14 -6.15.

³⁹ *Ibid.*, 6.8, 6.31.

mention that clothes washed in machines are not as clean as manually washed clothes. Using Ward, Shove and Southern's distinction between "modern and hypermodern forms of convenience", the circumstances of Dhobi communities echo the modern form of convenience that "reduces the time taken to achieve a goal' unlike hypermodern convenience that provides people with greater control over their schedule by storing or shifting time via devices such as freezer and car.⁴⁰ However some Dhobis are adopting faster means of transport and communication including cars and mobile phones that facilitate laundry work. Specific methods and materials are used for laundering each piece of cloth when it is manually washed. Some Dhobis separate with precision the types of clothes that are to be washed together, manually and in machines (for example hospital clothes are washed in a separate laundry in Princess Park Dhobi ghat). People in No. 28 Dhobi ghat recall that standards of laundry work declined after the British clients of Dhobis left India, post 1947. The decline in boiling clothes with *bhattis* (furnaces) in Dhobis ghats is similar to the decrease in the use of boiling and hot water for laundry activities in America where frequency of the laundry has increased.⁴¹ Dhobis in congruence with Sarah Pink, link changes in laundry practices and technologies with changes in textiles and fashion (type and quality of clothes washed)⁴². Clothes that are more dirty, white in colour, rough, have *kutcha rang* (raw colour, refers to weak colour that runs from clothes when dipped in water) require manual washing. Joy Parr also highlights cultural differences in standards of laundry work.⁴³

According to Krishna B. Reddy and Aruna C. Kumari labour saving machinery has enabled Washerpeople to save time, wash more clothes and make

⁴⁰ Elisabeth Shove, "Converging Conventions of Comfort, Cleanliness and Convenience," *Journal of Consumer Policy* 26 (2003): 411.

⁴¹ *Ibid.*, 401.

⁴² Sarah Pink, "Dirty Laundry. Everyday Practice, Sensory Engagement and The Constitution of Identity," *Social Anthropology* 13, 3 (2005): 285.

⁴³ Joy Parr, "What Makes Washday Less Blue? Gender Nation and Technology Choice in Postwar Canada," *Technology and Culture* 38, no. 1 Special Issue: Gender Analysis and The History of Technology (1997): 153-186.

more trips to meet their clients.⁴⁴ Reddy and Kumari's portrayal of the interface between science and technology and the caste system was structured for a conference on 'Science and Technology for Social Development' in early 1990s in India and does not challenge the hereditary occupational segregation that the caste system entails. Instead they show how the burden of humans who perform each occupation eases with technology. Similarly, the *Gazetteer of India* documents technological changes in the laundry highlights that some Dhobis have started mechanized modern laundries for washing clothes.⁴⁵

Coming of the market has critically brought with it inequity amongst different Dhobi families in the same Dhobi ghat that is seen in differing scales of work, ownership of technology and reflected in varied modes of transport. Dhobis encounter technology both as users and consumers of technology and as a group whose livelihoods are jeopardized by technological changes in laundry work. Kumar and Kanojia mention that people (families who previously leased out their family wash to the Dhobis) have replaced them with washing machines and refuse to give them work. They point out that they get just around a quarter of the clothes that they previously got for washing before the arrival of washing machines in the market. Kumar and Kanojia acknowledge that clothes come out fresh and clean from the automatic washing machines and emphasize that they are unable to purchase the costly washing machines themselves.⁴⁶

Interface of Dhobis with domestic washing machines is reflected in the narratives of Washerwomen. Dhobi women from No. 28 Dhobi ghat point towards their bare, swollen feet, protected only by rubber slippers during Delhi's severe winter. They say that they "have to wash clothes and socks tend to get wet." The women clean clothes manually for their employers who nevertheless keep washing machines for showing off which they use only when the Washerwomen take leave or sometimes for wringing clothes during winters. "We would not be given machines to use!" exclaim the Dhobi women whose

⁴⁴ Krishna B. Reddy and Aruna C. Kumari, "Impact of Technology on Jajmani System, Some Observations," in *Science, Technology and Social Development* eds. Venkatramalah, S.R. and Sreenivasan, K (New Delhi: Discovery Publishing House, 1992), 81-92.

⁴⁵ Kabir, *Gazetteer of India*, 506.

⁴⁶ Kumar and Kanojia, *Finding Delhi*, 153, 156.

a ghat on river Ganga in Mirzapur, Uttarpradesh Aparna argues that “steps, ramps, causeways, intermediate landings, pause points” “that came together in very articulate manner, came to be collectively known as ghat.”⁴⁸. She shows us that ghats provide “easy and comfortable access to the river” and “develop” “either as they are consistently used over a period of time” or are “built with philanthropic intentions”, often “symbolizing” “status of rich sections of society”. Further, Aparna describes the privacy of the *pukka* ghat used by women for bathing and worship in Mirzapur, Uttarpradesh and shows how it differs from men’s ghats that have *akharas* (gyms). While the content of the ghat for Aparna is at a tangent from the idea of Dhobi (the community does not find mention in her article), her definition of the ghat appears to envelope the roles and functions of Dhobi ghats, variations that draw upon river water as well as those functioning with tap water as she defines a ghat as a physical manifestation of certain social and functional needs of people.

Dhobi ghats where Dhobis wash clothes in Delhi are built environments that are constructed with cement and bricks. Dhobi ghats are located around 300 meters away from the Yamuna river bed and are scattered across Delhi. Laundry activities on the Yamuna River bed are banned by the Supreme Court of India. Some Dhobi ghats are facilitated or provided with water supply by Delhi Jal Board (henceforth DJB), bore well water, sheds over their workplace and are serviced by the municipality such as 54 out of 58 ghats in Municipal Corporation of Delhi area and 16 out of 21 ghats in New Delhi Municipal Corporation area. Out of the remaining ghats, 17 ghats are in Cantonment area and 1 ghat falls in a Railway area.⁴⁹

Newspaper reports highlight changes in the Dhobi ghats such as mechanization of Lodi Road Dhobi ghat.⁵⁰ Newspapers cover demolitions of

⁴⁸ Aparna, “Pukka Ghat in Mirzapur, Uttar Pradesh, Spatial Expression of Gender Identity in a Public Place,” *Women and Built Environment* ed. Madhavi Desai (New Delhi: Kali for Women, 2007), 74-99.

⁴⁹ DGSY, *Master Plan*, 412.

⁵⁰ Durgesh N. Jha, “Humble Dhobi Ghat set for Makeover,” *Daily Pioneer*, January 27, 2010, online edition, <http://www.dailypioneer.com/231930/Humble-dhobighat-set-for-makeover.html> Esha Roy, “Latest to clean up Yamuna ghats Laundromats,” *Express India*, January 11, 2005, online edition, <http://cities.expressindia.com/fullstory.php?newsid=113496#>

Dhobi ghats along the Yamuna River and *Tribune India* highlights housing demands from some Dhobis.⁵¹

Delhi's Dhobi ghats have diverse histories. Nine of the remaining Dhobi ghats in Minto Road area trace their genesis to the British government officers who brought Dhobis from different regions of India such as Uttar Pradesh, Rajasthan and Lahore for providing them with laundry services, share Dhobis of No. 28 Dhobi ghat on Mahavat Khan Road. Some Dhobis in Majnu Ka Tila Dhobi Ghat in Civil Lines recall washing clothes on banks of the River Yamuna just after they came to Delhi from Lahore at the time of partition of India and Pakistan in 1947. Majnu Ka Tila ghat in Civil Lines was built in 1977 and currently houses 65 families, around 50% of whom continue to wash clothes for a livelihood. A few of the 16 resident families in Moti Bagh Dhobi Ghat came from their previous Dhobi ghat at Char Dukan (4 kilometers away) that was demolished by the government. Other families remember coming to Delhi in 1978 after they were allotted a house in the new ghat constructed by the government in 1973. Currently the Moti Bagh Dhobi ghat residents pay approximately Rs. 150 every month to the government for renewing their licenses for the houses inside the Dhobi ghat.⁵²

Washing areas in Dhobi ghats are common resources that are shared by Dhobi communities residing in each Dhobi ghat. Most Dhobi ghats have slotted turns to different Dhobis for using the hauzes (washing stones) and cement structures that are part of the built environment of the Dhobi ghat. Delhi Jal Board (DJB) provides water supply to the Dhobi ghats through local municipalities. A large volume of water is used in Dhobi ghats. Dhobis pay the government for the water they use at commercial rates with no subsidy. The water bill for a ghat is

⁵¹ "Dhobis Irked Over Demolition of Ghats," *The Hindu*, July 08, 2006, online edition, <http://www.hinduonnet.com/thehindu/thscrip/print.pl?file=2006070812410400.htm&date=2006/07/08/&prd=th&>

Seema Harkauli, "City's Dhobi Ghat to Shift from Rouse Avenue to Dwarka," *Daily Pioneer*, January 28, 2011, online edition, <http://www.dailypioneer.com/312687/Citys-dhobi-ghat-to-shift-from-Rouse-Avenue-to-Dwarka.html>

Nalini Ranjan, "Washermen Seek a Fair Deal," *Tribune India*, August 14, 2005, online edition, <http://www.tribuneindia.com/2005/20050815/delhi.htm>

⁵² DGSY, *Master Plan*, 5.42, 2.174.

equally divided among all Dhobis who wash clothes at the ghat regardless of the actual amount of water they use. Dhobis who wash clothes in a ghat know each other and sort disagreements and conflicts by mutual consultation when they arise.

Most small scale Dhobis wash clothes once or twice a week when they have their turn to use the ghat. They plan their visits to clients' for fetching and delivering clothes accordingly. Dhobis who have a larger turnover and more clothes to wash usually depend upon washer machines. Dhobis utilize a mix of cement structures in the ghat that were traditionally used for laundry work and machines for washing and wringing clothes. The machines are privately owned and operated by individual Dhobi families who also pay their separate electricity bills.

Dhobi families in older neighborhoods tend to be related and many belong to the same community or *biradari*. Members of a *biradari* share their material things including laundry technologies and do not rent them out for cash to each other. Dhobis in relatively newer Dhobi ghats belong to communities (*biradaris*) that reside elsewhere and they do not always share their laundry technologies with their local community or immediate neighbours.

Dhobi families that reside in Dhobi ghats carry out laundry work. Children, women, men and elderly persons are assigned different tasks depending upon the need for workers. In larger Dhobi ghats, some self employed Dhobis hire workers for performing various laundry tasks.

Different Dhobi ghats have varied amounts of material possessions, income and standards of living. Dhobis in Moti Bagh Dhobi ghat and Bapu Dham Dhobi ghat that are relatively recent additions to Delhi city, largely manually wash clothes and have relatively homogeneous standards of living, income and modes of transport within the ghat (one family has a scooter and a few have cycles). Moti Bagh's Dhobis do not employ hired labours to work in their small ghat but they enjoy plumbing facilities and have kitchens and bathrooms in their flats constructed by the government. Dhobis in older ghats such as No. 28 Dhobi ghat

however have diversified their livelihood strategies, benefited from education and opportunities over seven decades. No. 28 Dhobi ghat harbours wide disparities in income that can be inferred from the variety of modes of transport and the huge number of transport vehicles used by the Dhobis (bicycles, motorcycles, cars). It is also seen in the skewed ownership of laundry machines amongst different Dhobi families where some Dhobis do not own any machines while most Dhobi families own some and a few own many laundry technologies. Some Dhobis in No. 28 Dhobi ghat despite their enormous turnovers reside in the old single room accommodations that their families constructed and which do not have plumbing, kitchen or bathroom facilities. From this introduction to Dhobi ghats and ideas from the profile of Dhobi communities we shift to look at the built environments and material spaces of the Dhobi ghats.

Physical space of the Dhobi ghat anchors the lives of Dhobis. At the ghat different Dhobis work side by side for earning their respective livelihoods. It is in the Dhobi ghat that they meet, interact with their neighbors, solve common problems and share gossip. Dhobis who have diversified their livelihoods continue to feel attached to the site of the Dhobi ghat, they either stay here or visit their relatives in Dhobi ghats intermittently. The Dhobi ghat is a physical place and a material space that brings together and connects Dhobi families. It is in the built material environment of the Dhobi ghats that the dynamic interface of gender and technology occurs. A snapshot of the visual appearance of the built environment of and material things in two Dhobi ghats is presented below. This serves as a point of reference for the discussion on dynamics of human and non human interactions inside the Dhobi ghats in Delhi that follow in the proceeding chapters.

No. 28 Dhobi ghat on Mahavat Khan Road

No. 28 Dhobi ghat is a fairly spread out Dhobi ghat, sandwiched between a railway track behind Bengali Market and a road leading to ITO that is dotted with

cars. Two tiny Hindu temples flank the wide passage that leads to the washing area of No. 28 Dhobi ghat on Mahavat Khan Road.

50 Dhobis live and 70 Dhobis work in the No. 28 Dhobi ghat. In addition to the fifty Dhobi families, 44 families belonging to No. 28 Dhobi ghat reside on foot paths on both sides of Mahavat Khan Road after their houses were demolished by the government two years ago. Dhobi families reside in cramped, tiny single room accommodations that immediately surround the washing area on three sides. Nearby on Mahavat Khan road the government has constructed a community toilet.

At the centre of the Dhobi ghat is a washing area. Cement cubicles near the entrance of the ghat are used for dumping piles of clothes. Dirty clothes wrapped in bed sheets are sorted and marked here. Some shallow cubicles (around half feet deep) are filled with water for soaking clothes. The ghat has fourteen hauzes (washing stones) or cubicles filled with water and made with cement). The stones are aligned back to back, seven in each row. British officers constructed the washing area with hauzes that are higher and larger than the ones constructed by the government of India in Dhobi ghats such as Haley Lane, Majnu Ka Tila and Moti Bagh Dhobi ghats. In the ghat, cement structures that are built to emerge from the ground and those that are close to the floor are of various shapes and sizes and have been innovated, designed, built, repaired and renovated by Dhobis over decades for facilitating their work. For example, five years ago elongated cement cubicles that are arranged in an L shape were divided into smaller containers. Edges of most of the cement structures are weathered and corners are broken in some places. One structure has a peculiar symbol engraved in the cement and legend has it that this was embossed when the ghat was first built. The Dhobi ghat also has two individual hauzes constructed in the present decade. Individual hauzes are built closer to the residential area by individual Dhobi families for their own use.

There are large numbers of hydro machines (wringer machines) in the washing area. Hydro machines are spread out across the ghat area. Domestic type

washing machines are positioned along the edges of the ghat area and two washers (small horizontal washing machines) are located in three places.

Behind the Dhobi ghat is a railway track and in a narrow lane between the ghat and the railway track clothes are dried. Clothes are also dried in an open space towards the eastern edge of the ghat on Mahavat Khan Road where rows and rows of bamboo sticks support the clotheslines. In the open space on a patch of grass, women sit on a *khatiya*/ charpoy (bed made with jute and wood) as they fold clothes. Clothes also hang on bamboo sticks alongside the Mahavat Khan Road and are spread out on the foot path to dry under the sun.

Moti Bagh Dhobi ghat

Back alley of a municipality hospital leads to the front entrance of Moti Bagh Dhobi ghat that is located in a corner close to a junction where three narrow roads meet in a crowded residential area. 16 Dhobis live and work in the compact Dhobi ghat in Moti Bagh. The Dhobi ghat consists of a small residential area where 4 flats on each floor tower one over the other in a building with a staircase that ends upon a terrace.

The ghat or washing area is actually a small courtyard that is covered by a shed. The washing area has a row of 6 hauzs (washing stones) that are neatly constructed with cement and smooth white tiles along one wall of the ghat. Opposite to the hauzes are old *bhattis* (furnaces) that were once popular for boiling clothes for getting rid of dirt (*mael*) but which are now defunct and contribute to the messy look of an otherwise tidy ghat. In between upon the smooth floor are two bath tubs, old ones made of plastic in which clothes are soaked and rinsed. Near the tubs is a curious cement structure upon the floor that is round and low and conical in the centre, the structure too can hold water and has been developed by Dhobis themselves. In one corner of the ghat are two washer machines, they are small and horizontal, similar to the ones used in small guest houses. On another side adjoining the residential area two hydro machines

(wringer machines) are situated and they are constantly in use.

On the ground floor of the residential area there is a room for ironing clothes. It has huge piles of freshly laundered white clothes that are waiting to be ironed on a bed, piled against a wall. The press room also has a small colour television, a bed, and a picture of Hindu gods. The back door of the Dhobi ghat complex opens into an area for drying clothes that merges with a wide public park. In the open area immediately adjoining the ghat premises, rows and rows of clotheslines are cramped close together. Two bamboo sticks are arranged in a cross and four bamboo sticks together hold each row of clothes. The clotheslines are fitted with double nylon ropes and do away with the need for cloth clips. Clothes usually are of various types and include towels, bed sheets, restaurant napkins, synthetic colourful clothes and uniforms of musical bands. Clothes are also spread out upon the green grass of the public park behind the ghat to dry under the afternoon sun.

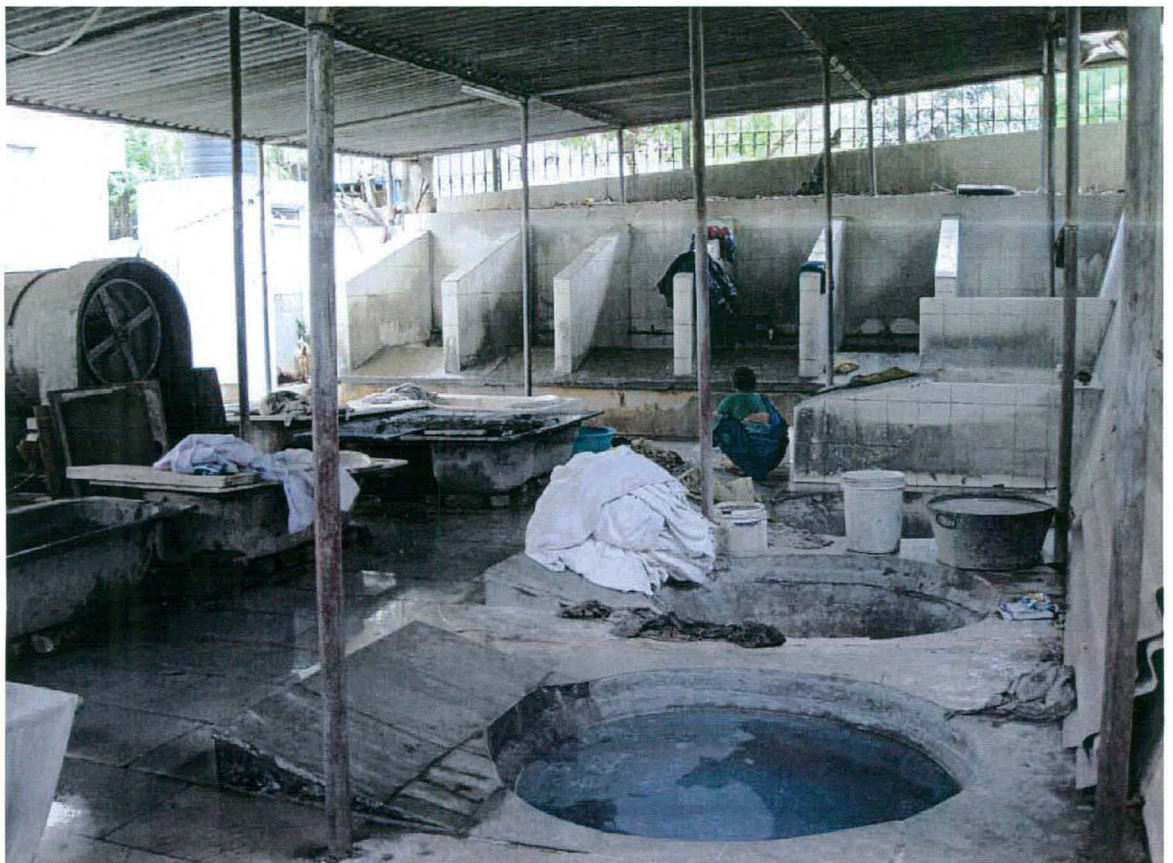
The space and the built environment of Dhobi ghats anchor the lives and livelihoods of Dhobis. Built environment is a part of everyday life of a Dhobi family. The following chapter takes the built environments of the No. 28 Dhobi ghat and Moti Bagh Dhobi ghat as described above as a reference point to explore the reconfiguration of gender based division of laundry tasks with the laundry technologies.

Dhobi communities in Delhi are a diverse group. They differ on the basis of their scale of laundry work, financial and social status and practice of alternative occupations that carry greater prestige for members of the Dhobi *Samaj*. Dhobis currently differ in their employment status and place of residence. A majority of Dhobis migrated from Uttar Pradesh, Rajasthan and Madhya Pradesh to settle in Delhi three generations ago and to work for the British. Thereafter Dhobis laundered the leased of family wash for client families and currently a majority of their current clients are commercial establishments such as small hotels, hospitals, offices and music bands. Dhobi ghats are also changing with demolitions, laundry technologies and transformations in clients and relationships with clients that take the flavour of business liaisons in place of patronage. However some Dhobis

continue to be bound in modified *jajmani* relationships with their clients. Laundry technologies that are enabling some Dhobis to reap greater profits have simultaneously jeopardized the livelihoods of small scale Dhobis and reinforced income inequality within and amongst Dhobi ghats. Domestic washing machines have taken away the wash from some Dhobis while Dhobi women continue to launder clothes in homes of clients who have washing machines that are displayed to connote wealth and social status. This chapter highlighted the ways in which Dhobis share the space and built environment of the ghat and showed that washing stones and water are shared while new laundry technologies are individually owned and operated. The chapter also mentioned differences in the built environments of different Dhobi ghats. The dynamics of gender and laundry work that occur inside the Dhobi ghats are explored in the next chapter.



A Haуз (behind the bath tub) in Majnu Ka Tila Dhobi Ghat, Civil Lines



Washing Area of Moti Bagh Dhobi Ghat



Washing Area of No. 28 Dhobi Ghat, Mahavat Khan Road



A Hydro machine (dewatering/ wringing machines)



Women operates a Washer machine in Moti Bagh Dhobi Ghat



Factory, mechanized laundry in No. 28 Dhobi Ghat

Chapter III: Configurations of Gender, Space, Tasks and Technologies

Focus of this chapter is on the configuration of gender based division of laundry work inside the built environment of Dhobi ghats. The chapter explores the ways in which, new laundry technologies reconfigure the gender based division of laundry work. The phrase ‘laundry work’ in this chapter includes both the process of cleaning and ironing clothes as a whole and the series of individual laundry tasks along with the specific sites and space where each laundry task is performed.¹ Fieldwork in three Dhobi ghats and interviews with Dhobis from different ghats in Delhi show that different physical spaces in Dhobi ghats and the various tasks that comprise laundry work are assigned to women or men, therefore the three themes of space and tasks and technologies organize this chapter that also includes factors other than new laundry technologies that challenge the gender based division of laundry work in Dhobi ghats in Delhi such as Washerwomen and hired workers.

3.1 Gendered Space

Literature from diverse contexts shows the links between physical and cultural space, the built environment and gender. Scholars have also looked at the work place as a sphere where men enact masculinities. The following section brings together perceptions of Dhobi communities regarding space in the Dhobi ghat.

Dhobis belonging to seven Dhobi Ghats in Delhi and the DGSY distinguish the zone of the washing area or ghat area within the physical area of the Dhobi Ghat. The Dhobi ghats also include space for drying clothes and a residential

¹ The phrase “laundry work” in this chapter refers to either the entire process of laundry work, or to a bunch of laundry tasks that are clubbed together where the phrases “men’s work” and “women’s work” are used. Individual laundry tasks that together as a series constitute laundry work or laundry are referred as “task”.

space. Dhobi men and not Dhobi women work in and occupy the washing of Dhobi ghats. Inside the washing area elderly men and male heads of households mark and sort clothes, discuss the working of the ghat and make decisions about water distribution and split common costs. Younger men help out with washing and join the large number of migrant workers who are employed for hand washing clothes.

Washing area of a typical Dhobi ghat is characterized by hauzes (washing stones). Cubical cement structure of the hauz is filled with water and has a wall on the back, on one side and a stone slab that slopes downward away from the container towards the front on the other side. The structure of the hauz enables the Washerman or Washerwoman standing inside the cubicle, waist deep in water, to thrash clothes upon the slanting stone slab. This is the procedure used for cleaning clothes. According to Dhobi men and women of all ages working on the hauz requires ardor, physical strength and *mehnat* (roughly translated as hard work). A middle aged man from No. 28 Dhobi ghat mention that at dawn during winters the water in the hauz is cold and sometimes sharp iron nails prick and punctures the feet of Dhobis. Dhobis notice the wounds only after they finish washing clothes as they are numbed doubly by the cold and by the severe exercise of operating the hauz. Dhobi men portray the act of washing clothes on the hauz as work requiring physical strength and endurance that aligns closely with the rough, adventurous, tough, macho images such as that of 'strong men who work hard' that the stereotypes of masculinity conjure up. Dhobi women step back in shock at the suggestion that they too could use the hauz, and emphasize, "it does not look good for women to be drenched in water in front of strangers" and that "it does not look good for women to work with men, especially strange men and hired workers who work in the washing area". Women's responses reflect their internalized cultural ideals of what constitutes proper behaviour, and appropriate work, for women. The gender based division of space and work in the Dhobi ghats is an example of how culturally constructed these distinctions are.

Intermittent spurts and splashes of water wet the work space of the washing area. Men working in the ghat often dress in *baniyans* (undershirts),

towels or pull up their trousers till their knees. In the Dhobi community where most married women cover their heads with *saris* (attire, dress) and observe strict rules of dress in accordance with the Dhobi *Samaj*'s unspoken but comprehended prescriptions of norms for "good women". Incongruence between the norms of dress for women in the Dhobi *Samaj* and the norms of dress that facilitate working in the washing area of Dhobi ghats, together work to exclude women from working in the ghat area.

Washing area of Dhobi ghats are largely silent spaces where self employed men work on different washing stones and their own machines against the background sounds of splashing water and thrashing of clothes. Physical distance amongst different workers in No. 28 Dhobi ghat is vast and men continue to call out to each other from across the ghat. Often the Dhobis pick on a neighbour who has more clothes to launder or *mota kaam* (fat work, but refers to big, or substantial, amounts of work and income) and pull his leg. Dhobi men also engage in hoarse play in the washing area. Language, the manner of speaking and exchanging information amongst male Dhobis in the ghat area is sprinkled with bad words and names. This constitutes and reinforces the ambiance of the washing area in congruence with a certain type of "crude masculine culture". The social space of the washing area with its particular banter excludes women and men exchange innuendos that objectify women. Dhobis who are residents of the ghats and not hired workers tend to participate loudly in conversations and bickering in the ghat area. Class, age and gender all collude to empower some Dhobi men to assert themselves much more than other Dhobis.

Culture of the No. 28 Dhobi ghat's washing area is similar to David L. Collinson's portrayal of shop floor culture in a lorry making factory. Collinson shows how exclusively male working class workers uses joking to express resistance in socially tolerable ways, relieve stress and break the monotony of their tasks. Dhobis like the shop floor workers in United Kingdom (1930-1960s) take pride in manual work, and reinforce their sense of masculinity by highlighting their role as providers for their families while hired workers most

often quietly go about their work.²

In a similar vein Madhavi Desai in *Women and Built Environment* that carries the flavour of traditional architecture across various regions in India writes that “though space may be physically available and may not have distinct barriers for women, it is still not socially or psychologically available to them”.³ Farther Desai argues that in Indian society girls internalize the use of space and behavior including posture, dress and speech.

Dhobi women do not wash clothes in the washing area and they do not often “go to the ghat” area of the Dhobi ghat. However they frequent spaces outside the nucleus of the ghat area for drying clothes such as neighboring parks, flyovers, back alleys of colonies, roads and open spaces. Dhobi boys on the other hand often “hang out” in the washing area watching their fathers and uncles work. Boys absorb the ways of work, learn the tasks and skills of Dhobi work after school hours and may wash a few clothes in the ghat area to help their family. Dhobi boys as they grow up contribute by occasionally washing clothes manually, a task which their community associates with physical strength and energy. Similarly, Radhika Chopra shows the internalization of space for men in a Punjabi village. Younger men learn the ways of work in agriculture fields from older men. Older men who refer to boys as child or “beta” make it clear by their language and the tasks assigned to youngsters that they have to put in effort to belong as equals in the field, to drive the tractors and not merely accompany the driver of the tractor. Women remain in control at home and division of workplace, the field and home that is women’s domain is learned by children. Adolescent and youth men Chopra shows, take the third space of the street which they claim in late evenings and where they experiment with street fights, masculinity and sculpt their identities. Literature also focuses on the congruence of the workplace with men’s domain that also provides a field for enacting and maintaining masculinities. Similar to the farmers in Punjab, Dhobis also refer to younger men

² David L. Collinson, “‘Engineering Humour’: Masculinity, Joking and Conflict in Shop-floor Relations,” *Organization Studies* 9, no. 2 (1988): 181-199.

³ Madhavi Desai, ed. *Women and Built Environment* (New Delhi: Zubaan, 2007), 3.

and women as “*beta*” and “*beti*” respectively. Unlike Chopra however this research does not interpret the word “*beta*” as a display of superiority or assertion of masculine power by adult Dhobis since the terms *beta* and *beti* (for girls) are widely used in Delhi for warmly addressing a person who is much younger than oneself in age.

Gendering of the ghat space across different Dhobi ghats differs. The washing area in Moti Bagh Dhobi ghat in contrast to the washing area in No. 28 Dhobi ghat is often frequented by women Dhobis who also work in the ghat area while they continue to avoid using hauzes. The washing area in Moti Bagh is tiny. The ambience at Moti Bagh is akin to that of a warm neighbourhood where a couple of families using only family labour (without hiring migrant workers) work in their *angan* (courtyard) together.

Dhobi families who wash clothes for a livelihood view washing areas of Dhobi ghats as masculine spaces where men work. Dhobis with a relatively higher economic and social status perceive the ghat area differently. Such Dhobis have either diversified their livelihoods or they employ labourers to work in the washing area where they themselves do not work. They view the ghat area as a space that is coloured by ‘particular kinds of Dhobis’ who are marked more strongly by their “lower” financial status and the working class ‘Dhobi way of life’ than exclusively by their gender. Male Dhobis from Moti Bagh who have diversified their livelihoods such as youth who have opted for paid employment in the private sector see the ghat area as a ‘space for manual labour’ where economically and socially “weaker” Dhobis who are unable to earn their way out of living the Dhobi way of life, eke out a living. Neither men nor women from families who consider themselves ‘superior’ (economically and socially) in comparison to the Dhobis who labour in the ghat area, visit the ghat area as they perceive the space as marked by class identities in addition to the gender identities of people who work in the washing areas of Dhobi ghats. Keeping in mind the social division space in Dhobi ghats, the spotlight now shifts to tasks that constitute laundry work in the Dhobi ghats.

3.2 Gendered Tasks

Breaking laundry tasks into thirteen subtasks, this research asked members of households in two Dhobi Ghats to share who performs which task in their family.⁴ Across the Dhobi ghats similar understandings of men's tasks and women's tasks emerge while some tasks are shared by both women and men. While a general classification of men's and women's work is available, variations in practice occur for those common tasks that are gender neutral. These are undertaken by people depending upon the age, health and number of workers in the Dhobi family. For families who employ hired workers or migrant wage labourers, and for those families that have many young men and few clothes for laundering almost all tasks including those classified as women's work are undertaken by the male workers. Various laundry tasks, the workers who perform them and the culture that envelops them are presented below. For analysis this chapter draws upon the work of M. Carme Alemany Gomez who shows how gender based division of work in a washing machine manufacturing unit in Spain is perceived by workers who describe tasks as "light work" and "heavy work". Interestingly, in the Dhobi ghats certain tasks are described by Dhobis as "*halka kaam*" that translates as 'light work'. Also, while no task is called 'heavy work' by Dhobis, adjectives that are used to portray certain tasks that men do are strikingly similar to those that Gomez labels as 'heavy work'. Robert Horowitz's findings from American meat packing industry show that while rhetoric associated men with heavy work unlike women, women in units such as "ice hell" (where meat is trimmed with knives in a workplace with very low temperature) lifted heavy buckets of meat, thus undertaking heavy work as well.⁵

Dhobi work is labour intensive and involves the labour of entire families including of schoolchildren who keep an eye on the clothes drying in the

⁴ Sample for questionnaires comprises of Dhobi families in No. 28 Dhobi Ghat (30 out of 50 families) and Moti Bag Dhobi Ghat (10 out of 12 families). Selected Dhobis in Majnu Ka Tila Dhobi Ghat, Princess Park Dhobi ghat, Mahadeo Road Dhobi ghat and Lodi Road Dhobi Ghats participated in a focused group discussions on laundry tasks and gender.

⁵ Roger Horowitz, "Where Men Will Not Work": Gender, Power and Space and the Sexual Division of Labour in America's Meatpacking Industry 1890-1990," *Technology and Culture* 38, no. 1 Special Issue: Gender Analysis and The History of Technology (1997): 201-202.

peripheries of their Dhobi ghat. The task of keeping a watch on the drying clothes (*nazar rakhna*), saving clean clothing from dogs, rain and thieves is collectively undertaken by a Dhobi ghat's residents. Some middle aged women in No. 28 Dhobi ghat observe, "clothes dry by themselves here", thereby underscoring the shared nature of this work.

One dimension of the indigenous 'knowledge technology skill' ensemble of the Dhobis aligns with what a twenty year old woman in 28 No Dhobi ghat calls "*the varadan* (fulfillment of a wish, a gift) *given by God to the Dhobis*". As Dhobis spread out clothes for drying (*sukhana*) anywhere and everywhere including on *gandagi* (filth) the *varadan* ensures that the clothes do not get dirty. The task of drying clothes is labeled as the work of men while all Dhobis across age and gender participate in drying clothes on the peripheries of their Dhobi ghats.

Another task that involves conceptualizing, identifying, sorting and marking clothes of client's with symbols is performed by men in the ghat area. "Women do not know this work" shares a middle aged man in No. 28 Dhobi ghat. This task also isolates women from learning and practicing an aspect of the indigenous 'knowledge technology skill' ensemble of Dhobis.⁶

Dhulai includes soaking clothes in water treated with chemicals, scrubbing them with soap, washing and rinsing the fabrics with water before wringing them dry. This process of washing clothes is called *dhulai* when it is undertaken within the washing area of Dhobi ghats where it is performed by a particular method that utilizes the built environment of the ghat space and involves the laundry technology of the *hauz*. *Dhulai* constitutes a core task in the laundry process that fetches an income for self employed Dhobi men. Undertaken in the ghat area, *dhulai* is the work of men.

⁶ Overlap between knowledge and male bearers of that knowledge may be explored further by either separating knowledge a neutral body of knowledge from people who use it who may be masculine or by looking for gender both in the people who use the knowledge as well as in the knowledge itself as researchers in science and technology studies seek to do and as Evelyn Fox Keller does with science as a body of knowledge.

Dhobi women launder their own family's clothes which they refer to as *kapde dhona* (washing clothes) instead of as *dhulai*. Dhobi women launder their own family wash inside their houses or in Dhobi ghats where houses are not equipped with plumbing and indoor water supply, just outside their homes but within the residential areas of Dhobi ghats. Thus Dhobis distinguish between laundry work as an income generating work undertaken in the workspace by men and laundry work that is part of unpaid domestic work undertaken in the residential space of Dhobi ghats by women. Washerwomen from No. 28 Dhobi Ghat and Majnu Ka Tila Dhobi Ghat problematize this simplistic segregation as they commercialize the task of *kapde dhona*, they use their skills of *kapde dhona* to earn an income. Washerwomen regularly visit *kothis* (houses) of their clients for washing clothes which they refer to as *kapde dhona* (washing clothes) instead of as *dhulai*. The *kothis* of clients where Washerwomen launder clothes (soak, scrub, thrash, rinse, wring) are located outside the Dhobi ghats but are in the vicinity of the Dhobi ghats at a walking distance in Bengali Market and Civil Lines respectively. However, the washing space in Dhobi ghats with its built environment and hauzes continues to be out of bounds for women and they do not perform *dhulai* in the washing or ghat area of Dhobi ghats. Thus one strand of *Dhulai*- the income earning potential is exploited by women as they wash clothes in their client's houses. Other strands that constitute *dhulai*, process and method of washing clothes inside the washing area and utilizing the hauz and built environment of Dhobi ghats remain firmly within the domain of men's work.

Washerwomen by undertaking paid work of *kapde dhona* modify the gender based segregation of washing clothes for an income to some extent for Dhobi communities. However this modification cannot be seen as a transformation or reconfiguration of gender based division of work since *dhulai* continues to be exclusively men's work.

The classification men's tasks and women's tasks is similar across Dhobi ghats in Delhi. However the tasks that men and women undertake in practice and can be observed doing in a few Dhobi ghats varies from the normative classification (for all Dhobi ghats) that is verbally shared. As seen in the previous

sub section (gendered space), at the Moti Bagh Dhobi Ghat “women work more” argues a woman Dhobi who washes and wrings clothes in the ghat for meeting tight deadlines while her father frequently departs during the crucial working hours on his scooter (two wheeler) for collecting clothes from their client guest houses.⁷

Folding of clothes is referred to as “*halka kaam*” (light work) in comparison with *dhulai* (washing) which is not directly referred to as ‘heavy work’ by the Dhobis. Men and younger boys can help in gathering the clothes from clotheslines as they mostly hang the clothes after *dhulai*, but folding clothes is the work of women. Folding is often undertaken in the peripheries of the Dhobi ghats where clothes are dried or in residential areas where people usually work in groups of two for folding bed sheets. Dhobi women who work in an enclosed room near the ghat area in Majnu Ka Tila Dhobi Ghat for around four hours per day, attest to the fact that the tasks of folding and ironing clothes are monotonous and physically strenuous. Across the Dhobi ghats when labourers are employed by Dhobis and are available for folding clothes, the “*halka kaam*” too is assigned to them. Concurring with the analogy of “light work” as women’s work, M. Carme Alemany Gomez unpacks physical strength as a facet of job design in factories where a particular washing machine is manufactured in Spain.⁸ She shows that “tasks that seem light” “impose repetitive strain on the hands, elbows, shoulders and back” and she contrasts the “absolute level of strength” required by a task with the “frequency and continuity with which effort has to be sustained” in a task. Gomez concludes that tasks that are labeled as “light work” require as much physical strength (though in a different and gradual manner) as the tasks that are labeled as “heavy work”. She mentions that while men doing “heavy work” can take advantage of policies that shield them from over exertion during their work (since it can be easily measured as the amount of force applied in one task),

⁷ The young woman was compelled by her family to quit pursuing higher education full time and to pursue her Bachelors of Arts degree in Delhi University by correspondence instead from the second year of her course.

⁸ M. Carme Alemany Gomez, “Bodies, Machines and Male Power,” in *Technology and Society, Building our Sociotechnical Future*, eds. Deborah G. Johnson and Jameson M. Wetmore (Cambridge, Massachusetts, London, England: MIT Press, 2009), 389-405.

women workers whose exertion is dispersed across tasks and is difficult to measure cannot. Roger Horowitz's literature review of rhetoric on gender based division of labour also shows that women are widely perceived to be "clean workers" who are "innately" more "dexterous" than and "less strong" than men workers. Findings from his study on American meat packing industry and those of Tilly Olsen whom he mentions show that the actual and wide range of women's tasks sharply differs from this rhetoric and narrow range of "abilities" that women are incorrectly attributed to have. Gender based segregation of tasks according to Horowitz is not simply a result of the roles considered appropriate for women and men.⁹

"Whoever chances upon ironing work, does it!" exclaims a woman in Moti Bagh Dhobi ghat. Patterns in the data show that when ironing work makes a meager contribution to the family income, it is pursued for around two hours daily by elderly or young women in their homes inside the Dhobi ghat where they iron clothes belonging to households in residential areas near their Dhobi ghat. Single person families such as a destitute woman in No. 28 Dhobi ghat and an elderly man in Mahadev Road Dhobi ghat sustain themselves by ironing clothes for households in their neighborhood and cover their ironing shed with tarpaulin at night and sleep there. Ironing shops run by Dhobi families for catering to a variety of clients including restaurants, offices, hospitals, hotels are led by male heads of households who sometimes employ labourers for assistance or draw upon the labour of their families. A few ghats such as Moti Bagh Dhobi ghat and Majnu Ka Tila Dhobi ghat have ironing rooms built by the government where men and women of different ages iron clothes.

Cultural constructions of "*halka kaam*" in Dhobi ghats include ironing. However while ironing work is considered "appropriate for women" it is not considered "inappropriate for men". Dhobis across gender and age iron clothes and complain of the strain caused by the monotonous work that requires careful hand- eye coordination. Findings from the Dhobi ghats contrast with the cultural construction of "light work" and its incongruence with masculinity and its

⁹ Horowitz, *Technology and Culture* 38:191.

correspondence with femininity as it is depicted in Gomeze's analysis of workers with "light repetitive jobs". She mentions that male workers "were inhibited by their sense of themselves as "men" and did not "admit to fatigue" in jobs calling for "no visible level of physical strength" while women workers "complained" about work induced strain without hesitation as it did not "affront their gender identity".¹⁰ In contrast to Gomez, Dhobis both men and women often complain about the strain caused by ironing work on their eyes, arms and legs (ironing is performed while standing).

Fetching clothes from clients and delivering the freshly laundered packages back is the work of elderly men and in their absence of younger men. Exceptions to the rule are Dhobi women who walk to houses in Bengali market for washing clothes; bring back clothes for ironing to the ghat and the school going daughters of three families who deliver the ironed clothing to houses in Bengali market on their way to school in the morning. In Gomeze's words, "masculinity is associated not only with physical strength but also with physical mobility".¹¹ From one angle transporting clothes comes with mobility and akin to Dhobi women, the women in the washing machine factory studied by Gomez in Spain have jobs that both "require" and "permit less mobility." From another angle however the masculinity-mobility nexus made by Gomez does not apply to Dhobi ghats since men's tasks revolve within the washing area (barring the act of fetching clothes) while women's bundle of tasks span the residential area, space for drying clothes and neighbourhood client households in the Dhobi ghat's vicinity.

The tasks of self employed, resident Dhobi men are found to converge at the site of work, the ghat area that is a 'masculine space' in the Dhobi ghat. The 'space-task congruence' then overlaps with the normative allotment of different laundry tasks to women and men that are in turn to be undertaken in specific areas within the Dhobi ghat. Dhobi families, who rely on family labour to perform laundry work, function according to the normative prescriptions of 'gendered space gendered task congruence'. This cultural segregation of tasks according to

¹⁰ Gomez, *Technology and Society*, 397

¹¹ *Ibid.*, 397-398.

gender is broken by male hired workers who are usually migrants from the neighbouring state of Uttar Pradesh. As Dhobi families expand their work and hire labourers or as they diversify their livelihood in a way that does away with the requirement for family labour in laundry work, the employed workers enter the picture. Hired workers have a lower social and economic status and rank lower on one dimension of masculinity that concerns “the ability to provide for one’s family”. Hired workers are made to tread into ‘women’s work’ or ‘*halka kaam*’ (light work) in the Dhobi ghat, thus altering gender based division of work for Dhobi families who employ them.

Dhobi women freed from their laundry tasks with the coming of hired workers and improvements in material standards of living for their families often take up the role of ‘full time housewife’. The housewives take pride in not doing laundry work. Hired workers with their relatively lower social status (most are migrants from Uttar Pradesh) and economic necessity do the work assigned to them. The work of hired workers includes all laundry tasks associated with men and with women and often includes the domestic chores of Dhobi families who employ them.

Hired workers, who are exclusively male, are simultaneously assigned tasks that are seen as men’s work and tasks that are perceived as ‘light work’. The “most strenuous” task that requires physical exertion, hand washing clothes or *dhulai* in the washing area is performed mostly by hired workers, for Dhobi families who can afford to hire workers.

In the light of debates on masculinities at the workplace, the movement of hired workers into women’s work of folding clothes can be viewed as a reflection of a marginalized or oppressed masculinity of the worker or employee. Masculinity of the hired worker who is a subaltern in a subaltern community is complex and while his is a subordinate masculinity in relation to his employers (who materially provide for their own and for the worker’s family), the hired worker who performs more manual labour and is usually a younger, agile man ranks higher along a key dimension of masculinity- that of physical prowess. According to Dhobi men, hired workers are physically stronger because their

employment is contingent upon their physical fitness and ability to carry out laundry work. Presence of hired workers thus challenges the gender based segregation of laundry tasks. Interestingly, the presence of hired workers also contributes to strengthening 'gendered space'.

The association of washing area with masculinity is enhanced by the numerical dominance of hired workers in the washing area of Dhobi ghats that excludes women as it is considered inappropriate for "good women" to work alongside strange men who do not belong to the local communities (*biradaris*) and particularly men with a lower social and economic status. Perception of the washing area as a work space where Dhobi men work for a livelihood with which they sustain their families gets reinforced as men and not women Dhobis continue to perform laundry activities in the workspace of the Dhobi ghat. Dhobi women in turn accept the idea that men will provide for them and that it is "inappropriate" for them to work alongside men and hired workers in the washing space.

3.3 Laundry technologies: Reconfiguring gendered space, gendered tasks?

Drawing from the previous sections on gendered space and gendered tasks, this section explores the adoption and use of laundry technologies such as hydro machines, washer machines, domestic type washing machines, *bhattis* (furnaces) and electric irons that have been introduced into Dhobi ghats. This section approaches laundry technology with a 'technological determinist' assumption that views technologies as both the agents of and the vehicles for achieving desired social changes.¹²

The theorization of women- technology interface for developing countries occurs upon the terrain of development. Women In Technology approach (henceforth WIT), in congruence with women in development approach calls for including more women in and recognizing the contribution of women in science and technology which are viewed as neutral and progressive. The comparatively

¹² 'Technological determinism', the idea that technology impacts society in a one way relationship while remaining isolated from society itself.

recent Women and Technology approach (henceforth WAT) and gender and technology approach (GAT) acknowledge the multifaceted nature of technologies and of modern science, taking a more critical and cautious view compared to the earlier stand that saw technology as the miracle that could fix all problems including gender inequalities. This strand of development thought that subsequently emerged, views the 'technological' in 'technological determinism' differently. In sustainable development thought, modern science and technology are problematized and technology is seen as "violent towards women and nature" and as a political instead of as a neutral vehicle for progress.¹³ The WAT approach calls for critically addressing the question of 'women and technology' and documents the impacts of technology on women's lives that are often negative, such as deskilling and retrenchment of women workers and feminization of work. Feminization of work refers to a higher share of women workers in the labour force of both developed and developing countries according to Standing whom E. Revathi mentions in her article. E Revathi's article in *Rural Transformation* showcases the phenomena of feminization of agricultural work with the adoption of agriculture technologies over time in Andhra Pradesh through an ethnographic study that traces technology's effects on different castes and classes of women and labourers. Women took up *beedi* rolling work with meager pay as their previous work in the fields came to be perceived by them as lower in social status and came to be undertaken by hired labourers. Men migrated and sent remittances from the gulf, altering the patterns of landholding amongst the castes and as men took up off farm work, women supervised labourers reducing their leisure time. Here with the emergence of peasant capitalism, female agriculture labourers have "borne the burden of labour".¹⁴ A similar phenomenon is reflected in an article by Chandri Raghava Reddy. She finds that women workers are preferred in the plant tissue culture industry's

¹³ Vandana Shiva, "Reductionism and Regeneration: A Crisis in Science," in *Ecofeminism*, Maria Mies and Vandana Shiva (New Delhi: Kali for Women, 1993), 23.

¹⁴ E Revathi, "Women's Work and Technology: Irrigation Induced Dynamics in Timmapur of Karimnagar District," in *Rural Transformation: Perspectives from Village Studies in Andhra Pradesh*, Studies in Local Development- 6 eds. G. Naranjan and D. Narsimha Reddy (New Delhi: Daanish Books, 2008), 178.

production process (centered on horticultural plants) not just due to their nimble fingers but more importantly due to the docility of their labour that evades unionization.¹⁵ V. Sujatha shows how a particular community of people whose traditional occupation was tanning leather with vegetable dyes in Tamil Nadu was affected by the modern leather industry facilitated by the State that appropriated raw material, sustained itself on labourers whose condition was “pathetic” while leather exports fetched the largest percent of foreign exchange. Empirical studies on the intersection between the categories of women and of technology especially in the low income countries focus on operation and use of technologies or document the impacts of technology on women’s lives.¹⁶ Judy Wajcman writes that “capitalism continuously applies new technology designed to fragment and deskill labour, so that labor becomes cheaper and subject to greater control,” and emphasizes the importance of gender of the workers that plays a role in patterning the processes of deskilling and control.¹⁷ Cynthia Cockburn’s article on the history of technological changes in printing also shows that technology is linked with deskilling and retrenching labour as employers seek technology to bring down the adult wages and break the nexus of skilled workers.¹⁸ Most women in low income countries and clearly in the Delhi’s Dhobi ghats encounter technology either as potential or actual consumers and users of technology or they brace the side effects and impacts of technologies that are adopted by communities and the world surrounding them.

This section describes each of the laundry technologies (machines) and the ways in which they have been adopted and integrated in the small scale

¹⁵ Chandri Raghava Reddy, “Plant Tissue Culture Industry and Women’s Participation: ‘Nimble Fingers’ or Docile Labour,” *Gender, Technology and Development* 11 no. 179 (2007):179-198.

¹⁶ B. N. Bhaskar, “Technological Innovation and Rural Women,” in *Technology and Gender: Women’s Work in Asia*, ed. Cecilia NG. Choon Sim (Kuala Lumpur: Women Studies Unit and Development of Extension Education, Universiti Pertani and Malaysian Social Science Association, 1987), 1-16.

Maya Prabhu, “Marketing Treadle Pumps to Women Farmers in India,” *Gender Technology and Development* 7, no. 2 (1999):27-30.

¹⁷ Judy Wajcman, “Reflections on Gender and Technology Studies: In What State is the Art?” *Social Studies of Science* 30, no. 3 (2000): 448.

¹⁸ Cynthia Cockburn, “The Material of Male Power,” in *Social Shaping of Technology, How the Refrigerator got its Hum*, eds. Donald MacKenzie and Judy Wajcman (Cambridge, Massachusetts and London: Open University Press, 1985),131.

sociotechnical ensembles of Dhobi ghats and shows how the patterns of adoption and use of technologies contradict the assumption of ‘technological determinism’.

The potential of some laundry technologies such as *bhattis* (furnaces) that are used for boiling clothes in altering gender based division of laundry tasks is uncertain as seen in the data from three Dhobi ghats. *Bhatti* is a laundry technology that has large vessels in which white cotton clothes are boiled overnight over an open fire that consumes fuel wood, emits smoke, lets out char and carries the threat starting a fire. A young boy in No. 28 Dhobi ghat observes that “*bhattis* are the predecessors of water heating, washing machines and their work is at present undertaken by the domestic washing machines”. Boiling clothes for getting rid of dirt was the work of men in Minto Road Dhobi ghats and Moti Bagh Dhobi ghat where different Dhobi families stopped using the *bhattis* two to fifteen years ago. Dhobis in No. 28 Dhobi ghat stopped using *bhattis* because the *bhattis* pollute the environment; the white uniforms of nurses are not leased out to them for washing anymore (hospitals have opened their own laundries) and their current clients are hotels who supply relatively clean towels for washing. Moti Bagh’s Dhobis stopped using *bhattis* because synthetic fabrics that began replacing cotton clothes two decades ago form a bulk of the wash. The decline in boiling clothes with *bhattis* in Dhobis ghats is similar to the decrease in the use of boiling and hot water for laundry activities in America where frequency of the laundry has increased.¹⁹ In contrast to the No. 28 Dhobi ghat, women continue to operate *bhattis* in Lodi Road Dhobi ghat where the government is considering the option of introducing Liquefied Petroleum Gas (LPG) based *bhattis*.²⁰

Dhobi workers across age, gender and economic status undertake ironing work. Data shows that coal irons and electric irons are simultaneously used by most Dhobis. Transition from coal based iron to the electric iron for the Dhobis does not appear to reconfigure gender based division of ironing task in the Dhobi ghats.

Washer machines and washing machines that mechanize the task of

¹⁹ Elisabeth Shove, “Converging Conventions of Comfort, Cleanliness and Convenience,” *Journal of Consumer Policy* 26 (2003): 401.

²⁰ Dhobi Ghat Sudhar Yojna, *Feasibility Report for Model Dhobi Ghat*, 4.3.

washing clothes- lathering, scrubbing and rinsing clothes emerge as competitors to the hauzes that are ‘culturally out of bounds’ for women workers. Adoption of washing technologies offers the option of altering the gender based division of the tasks in the Dhobi ghats because the task of washing clothes is associated by Dhobis with the requirement for physical strength that the men in Dhobi ghats are perceived as embodying and not women. Machines make the perceived need for physical strength redundant and therefore open up the opportunity for reconfiguring gender based segregation of washing tasks in the Dhobi ghats.

However washer machines are installed within the washing areas of Dhobi ghats. Located in the washing areas of Moti Bagh and Majnu Ka Tila Dhobi ghats are two washer machines each while No. 28 Dhobi ghat’s washing area has around six washer machines. Washer machines are elongated rectangular machines that roll horizontally and wash large chunks of homogeneous clothes. Dhobis continue to use hydro machines for wringing clothes and the washer machines are usually either not equipped with dryers or the dryers are not used. Washer machines are expensive; consume electricity and a few Dhobi families across Dhobi ghats have “*mota kaam*” or sufficient laundry work to own and operate washer machines. However, in the Moti Bagh Dhobi ghat unlike in No. 28 Dhobi ghat and Majnu Ka Tilla Dhobi ghat, washer machines in the washing area are used by two women and not by men and hired workers. Hired workers are absent in Moti Bagh Dhobi ghat and Dhobi families draw upon their own labour for carrying out laundry work. Another woman in Moti Bagh ghat washes clothes manually while sitting on the floor of the ghat as she avoids using the haуз.

Largely enclosing the washing area of No. 28 Dhobi ghat, a few domestic washing machines are situated in the tiny lanes of the residential area. Domestic washing machines entered the Dhobi ghat five to seven years ago. Washing machines are sparingly operated by women for carrying out laundry work for clients. Women belonging to a few Dhobi families who have positioned their domestic washing machines just outside their home, in the residential area of No. 28 Dhobi ghat operate the machines for laundering clothes for clients and perceive their role as “helpers” of male members of their families. Younger

women use the new technology for cleaning clothes of their own children. The top loader washing machines that are designed for domestic use with their small capacities for handling the family wash are a curious sight in the No. 28 Dhobi ghat. Gomez in her exploration of the design of domestic washing machines shows how male technicians in a laboratory for testing the washing machines simulate the “technical ignorance of women” and tailor the buttons of the machine for “nimble fingers” to operate.²¹ Helen Meintjes’s research from Soweto, in rural Africa reveals that washing machines are one of the last domestic technologies on the “to be purchased list” of households that embrace radios, televisions, refrigerators and microwaves that more members of the family can use. Washing machines that are seen as exclusively easing the labour of only the women in the family are culturally constructed as devices that “make lazy women”.²² In contrast to the community in Soweto, washing machines in Dhobi ghats are readily embraced and the washing machines ease the labour of Dhobi men, contribute to the livelihood of Dhobi families and are sited outside the domain of housework (which includes washing clothes of the Dhobi families and remains in Dhobi women’s basket of chores) in Dhobi ghats in Delhi. Xiu Jie Wu in her article on electrical appliances in rural China emphasizes that while the marketing strategies of washing machine manufacturers target rural men who would purchase the machines, the needs of rural women users of the washing machines such as adapting machines to intermittent electricity and water supply and to the rural terrain are not incorporated in the design of washing machines.²³ Along the dimension of tailoring the small washing machine in accordance with the requirements of the Dhobi consumers cum users, washing machine assemblers in Delhi’s Kamla market offer lucrative schemes. The washing machines are modeled on the designs of top loader domestic washing machines (the prices of which start from Rs. 8000 per piece) but are available for around Rs. 2000 a piece

²¹ Gomez, *Technology and Society*, 393.

²² Helen Meintjes, “Washing Machines Make Lazy Women” Domestic Appliances and the Negotiation of Women’s Propriety in Soweto,” *Journal of Material Culture* 6 (2001): 325.

²³ Xiu Jie Wu, “Men Purchase Women Use: Coping with Domestic Electrical Appliances in Rural China,” *East Asian Science, Technology and Society: An International Journal*, no. 2 (2008): 211-234.

with a one year warranty. Locally assembled, the washing machines that are adapted to run relentlessly in rough conditions of the Dhobi ghat are easily repaired by local technicians and electricians.

“Indigenous innovation of Dhobis” is how the Dhobi Ghat Sudhar Yojna describes the dewatering and wringing machines called hydro machines that mechanize the laundry task of wringing (*nichodana*) washed clothes. Resembling a *tandoor* drum from the outside, hydro machines can be operated manually with a handle. In the last five years, electric hydro machines have become more common. Affordable, easily assembled and repaired, the use of hydro machines has proliferated in Delhi’s Dhobi ghats in the previous two decades. Most Dhobi families in No. 28 Dhobi ghat either own hydro machines or borrow them from their community (*biradari*) members, especially during winters when clothes are hard to dry.

Wringing clothes is part of the *dhulai* task and is labeled as men’s work across the Dhobi ghats. Dhobi women in No. 28 Dhobi ghat emphasize that hydro machines have eased the labour requirements for wringing clothes and thus “anybody” (including men, women, children and the elderly) can operate the hydro machines. Yet, few women defy the norm of gender based division of laundry tasks and actually operate hydro machines in No. 28 Dhobi ghat. In Majnu Ka Tila Dhobi ghat also, men and migrant workers operate hydro machines and not women. In contrast to the stronger distinction and “masculinization” of the washing space in No. 28 Dhobi ghat where few women barring an elderly woman who operates hydro machines venture, one mother daughter dyad constantly use hydro machines in Moti Bagh Dhobi ghat. For this family in Moti Bagh Dhobi ghat, arrival of the hydro machine reconfigured gender based division of the wringing task. However laundry technologies alone are not responsible for reconfiguring gender based division of laundry work because another women in Moti Bagh Dhobi ghat whose family does not own laundry machines also washes clothes in the washing area of Moti Bagh Dhobi ghat though she does not use the laundry technologies that men use for *dhulai* but utilizes the method of *kapde dhona*. Washing and wringing clothes for women in

the washing space is possible because the washing area of Moti Bagh Dhobi ghat is analogous to a neighborhood courtyard while still perceived as a “masculine space” by Dhobis, it is “less masculine” compared to washing areas of other Dhobi ghats that are dominated by men, hired workers and where norms of language, behaviour and dress create a social space that excludes women. Reconfigured gender based division of labor as it is currently practiced in Moti Bagh Dhobi ghat is at a tangent from the normative labeling of washing and wringing tasks as men’s work in Moti Bagh Dhobi ghat. New laundry technologies have not reconfigured gender based division of laundry tasks in most Dhobi ghats with the exception of Moti Bagh Dhobi ghat where women workers are understandably not delighted with additional laundry tasks.

Analysis of data in this section shows that the data from Dhobi ghats does not confirm the expected and anticipated trend of changes in gender based division of laundry work with the entry of new laundry technologies. The laundry technologies have adapted to and have been incorporated within the existing ‘gendered space-gendered tasks congruence’ that is also superimposed by division of work according to class and employment status for Dhobi families that hire workers. Reconfigurations of gender based division of labour attributable to the coming of laundry technologies are true for few Dhobi families. The endurance of the ‘gendered space-gendered tasks’ congruence in the Dhobi ghat match with the findings of Ronald R. Kline’s analysis of time use studies in America. According to Kline who considered technological determinism in everyday technologies (such as domestic technologies and automobiles), technologies did not transform gender based division of work. He emphasizes that “urban and rural people wove new technologies” “into existing social patterns to a large extent” and “social norms” and not just availability of modern technology determined the length of a “typical work week” for American farm women.²⁴

²⁴ Ronald R. Kline, “Ideology and Social Surveys: Reinterpreting the Effects of “Laboursaving” Technology on American Farm Women,” *Technology and Culture* 38, no. 2 (1997):385.

In the Dhobi ghats, entry of new laundry technologies does not simply reconfigure gender as the technologies are incorporated within the existing patterns of gender based division of work in the Dhobi ghats. The current patterns of work are characterized by a congruence of 'gendered space' and 'gendered tasks' in the Dhobi ghats. Laundry tasks that are assigned to men are performed in the washing area in the Dhobi ghats where language, codes of dress and manner of speech together create, reinforce and maintain a 'masculine culture' that excludes women. Therefore the technological determinist assumption is only partially appropriate for tracking changes in gender based division of labour. However the new technologies do destabilize the meanings of 'heavy work' and 'light work' that Dhobi communities attribute to various laundry tasks. The coming of washer machines and hydro machines is associated with enabling women to wash and wring clothes in the washing area of Moti Bagh Dhobi ghat that has a weaker degree of segregation of space and a more inclusive, 'less masculine' washing area. A mild challenge to gender based division of laundry tasks in No. 28 Dhobi ghat and Manju Ka Tila Dhobi ghat comes from the Washerwomen who visit houses outside Dhobi ghats and wash clothes there. Dhobis refer to this work as *kapde dhona* a work that is also done by Dhobi women as part of their own household chores in residential areas of Dhobi ghats. The corresponding laundry task of *dhulai* that is undertaken by male Dhobis who wash clothes in the built environment of the Dhobi ghat by using the technology of the haуз for earning their livelihood continues to remain out of bounds for women. By taking one portion of *dhulai*, of washing clothes for an income, the Dhobi women challenge and modify the gender based division of laundry work in Dhobi ghats. However this modification cannot be viewed as a reconfiguration of gender based division of work because the process and method of the *dhulai* task continue to remain exclusively men's work performed within washing area of the Dhobi ghats.

One factor that does reconfigure gender based division of laundry work for some Dhobi families in No. 28 Dhobi ghat and Manju Ka Tila Dhobi ghat are the hired workers, human labour instead of laundry technologies. The division of laundry

work in the Dhobi ghats crucially depends upon the type and number of workers that a family has. Hired workers for example carry out all laundry tasks that are labeled as men's work and women's work for Dhobi families who employ them. Employees in Dhobi ghats are subordinate to the self employed Dhobis who employ them. Class based division of laundry work superimposes and even invisibilizes the normative gender based division of laundry tasks that all Dhobi ghats share. As the hired workers crack the cultural norms regarding 'gendered tasks' and venture into women's work inside Dhobi ghats they simultaneously contribute to strengthening 'gendered space' by bringing a new masculinity marked by lower economic and social status to and strengthening the dominance of men over the washing areas of Dhobi ghats. This idea is farther explored in the following chapter. The hired workers who are present in the data on gender, space, tasks and technologies in Dhobi ghats are blurred by this exploratory research's deliberate search for and excessive focus on non human material things as agents of change. Keeping the focus on material things and the meanings they hold, the next chapter explores the laundry technology called the hauz that is a central feature of the built environments of Dhobi ghat's washing areas where masculine culture prevails.

Chapter IV: Meanings of the Hauz

Built environment is often eclipsed in research on the technology society interface.¹ Assuming that things and technologies have diverse and ever changing meanings for different people who interact with them, this chapter explores one laundry technology that is an integral part of the existing built environment of Dhobi ghats in Delhi – the hauz (washing stone). Previous chapter showed that the hauzes are located in the washing area of Dhobi ghats and they are used by men for thrashing, cleaning and rinsing clothes. While the previous chapter explained the use of the hauz by men with ‘gendered space, gendered task congruence’, this chapter farther explores the gendering of the hauz by using insights from different theoretical approaches to technology. The hauz performs diverse functions and various meanings are attributed to the hauz by different groups of Dhobis in Delhi. This chapter also documents the functions that the laundry technology in focus serves other than its simple function of washing clothes that meets the eye. Functions of the hauz include serving as an appropriate technology, an ornament, a ‘designer technology’ and an obsolete technology.

4.1 *Hauz, a gendered technology*

The hauz is a laundry technology that is a part of the built environment of Dhobi ghats in Delhi. This section analyses the hauz from different theoretical perspectives on technology that reveal the ways in which the hauz is “gendered”. Donald MacKenzie and Judy Wajcman emphasize that technologies come as a whole and not separate isolated devices. They share the example of a washing machine that is integrated in the systems of electricity, water supply and drainage.² The hauz can be similarly seen as technological system that fits with

¹ Steven A Moore and Andrew Karvonen, “Sustainable Architecture in Context: STS and Design Thinking,” *Science Studies* 21, no. 1 (2008):30.

² Donald MacKenzie and Judy Wajcman, eds., *The Social Shaping of Technology, How the Refrigerator got its Hum* (UK and USA: Open University Press, 1985),12.

pipe water supply, can do without electricity and requires manual labour of humans who have specific laundry skills that are more common among Dhobi communities in Delhi.

The hauz was designed and stabilized decades ago. The hauzes in No. 28 Dhobi ghat were designed under the aegis of the British government before 1947. ‘Constructivist perspectives’ on technology (that include ‘social construction of technology’, ‘social shaping of technology’, ‘feminist technology studies’ amongst other perspectives), often emphasize the social aspects that go into the making of technologies. Maria Lohan encourages us to explore technologies at the stage of their development with a gender lens, going beyond the more frequented domain of studying women as consumers.³ It is possible that the hauz was designed by experts in the government who constructed the hauzes perhaps with inputs from Dhobis for male Dhobi users who are seen as the breadwinners in Dhobi families. As seen in the previous chapter the task of *dhulai* or washing clothes with hauzes in the washing area is performed by men. Due to lack of evidence we can only speculate about the making of the hauz. Exploring the design and development of the hauz is problematic after decades of its development. However understanding the hauz as a technology is crucial as new hauzes continue to be constructed and replicate the same or similar design. The hauz is central to the technological ensemble of the Dhobi ghats in Delhi. In newer Dhobi ghats the government is building washing areas that revolve around and often comprise of hauzes. For example hauzes are the focus of the washing area in Dwarka that is being constructed for displaced Dhobis from Rouse Avenue (No. 28 Dhobi ghat). Older Dhobi ghats such as No. 28 Dhobi ghat have washing areas that also include technologies developed by Dhobis for carrying out their work. In No. 28 Dhobi ghat in Minto road area, the local innovations by Dhobis such as a circular cement structure on the floor is used for soaking clothes and bigger cement cubicles for holding water have been divided and made smaller by successive generations of Dhobis as per their requirements. Few of the newer

³ Maria Lohan and Wendy Faulkner, “Masculinity and Technologies, Some Introductory Remarks,” *Men and Masculinities*, 6 (2004):321.

Dhobi ghats do not provide space for indigenous innovations and laundry technologies other than the hauzes. Bath tubs, drums, hydro machines, washers and water tanks are cramped inside or close to the hauz focused washing areas constructed by the government in Moti Bagh and Majnu Ka Tila Dhobi ghats.

Insights from ‘constructivist technology studies’ that assume the existence of “scripts that are built into material objects” and which can be “inferred” offer an alternative path for understanding the hauz. Feminist Technology Studies (henceforth FTS) theorists write that “those who design technology are designing society with the same stroke”.⁴ In congruence with the FTS theorists, Sarah S. Jain also perceives gendered scripts that according to her are “intentionally” or “unintentionally” built into or inserted within material technological objects designed for “gender neutral users”.⁵ According to the feature of closure in social construction of technology (SCOT) the scripts encoded within material objects have the feature/ affordance of interpretive flexibility and can be variously interpreted till the meanings and technical content are narrowed and stabilized by concurring groups of interpreters (including designers and users).⁶ For utilizing this conceptual tool from FTS, this chapter assumes that the hauz has scripts built into its material substance. Unlike FTS however this chapter does not perceive women and men as essentially different and does not see masculinity and femininity as stable constructs that are embodied in the bodies of men and women respectively. Therefore Jain’s work and not exclusively FTS is drawn upon for analyzing the scripts that the hauz is assumed to have.

Although body types of all men and all women are not standardized and some men do have a body type that is similar to the average body type of women and visa versa, Jain shows how air bags kill more women and children during car accidents than men on whom and “unintentionally for whom” the air bags are designed. With this understanding that technologies can be more suited for certain body types than others the hauz is observed with the aim of finding “scripts” that

⁴ Ibid., 322.

⁵ Sarah S. Jain, “The Prosthetic Imagination Enabling and Disabling the Prosthesis Trope,” *Science, Technology and Human Values* 24, no. 1 (1999): 31-54.

⁶ Judy Wajcman, “Reflections on Gender and Technology Studies: In What State is the Art?” *Social Studies of Science* 30, no. 3 (2000): 450-451.

may make the hauz easier to use for the average body type of women and men. Careful observation of the material structure of the hauz and its use by human bodies show that the inbuilt scripts prescribe few characteristics of the worker or user of the laundry technology including height of the worker and the ability to thrash clothes while standing in the water. The hauz can technically be operated by adult average human beings both men, women and elderly persons. Women and men equally have the capacity to operate the hauz. Thus the scripts inside the hauz are gender neutral and the hauz in itself does not privilege the bodies of men or women users.

A second way of inferring the scripts of the hauz is by documenting the stage of closure or stabilization of the meanings of the scripts by concurring groups of interpreters. The ways in which the hauz was previously used and is currently used in the Dhobi ghats according to the Dhobis shows this stabilized meaning and interpretation of the hauze's scripts. The scripts that are built into the hauz may have been initially broadly interpreted to include able bodied men, women, youth and elderly. However the interpretation of the hauzes' scripts by Dhobi communities has reached a closure and stabilized to interpret only younger able bodied men, middle aged men and male hired workers as the appropriate users of the hauz. The following section further explores how the gender neutral hauz comes to be interpreted in gender specific ways.

The hauz is a gender neutral technology when it is seen as separate and isolated from the cultural context of the Dhobi ghats where it is located and used. The following perspective explores the culture that surrounds the technology in use, as the technology as it is practiced and utilized in the Dhobi ghats. Three ideas regarding gender and laundry technologies are simultaneously created and practiced inside Dhobi ghats. Ideas of the appropriate behavior for women and men, the ideas of physical strength that men and women are attributed to have and ideas regarding the use of various laundry technologies including the hauz. Cynthia Cockburn writes that "bodily strength and capability" are "socially constructed and politically deployed" and the "social product of *bodily difference* in size and strength" is developed into an "increasing relative physical *advantage*

to men and vastly multiplied by differential access to technology” (emphasis in the original).⁷ In the context of the Dhobi ghats, Dhobis consider men to be stronger than women regardless of the stronger women and weaker men Dhobis who live in the Dhobi ghats and regardless of the actual amount of work that women do which far exceeds the time, stamina and effort that men put into laundry work.

Keith Grint and Steve Woolgar critique constructivist approaches that show technologies as embodying or being inscribed with social and political scripts that are likely to constrict the interpretative flexibility of these codes that are “encased within” the technologies. They emphasize that “gender of a technology does not lie encased in the fabric of the material” but in the “interpretative framework within which it is constructed,” in “the gaze of the human.”⁸ In congruence with the argument of Grint and Woolgar, Wanda J. Orlikowski outlines a practice lens for studying technology that “focuses on human agency” and on “open-ended set of emergent structures that may be enacted through recurrent use of a technology.” She defines her approach against the constructivist approaches to technology that rope in “closure”, or the idea that interpretative flexibility that is initially negotiated amongst various groups of designers, developers, users gets stabilized and frozen once the technologies are fully developed.⁹ Her practice lens “accommodates people’s situated use of dynamic technologies because it makes no assumption about the stability, predictability, or relative completeness of the technologies”. Distinguishing “technological object” from its “use’ (aspects that are frequently conflated), Orlikowski critiques the idea that technological objects have embedded within them inscriptions that merely unfold according to a “closed set of predefined possibilities” (Though the possibilities are somewhat limited by physical properties of technologies). She simultaneously views what

⁷ Cynthia Cockburn, “The Material of Male Power,” in *Social Shaping of Technology, How the Refrigerator got its Hum*, eds. Donald MacKenzie and Judy Wajcman (Cambridge, Massachusetts and London: Open University Press, 1985), 128.

⁸ Keith Grint and Steve Woolgar, “On Some Failures of Nerve in Constructivist and Feminist Analyses of Technology,” *Science, Technology and Human Values* 20, no. 3 Special Issue: Feminist and Constructivist Perspectives on New Technology (1995):289-292, 305-306.

⁹ Wanda J. Orlikowski, “Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations,” *Organization Science* 11, no. 4 (2000): 411-412.

users do with a technology and its inscriptions, as “enactment” and emphasizes the “knowledge and experiences of institutional contexts in which users live and work and the social and cultural conventions associated with participating in those contexts”.¹⁰ In the context of Dhobi ghats in Delhi, it is considered inappropriate for women Dhobis to work on the hauzes alongside male labourers and in clothes that are likely to get wet. Hauzes are located in the washing area or work space of the Dhobi ghats that is perceived as out of bounds for women as seen in the previous chapter that highlighted the features of the washing area that contribute to making it a masculine space. Inside the Dhobi ghats, Dhobis attribute certain features to laundry technologies and may see them as appropriate for men and women. For example Dhobis opine that the use of the hauz requires physical strength (which they perceive as an inherent attribute of men and not of women). Dhobis also assign different laundry tasks to men and women. Based on the ways in which Dhobis perceive and attribute physical strength, laundry technologies and laundry tasks to women and men, the hauz that is a gender neutral technology by itself, becomes a gendered laundry technology within the context of the Dhobi ghats. Therefore in congruence with Trevor Pinch and Richard Swedberg’s use of the idea of ‘sociotechnical ensemble’, the material object of the hauz and the people (Dhobis) are seen as mutually constituting one another in this chapter.¹¹ Bryan Pfaffenberger highlights the “complexity and inherent heterogeneity of all sociotechnical systems,” which he views as “activity systems” that “constitute knowledge and behaviour reciprocally” by “social, individual and material phenomena” in a “purposive, goal oriented” manner.¹² Pfaffenberger also draws our attention to rituals that enable coordination of labour and Orlikowski highlights recurrent practices of human agents that create and sustain the use of a technology. The rituals that comprise the use of the hauz in the Dhobi ghats by men since generations reinforce and maintain the use of the hauz by men and not by women. Elder Dhobis train younger ones in laundry work and the younger

¹⁰Ibid., 407- 410.

¹¹ Trevor Pinch and Richard Swedberg, eds., *Living in a Material World, Economic Sociology Meets Science and Technology Studies* (Cambridge and London: MIT Press, 2008), 3.

¹²Bryan Pfaffenberger, “Social Anthropology of Technology,” *Annual Review of Anthropology* 21 (1992): 493-509.

Dhobis learn that the hauz is used by men in their communities and not by women. Wanda J. Orlikowski mentions that “understandings of the properties and functionality of a technology” are influenced by “trainers” that shape our interaction with the technology.

Hauzes form an integral part of the way of life of small scale Dhobi families who launder clothes for a livelihood. Men from relatively economically weaker Dhobi families in the Dhobi ghats use the hauzes and wash the clothes while women often work as washerwomen for households near their Dhobi ghats and contribute by folding and ironing the clothes in the Dhobi ghat which they do alongside housework. Out of the 13 women in No. 28 Dhobi ghat who reported working as washerwomen in *kothis* (houses) in Bengali market, all had husbands or sons engaged in small scale Dhobi work and used the hauzes themselves. Self employed Dhobis who use the hauzes often do not own hydro machines and washing machines and may borrow these from their community members. Family income of self employed small scale Dhobis who work on hauzes is often supplemented by family members who have inconsistent jobs in sectors other than laundry work.

Dhobi families who own relatively more laundry technologies such as washers and hydro machines often hire workers for laundry tasks that include operating the hauz. Women whose husbands do not use the hauz themselves are more likely to identify themselves as housewives and they do not work as Washerwomen and in some cases do not even perform such tasks as folding clothes in the Dhobi ghats.

Heterogeneity amongst Dhobi men who may or may not use the hauz brings a new meaning to the gendering of the hauz. The hauzes are not used by young male Dhobis who are comparatively wealthier and whose families hire workers for operating the hauz. Dhobi men who do not use the hauz are not perceived by Dhobi communities in Delhi as not strong enough to operate the hauz nor as less masculine. In contrast, the young Dhobi men who do not use the hauz are regarded with respect because they belong to “*achche ghar*” (good homes, a phrase used for referring to economically and socially well to do families). They

are associated with the dimension of masculinity that concerns the ability to provide for one's family. This dimension of masculinity overshadows the dimension of masculinity that is associated with manual labour and physical prowess. This discussion draws upon debates in the field of masculinities in the workplace and culls out different dimensions of masculinity.¹³ The hauz is not simply a technology that is used by those who are perceived as physically stronger. While women who are perceived as physically weaker are excluded from using the hauz, men who are perceived as wealthy enough to choose not to work on the hauz are not. Stephen Meyer's findings help in interpreting the two types of masculinity. He distinguishes between "rough culture of labourers" and "respectable culture of craftsmen" on the shop floor of American automobile industry (1930-1960).¹⁴ The hierarchy in the dimensions of masculinity that different men have, ranks providing for family as higher than prowess in manual labour in the Dhobi ghats is similar to and also runs throughout the styles of masculinity that Geert de Neve perceives in dying industries in Tamil Nadu in my reading. While de Neve's study focuses on the different factory owners particular styles of masculinity that are emulated by factory workers, the dimension of masculinity that involves the ability to provide for one's family is ranked higher than performing manual work.¹⁵

This section sketched the meanings of the hauz as a gendered technology and explored the gendering of the hauz from different theoretical perspectives. The following section captures three broad meanings that the hauz is taking for different groups of Dhobis.

¹³ Ben Lupton, "Maintaining Masculinity: Men Who Do 'Women's Work'," *British Journal of Management* 11, Special Issue (2000):33-48.

Glendon D. Smith and Hilary P. M. Winchester, "Negotiating Space: Alternative Masculinities at the Work/ Home Boundary," *Australian Geographer* 29, no. 3 (1998), 327-330.

David L. Collinson, "'Engineering Humour': Masculinity, Joking and Conflict in Shop-floor Relations," *Organization Studies* 9, no. 2 (1988):181-199.

Radhika Chopra, "Encountering Masculinity: An Ethnographer's Dilemma," in *South Asian Masculinities Context of Change, Sites of Continuity*, eds. Radhika Chopra, Caroline Osella and Filippo Osella (New Delhi: Women Unlimited, 2004), 36-59.

¹⁴ Stephen Meyer, "Work, Play and Power, Masculine Culture on the Automotive Shop Floor," *Men and Masculinities* 2, no. 2 (1999): 115-134.

Geert de Neve, "Locating Masculinities in the South Indian Textile Industry," in *South Asian Masculinities Context of Change, Sites of Continuity*, eds. Radhika Chopra, Caroline Osella and Filippo Osella (New Delhi: Women Unlimited, 2004), 61-94.

4.2 Hauz, appropriate technology, designer technology and obsolete technology

The hauz is crucial for sustaining the livelihoods of small scale Dhobis and a dominant meaning of the hauz is that of an appropriate technology. The hauz builds upon the existing supply of semi skilled labour of small scale Dhobis and enables them to launder clothes with little capital, away from the river and natural bodies of water to speedily service their clients. Appropriate technology is “labour intensive”, “inexpensive”, “small scale”, “adaptive”, “low cost”, “intermediate” and tailored for less industrialized countries according to Simon Tietel.¹⁶ Susan C. Bourque and Kay B. Warren see technology as an “integral element in the pursuit of modernization” and mention that appropriate technology emphasizes “local resources”, instead of costly capital intensive solutions for low income countries.¹⁷ Appropriate technology according to Jennifer Daryl Slack and J. Macgregor Wise who trace appropriate technology movement to Ernst Friedrich Schumacher’s *Small Is Beautiful* published in 1973 and probe his definition, is “intermediate”, “more productive than indigenous technology”, (though not necessarily a technology of the past) but “cheaper than the capital intensive modern technology”. Further, appropriate technology is context specific for users for whom it also “carries freedom rather than dependence”.¹⁸

The hauz then is entrenched in a way of life for Dhobi families facilitates the task of hand washing clothes and this is the immediate, direct and visible function performed by the hauz. Functions of the hauz that expand the sphere of influence of its meanings beyond that of a simple laundry technology follow.

Meanings of the hauz as a part of the built environment of the Dhobi ghats and the functions that it performs go beyond its immediate role as a simple laundry technology. Meanings and functions of the hauz differ for Dhobi families

¹⁶ Simon Tietel, “On the Concept of Appropriate Technology for Less Industrialized Countries,” *Technological Forecasting and Social Change* 2 (1978): 350.

¹⁷ Susan C. Bourque and Kay B. Warren, “Technology, Gender and Development,” *Daedalus* 116, no. 4 (1987):173-197.

¹⁸ Jennifer Daryl Slack and J. Macgregor Wise, *Culture + Technology, A Primer* (New York, Washington, Bern, Frankfurt, Berlin, Brussels, Vienna and Oxford: Peter Lang, 2007), 77-80.

who have diversified their livelihoods and for whom work and life are no longer organized around the hauzes.

The hauz forms a part of the built environment and material culture of Dhobi ghats. Amalgamating “culture” (including signification) with the “materiality” of technological things is the idea of “objectification” outlined by Phillip Vannini who merges insights from Science and Technology Studies (STS), anthropology of technology and material culture perspective.¹⁹ Objectification, in my reading of Vannini’s work encompasses material processes, an analytical approach and the idea that material culture, technological culture and culture are inseparable and constitute each other. In congruence with the approach to material culture outlined above, Slack and Wise title their book “*Culture + Technology*” as they perceive culture as “a whole way of life” and that posing the relationship as “culture *and* technology” (emphasis is mine) would be inaccurate because culture and technology are not two discrete entities.²⁰ Meanings of the hauz and the functions that it performs go beyond its immediate role as a simple laundry technology. Alisa Craig emphasizes that artifacts can be envisioned as “vessels of meaning”(emphasis in original).²¹ Meanings and functions of the hauz and the built environment of which the hauz is a part differ for Dhobi families who have diversified their livelihoods and for whom work and life are no longer organized around the hauzes. The hauz is likely to undergo ‘semiotic transformation’ for Dhobis who no longer depend upon the hauz for eking out their livelihood. Vannini explains ‘semiotic transformation’ to mean “change intervening over time in the way objects are used and/or in the meaning attributed to signs”.²² The hauz takes an ornamental status in the Dhobi ghat and primarily symbolizes a link with community and family for Dhobis who do not wash clothes with the hauzes

¹⁹ Phillip Vannini, “Material Culture Studies and Sociology and Anthropology of Technology,” in *Material Culture and Technology in Everyday Life, Ethnographic Approaches*, ed. Phillip Vannini (New York, Washington, Bern, Frankfurt, Berlin, Brussels, Vienna, Oxford: Peter Lang, 2009), 15-26.

²⁰ Slack and Wise, *Culture + Technology*, 4-5.

²¹ Alisa Craig, “When a Book is Not a Book: Objects as ‘Players’ in Identity and Community Formation,” *Journal of Material Culture* 16, no. 1(2011), 47.

²² Phillip Vannini, “Material Culture and Technoculture as Interaction,” *Material Culture and Technology in Everyday Life Ethnographic Approaches*, ed. Phillip Vannini (New York, Washington, Bern, Frankfurt, Berlin, Brussels, Vienna, Oxford: Peter Lang, 2009),79.

as is seen from interviews in No. 28 Dhobi ghat, Moti Bagh Dhobi ghat and Majnu Ka Tila Dhobi ghat below.

A majority of Dhobis mention that they have diversified their livelihoods. Dhobi Ghat Sudhar Yojna that comprises the most recent survey of Dhobis by the government mentions that a large percentage of Dhobis pursue other occupations.²³ 17 households out of 30 households surveyed for this dissertation, in No. 28 Dhobi ghat (that houses 50 Dhobi families) reported diversifying their livelihood kitty to include unconventional occupations including salaried employment in government sector and private sector. A majority of youth both men and women have obtained formal education (till undergraduate level on an average) and have inconsistent employment in the service sector that they describe as inconsistent office employment. The jobs include clerical work, field work as salespeople, driving autos and cars, working as assistants in photocopy shops, photography shops, courier service and assistants in small restaurants.

According to an elderly man who got a job in the government postal service department and has not washed clothes himself for the previous four decades, around half the families in Majnu Ka Tila Dhobi ghat are pursuing a variety of occupations and only a quarter of the families in the ghat practice only laundry work for a living. The elderly Dhobi mentions that he deliberately married his daughter in the same ghat to a Dhobi (who does not wash clothes for a living) because he is proud of being a Dhobi and of living near a washing area where “men work hard”.

Out of the 10 families interviewed for this dissertation in Moti Bagh Dhobi ghat that houses 12 families, 7 homes report that laundry work is their primary livelihood. Two families do not launder clothes of clients. A third family stopped practicing Dhobi work after 2008 when their tender for the hospital clothes that they were washing was not renewed. Young men in this family were eager to change their occupation because college friends used to tease them for undertaking Dhobi work. The young men mention that if they do Dhobi work they will lose respect in society. Here too, the haуз and the material environment of the

²³ Dhobi Ghat Sudhar Yojna, *Second Draft Master Plan*, 3.7.

Dhobi ghat in which the family resides, take on a symbolic meaning, for the family. Families who have altered their place of residence and livelihoods continue to define themselves in contrast to Dhobis and the material culture of Dhobi ghats as seen from the case of a young couple who visit relatives in No. 28 Dhobi ghat. They share that they are Dhobi, their parents are Dhobi but they do not do Dhobi work. The young woman emphasized that she does not even know how to do laundry work (though her extended family continues to launder clothes for a hotel). The woman who grew up in the No. 28 Dhobi ghat would have learnt folding and ironing clothes that girls undertake along with their female relatives. In saying that she does not know the work, the woman marks a distance between herself and other Dhobis who know as well as continue to practice laundry work. The husband started working after his father retired from a government job with a bank and after chauffeuring a car for houses and an office for eight years the young man currently works as an auto rickshaw driver. The couple shared that sometimes they get very few clothes for ironing from houses their neighborhood. Here too the Dhobis themselves make a distinction between Dhobi *kaam* (Dhobi work) that involves washing clothes with a hauz and ironing clothes on a small scale from time to time merely to supplement earnings from an alternative source of livelihood. The former is undertaken as a primary livelihood while ironing on a small scale and inconsistently is not. While Dhobi *kaam* is washing clothes, ironing is simply ironing, an ancillary activity which is included in Dhobi *kaam* but is not Dhobi *kaam* by itself.

Inge Ropke mentions that “humans experience themselves through the use of things” and while “meaning is ascribed to activities of everyday life” through “social interplay”, “material things are integrated as cultural markers that have the function of rendering visible and stabilizing cultural categories.”²⁴ Physical proximity to the hauz, from a perspective of material culture and technology reinforces connection of Dhobis with Dhobi communities. This is reflected in a

²⁴ Inge Ropke, “New Technology in Everyday Life – Social Processes and Environmental Impact,” *Ecological Economics* 38 (2001):410.

comment made by a woman in Moti Bag Dhobi ghat who chided a child who playfully said that he was not a Dhobi with “Who lives here if not Dhobis?”

This association between belonging to a Dhobi family and community and practicing the occupation of washing clothes with a hauz is made both by Dhobi communities and by outsiders who perceive Dhobis as a people who launder clothes in Dhobi ghats. While not all Dhobis practice the occupation of washing clothes, the idea that Dhobis require hauzes in a Dhobi ghat endures. For some groups of Dhobis, this link between being a Dhobi and requiring hauzes to sustain one’s livelihood translates into a claim for land and space for a washing area. For example, the Delhi High Court instructed the DDA to construct a washing area equipped with hauzes in Dwarka for the 44 families of No. 28 Dhobi ghat who are being relocated to Dwarka from Minto Road area. The displaced 44 families of No. 28 Dhobi ghat settled in No. 28 Dhobi ghat in Delhi three generations ago and their homes on a stretch of land called Rouse Avenue were demolished without a notice by the government in 2010 as they were seen as encroachers and because they do not have legal ownership and papers for the land on which they live. This group of Dhobis that has a diversified livelihood kitty was able to negotiate with the State and acquired a new place of residence along with a washing area. Similarly an elderly man inherited a flat in Moti Bagh Dhobi ghat from his relative who practiced washing clothes. The elderly man himself never learned laundry work because his father like him worked and retired from a job in the banking and insurance sector.²⁵ Grint and Woolgar use the term “designer technologies” for technologies and material things that may serve functions other than those they are pursuing at the surface level. While the hauz enables washing clothes, the built environment of the Dhobi ghat that includes the hauz also functions as a technology on the basis of which some Dhobis regardless of their livelihood sources ask the government for land. The hauz in addition to serving as a laundry technology serves as a material object or technology that has political

²⁵ The hauz did not act as a technology that could actualize a claim for land inside and near Delhi for Dhobis displaced from ghats on the River Yamuna. All groups of displaced Dhobis are compelled to give up their livelihood that is linked with laundry work because the previous clients of Dhobis are not in the proximity of the relocated Dhobis.

effects and consequences which are likely to have been unintended by designers of the hauzes who created the hauz prior to 1947.

This argument finds support in Winner's analysis of technologies in 'Do Artifacts have Politics?' where he brings into the picture "the social circumstances of development, deployment and use of technical things".²⁶ His article and the example of Robert Moses's bridges that he shares for illustrating his argument on political technologies is critiqued and Winner is perceived as accusing Moses of intentionally building technology that excludes coloured people from accessing a public park.²⁷ In my reading of Winner's article however, the conscious and unconscious, intended, purposeful as well as unintended side effects that material technologies may have are clearly included both in the text and in examples when Winner discusses the disability movement of the 1970s.

Winner also emphasizes that materials and technologies once built crystallize the ideologies with which they are formed. He mentions that "society's choices get fixed in the material equipment", "economic equipment", "social habit", "endure over many generations" and have real effects for people. Hauzes in the built environments of Dhobi ghats coincide with a way of life for small scale Dhobis and configure the family's way of work including gender based division of laundry tasks. As seen in the previous section, women whose husbands and sons work with the hauz often tend to work as washerwomen who visit client's homes to wash clothes. As the hauz endures over generations, the gender based division of laundry tasks and the context that views men as physically strong enough to operate the hauz also endures. Winner emphasizes that technologies can contain political properties by either invention, design, by the ways in which they are used or by the technologies that embody, or appear to require and are strongly compatible with particular kinds of political relationships. Gendering of the hauz is one such political relationship amongst women and men Dhobis that endures with the hauz. As one meaning of the hauz as a designer technology in

²⁶ Langdon Winner, "Do Artifacts Have Politics?" in *Social Shaping of Technology, How the Refrigerator got its Hum*, eds. Donald MacKenzie and Judy Wajcman (UK and USA: Open University Press, 1985), 27.

²⁷ Steve Woolgar and Geoff Cooper, "Do Artifacts Have Ambivalence? Moses' Bridges, Winner's Bridges and Other Urban Legends in S & TS," *Social Studies of Science* 29, no. 3 (1999):433-449.

the context of a claim for land and space for a washing area by some Dhobis is discussed, another meaning of the hauz is simultaneously emerging in the context of mechanization of laundry work in Delhi.

The hauz is increasingly being perceived as and attributed the meaning of an obsolete laundry technology by some groups of Dhobis who have entirely mechanized their laundry methods and by the competitors of small scale Dhobis. Within the Dhobi ghats the hauz is eclipsed by new laundry technologies such as washing machines and hydro machines. Outside the Dhobi ghats technological changes in the laundry industry such as the increasing number of dry cleaners, self serve laundromats, laundries of hotels and hospitals are threatening both the livelihoods of Dhobis and rendering the hauzes, gradually obsolete. Meaning of the obsolete hauz can be seen in the ways of work and laundry technologies in use at the factory in No. 28 Dhobi ghat on Mahavat Khan Road. The factory is a mechanized laundry that services large hospitals and the railways by meeting daily deadlines. The owner of the factory converted the home where he grew up near the hauzes where his father and grandfather used to wash clothes into a place where nearly all laundry tasks are mechanized. Machines comprising of laundromats, washers, hydro machines for cleaning clothes and rollers for ironing bed sheets are operated by hired workers who are supervised by a supervisor who work in twelve hour shifts, often throughout the night. The factory workers do not rely upon the hauzes, they wash more clothes of a similar type, in less time with mechanized laundry technologies. The factory owner shares that not many Dhobis of his generation have expanded their work. He elaborates that he is the only Dhobi in No. 28 Dhobi ghat who has built his business and moved beyond the hauz. Hauzes within the built environment of the Dhobi ghat for him are his past that still constricts a majority of his community members who have been unable to progress by changes in their laundry technologies. According to the factory owner who hires migrant workers to perform laundry work in his factory, the hauz is an obsolete laundry technology. He emphasizes that the occupation of Dhobis will also become obsolete because younger generation is not interested in laundry work. Inge Ropke shows that renewal of products with improvements encourages

people to buy products. He shows that renewal of some products such as CDs renders previous products that they replace (tape recorders), obsolete. As some Dhobis adopt hydro machines and washers for wringing and cleaning clothes a majority of Dhobis are encouraged to buy the new laundry technologies to compete with their neighbours who are able to launder a larger wash and capture a larger share of the market. Ropke also mentions that often new products “replace” previous products that “served a similar function” instead to taking up a “new function”.²⁸ The new laundry technologies change labour requirements, preferring knowledge of operating technologies to skills in manual washing and save time enabling Dhobis to wash and wring more clothes. Dhobis compete to garner larger portions of the laundry business. Technological change enabling this process begins from few Dhobis who adopt new technologies while others are looped into adopting laundry technologies that render the *hauz* obsolete due to changes in standards of laundry work made possible by technological changes in laundry work in Dhobi ghats. Elisabeth Shove shows that the washing machine is blurring cultural differences between varying ideas of cleanliness and mentions that increase in demand for convenience goes with reliance on standardized commercialized solutions that redefine the meanings of normal and necessary.²⁹ The functions of new laundry technologies may also include bringing convenience into laundry work and as Dhobi communities across Dhobi ghats associate laundry technology with *sauhilyat* (comfort and convenience). The new standards of convenience in Dhobi ghats are likely to reconfigure the ideas of “normal” amount of laundry work and the “normal” type of laundry technology. Following the trajectory of technological changes in laundry work, the *hauz* is likely to become obsolete as new laundry technologies such as washing machines replace the *hauz* as the new “normal” laundry technologies that minimize drudgery.

²⁸ Ropke, *Ecological Economics* 38: 409, 406.

²⁹ Elisabeth Shove, “Converging Conventions of Comfort, Cleanliness and Convenience,” *Journal of Consumer Policy* 26 (2003): 415-416.

Assuming that the material substance of the hauz contains gendered scripts and attempting to decipher these codes showed that the hauz is a gender neutral technology. The hauz becomes a gendered technology as it gets incorporated and used in the Dhobi ghats where its continued use by men and not by women over generations makes the gendering of the hauz endure as it is packaged in the rituals that surround the use of the hauz that are communicated to and imbibed by successive generations of Dhobis. The chapter also highlighted the ways in which the hauz serves as a portion of the material culture of Dhobi ghats, as an ornament that links Dhobis who have diversified their livelihoods with Dhobis who continue to use the hauz in the built environment of the ghat. The hauz also acts as a designer technology that enables certain Dhobis to claim land and space for constructing a washing area in Delhi. Another meaning of the hauz is that of an appropriate technology because the hauz draws upon existing labour supply, skill sets of workers and provides a useful technology that requires little resources and investment. An emergent and competing meaning of the hauz is that of an obsolete technology that belongs to the past of the Dhobi ghats that are technologically advancing with speed towards mechanization of laundry work. The following chapter explores the tussle between two meanings of the hauz, that of appropriate technology and that of obsolete technology as they play out in the Dhobi Ghat Sudhar Yojna (DGSY) that provides a blueprint of the future development of Dhobi ghats.

Chapter V: ‘Development Thought’ and Mechanization of Dhobi Ghats in Dhobi Ghat Sudhar Yojna

A specific and exclusive policy framework for Dhobi ghats in Delhi, the Dhobi Ghat Sudhar Yojna or Dhobi Ghat Improvement Scheme (henceforth DGSY) collects data on Dhobis and Dhobi ghats in Delhi, presents the existing situation analysis and charts out a future plan for Dhobi ghats. The scheme is backed by the Government of India (henceforth GOI) and as a part of Yamuna Action Plan Phase II of the Ministry of Environment and Forests (henceforth MOEF) and the DGSY has the power and financial resources to realize the future possibilities that it envisions. The DGSY then constitutes a significant force of transformation for Delhi’s Dhobi communities and Dhobi ghats. It seeks to improve and therefore entails changes in the built environment and laundry technologies in Dhobi ghats. As people, the built environment and laundry technologies are closely interlinked; changes in the technical and the material involve and evolve with changes in the ways of life and work of Dhobi communities. Given the significance of the DGSY for Delhi’s Dhobis and Dhobi ghats, and the unique large scale sociotechnical ensemble that it brings into the Dhobi ghats, this chapter explores the DGSY for traces of ‘development thought’ and draws out possible implications of the DGSY for Dhobi communities.

DGSY introduces mechanization of laundry tasks for some Dhobi ghats where it will transform the existing small scale sociotechnical ensemble that revolves around the hauz into a large scale sociotechnical ensemble. This chapter traces the position of the DGSY in ‘development thought’ and mentions the categories of Dhobis who avail of its benefits. The chapter sketches a picture of the large scale sociotechnical ensemble of Dhobi ghats that includes mechanization of laundry tasks through arcane technologies, the side effects and features of which are not

completely known. This chapter explores the meanings of the large scale sociotechnical ensemble of Dhobi ghats and its possible implications for various Dhobis. The chapter shows that despite the drawbacks of mechanization of laundry tasks that are actually the side effects of ‘mainstream development’ trajectory that the Dhobis ghats and DGSY follow, the Dhobis and policy makers continue to pursue a large scale sociotechnical ensemble because of the charm of ‘mainstream development’.

Changes in sociotechnical ensembles of Dhobi ghats are likely to include reconfigurations of gender, space, tasks and technologies and possibly marginalize the houz centered ways of work and life of small scale Dhobis. Previous chapter explored the meanings of the houz as part of the built environment of Dhobi ghats and presented a range of meanings of the houz. This chapter takes the exploration farther and considers the meanings of the small scale sociotechnical ensemble of Dhobi ghats that centers on the houz alongside the meanings of the large scale sociotechnical ensemble (that involves mechanization of laundry tasks) of Dhobi ghats. The debate between meanings of obsolete technologies and appropriate technologies is discussed with the help of frameworks from development thought.

DGSY captures with precision and brings together various kinds of information on Dhobis and Dhobi ghats that is exclusively available with (and in some cases accessible to) different departments of the government and Dhobi communities in Delhi. DGSY also involves transforming Dhobis and Dhobi ghats into green consumers of laundry technology and producers of environmentally conscious laundry services.

DGSY falls under Yamuna Action Plan Phase-II (YAP-II) a project initiated under the aegis of the National River Conservation Directorate (NRCD) in the Ministry of Environment and Forests (MOEF), Government of India (GOI). The DGSY is to be implemented by the MCD (Municipal Corporation of Delhi). DGSY is available to us in the form of three documents, a Situation Analysis Report of Dhobi Ghats, A Second Revised Master Plan for Dhobi Ghats and a

Feasibility Report for a Model Dhobi Ghat (Lodi Road). The DGSY reports are prepared by M/s Tetra Tech India Ltd., New Delhi for Project Management Consultants (PMC) for Yamuna Action Plan Phase II (YAP-II) that in turn is accountable to the NRCD, MOEF.

5.1 Dhobi Ghat Sudhar Yojna, carving a niche for development in Dhobi Ghats in Delhi

The purpose of the DGSY is “environmental improvement of area”, “upliftment of the socioeconomic conditions of the Dhobis” and “pollution abatement of the River Yamuna”.¹ The scheme covers 79 Dhobi ghats out of a total of 92 Dhobi ghats in Delhi.

DGSY brings development to a specific category of Dhobis who reside in facilitated ghats in Municipal Corporation of Delhi (MCD) and New Delhi Municipal Corporation (NDMC) areas, have land in ghats that are not demolished, are non controversial and are willing to, and capable of, participating, including monetarily in mechanization of the Dhobi ghats. DGSY works to bring about tangible results and therefore targets certain Dhobi ghats. From the 79 Dhobi ghats that are eligible for intervention under the DGSY only 32 are chosen for mechanization because infrastructure development and facilitation for the smaller ghats with less number of units is costly per unit.² Benefits of development that come with the DGSY are therefore differentially concentrated between the Dhobi ghats. Selection of Dhobi Ghats under DGSY involves several criteria including the willingness of Dhobis to participate. The dimension of willingness to participate is factored in the selection of 32 Dhobi ghats for modernization. Willingness may include the abilities, capacities and capabilities of participating in the development project as well as be mediated by what Dolly Daftary terms

¹ Dhobi Ghat Sudhar Yojna, *Feasibility Report for Model Dhobi Ghat*, 2.2.

² Dhobi Ghat Sudhar Yojna, *Second Draft Master Plan*, 11.23.

‘political brokers’ in her article that looks at the development of irrigation infrastructure and forest conservation in Gujarat.³ ‘Political brokers’ in the context of Dhobi ghats could be Dhobis who are informed about the functioning of government departments and keep themselves updated on new schemes. ‘Political brokers’, whose social network tends to slightly overlap with the economically and politically powerful lineages in their region, are likely to make use of the DGSY for their communities and Dhobi ghats (including extended family, friends and neighbours) by sharing knowledge, information and access to development initiatives.

The DGSY does not cover some categories of Dhobis who also work in Delhi such as internally displaced Dhobis, Dhobis working in unauthorized and disputed ghats and hired workers who temporarily as individuals but constantly as a group live and work in Delhi’s Dhobi ghats. Also excluded from inclusion in the DGSY are dry cleaners both non Dhobis and Dhobis, laundries installed within hotels and hospitals, new self serve laundromats at Satyaniketan and Delhi University, private laundries run by non Dhobis and laundry work undertaken in households that contribute to the pollution of the river Yamuna from laundry activities. However only the Dhobi ghats are roped into the policy web for curtailing water pollution and while they benefit from renovation, they bear the costs of treating wastewater. Treatment of waste water figures as a mandatory clause for the modern Dhobi ghat in Lodi Road.

Under the umbrella of interventions designed for pollution abatement for the entire Yamuna river that are dominated by sewage treatment and control of direct pollution, the DGSY for Delhi is a tiny venture that focuses on pollution generated by wastewater from laundry activities in traditional Dhobi ghats that meets the Yamuna. Delhi contributes 79% of the pollution load on the River Yamuna through 26 identified industrial and residential areas. Dhobi Ghats figure in non point sources of pollution under laundry activities both individual and

³ Dolly Daftary, “Elected Leaders, Community and Development: Evidence on Distribution and Agency from a Case in India,” *Journal of Development Studies* 46, 10 (2010):1692-1707.

commercial that find their way into the Yamuna through mostly the 21 drains that crisscross Delhi although pollution is largely attributed to domestic sewage and industrial pollution. Since the year 1993 the National River Conservation Directorate (NRCD) through YAP has covered 20 towns across Uttar Pradesh and Haryana including Delhi city. The project is supported by a soft loan assistance of around 700 crore rupees (17.773 billion Japanese Yen) from The Japan Bank for International Cooperation (JBIC).⁴

Actors fueling the DGSY, government and the private sector come together in a technocratic style. Qualitative and quantitative research techniques are used for making detailed socio-economic profiles and gathering information on washing practices, laundry technologies, laundry materials and detergents used in each of the Dhobi ghats in Delhi. Researchers engaged by Project Management Consultants (PMC) for the DGSY for Delhi have also taken interviews with clients of Dhobis, people who earn their livelihood by ironing clothes outside Dhobi ghats, estimated number of clothes washed and the wastewater and effluents discharged from Dhobi ghats.

The DGSY makes a case for development by portraying the existing Dhobi Ghats as “improper” entities formed in an unplanned, haphazard manner. Existing Dhobi ghats with their sub optimal use of space are yet to embark upon the linear, progressive path of development as the texts of DGSY subtly reveal. The path of development is synonymous with rationality, organization, cultural values of hygiene and sanitation and constant improvement.⁵ According to the DGSY, Dhobighats lack basic infrastructure, “water drainage”, “place for drying clothes”, “hygiene” and “sanitation”. Most of the washing activities in these Dhobi ghats are “unorganized and the overall environment and infrastructure of Dhobi ghats need to be improved in order to prevent and manage Yamuna River pollution”.⁶

⁴ DGSY *Master Plan*, 4.1-4.4.

⁵ Shanin, Theodor. “The Idea of Progress.” in *Post Development Reader*, eds. Majid Rahnema and Victoria Bawtree (Bangladesh: Zed Books, 1997), 65-72.

⁶ DGSY, *Master Plan*, 1.4.

Critically tracing the origins of ‘mainstream development thought’, Arturo Escobar mentions that the traditional became synonymous with the backward and indigenous social institutions and ways of life had to be modernized to mirror the western nations despite resentment and resistance of those who were to be transformed in this way.⁷ In the eyes of anti/ post development theorists, development is broadly an extension of the colonization project which does not liberate people from poverty. Development as a term connotes a value-laden, planned process of induced change and continuous improvement. Development is a political process harbouring values and pursuing goals that have changed over time, as have the agents and catalysts of development. Emergence of development, which collided with demise of colonialism, is aptly illustrated through W.W. Rostrow’s linear stage model of progressive growth. Growth usually interpreted as economic indicates an increase. In contrast to development, change, transformation and spontaneous development are associated with generic, random, potentially multi-directional and unplanned transition such as the changes in Dhobi ghats prior to DGSY as inferred from DGSY reports.

Another dimension of development that echoes throughout the DGSY is mechanization cum modernization. Peter Drucker emphasizes linking people living in traditional societies doing “traditional work” with “modern technology” in such a way that people have better “tools” to “master” their “own world and tasks”. He favors making “existing culture more viable and traditional work more rewarding” as a “central” pursuit of “economic development”, especially for developing countries.⁸ In congruence with Drucker’s assertion, the DGSY takes technology as a means for economic development for Dhobis and values improvements in material standards of living. Dhobi community’s fascination with science and technology is also reflected in their narratives that return again

⁷ Arturo, Escobar, *Encountering Development: The Making and Unmaking of The Third World* Princeton Studies in Culture, Power and History (New Jersey: Princeton University Press, 1995), 4.

⁸ Peter Drucker, “Modern Technology and Ancient Jobs,” *Technology and Culture* 4, no. 3 (1963):281.

and again to the power of machines that make laundry work more convenient. According to Escobar science and technology form an integral part of development. He mentions that ‘mainstream development’ force is driven by a faith in science and technology that often bring about improvements in material standards of living. The mainstream view perceives technology as a neutral (implicitly assumed to be a positive) instrument to create desirable socio-cultural orders. Ideologies that place an exclusive faith in economic growth and material standard of living often view science and technology as instruments for achieving their goals.⁹ Ashish Nandy explores this link farther and adds a third ingredient, that of the state as a sculptor of development. He shows the centrality of the State in creating development and in owning the well-being of its citizens.¹⁰ Other thinkers have highlighted that development merges with the state’s power and facilitates legitimization of the state. Rotation from haphazard change to development for Delhi’s Dhobi ghats comes through the state policy in the form of DGSY especially as “there is no separate budgetary provision as far as Dhobi ghat Development and modernization are concerned”.¹¹

According to the DGSY, “development is a continuous process which depends on need” and caters better facilities to the people. DGSY recognizes environmental improvement as an “integral part of development” that has to be considered while planning the development prospects. Therefore, “the impact of Dhobi ghat pollution load needs to be managed for sustainable management of River pollution in order to meet the goal of pollution abatement of the River Yamuna”.¹² Thus the scope of DGSY includes “improvement of the socioeconomic conditions of Dhobis” as well as “upgradation of river quality”. Ideas of “mainstream development” that are synonymous with the Welfare approach and Women In Development (WID) approach came under siege by the

⁹ Escobar, *Encountering Development*, 36.

¹⁰ Ashis Nandy, “Introduction: Science as Reason of State,” in *Science, Hegemony and Violence, A Requiem for Modernity*, ed. Ashis Nandy, <http://www.arvindguptatoys.com/arvindgupta/hegemony-nandy.pdf>

¹¹ DGSY, *Master Plan*, 12.5.

¹² *Ibid.*, 5.186.

‘sustainable development thought’ that emerged after 1992. Advocated by anti-development groups and individuals such as Helena Norberg-Hodge in Ladakh, ‘sustainable development thought’ and its applications are characterized by non government organization led, grassroots involving, local focused, environment friendly, inclusive, development that anchors intergenerational equity. The expanded ensemble of development revolves around the idea of sustainability. Sustainability literature broadly relates to a concern for the environment and intergenerational equity. The DGSY ropes in portions of sustainability. It seeks to secure the maintenance of development actions that it takes and ensure its benefits over time. Traces and jargon from ‘sustainable development thought’ are incorporated in the documents of DGSY. ‘Sustainable development thought’ is congruent with but vaster than the Anti-Poverty and Efficiency/ Instrumentality approaches. The latter approaches view participation of local communities/ beneficiaries of development, here the Dhobis as a means for the development projects (modernized Dhobi ghats) to be sustainable, demonstrate eco friendliness and endure over time.

‘Sustainable development thought’ also blends with counter development approach and ropes in the gender and development (GAD) approach that stresses the need for involving and including women in and using the gender lens throughout the various stages of the development process. For the Lodi Road Dhobi ghat under DGSY, the first ghat to be modernized, this is done through two focused group discussions with women and gender segregated data which is presented as data on categories of workers who do different laundry tasks. Gender sensitivity of the DGSY is visible in the DGSY that suggests building an equal number of toilets for women and for men under the draft layout plan for the Lodi Road Dhobi ghat. However by not providing for representation of women in the local Dhobi committees that are proposed for governance of the modernized ghats, the DGSY aligns with prevailing gender stereotypes. This is also reflected in a guideline for Dhobi ghats that states that “children may be discouraged from

washing activities and ladies may be kept away from heavy duty works”.¹³

Viewing DGSY through the tool for policy analysis framed by Naila Kabeer the DGSY appears to be a gender sensitive policy in pieces as it branches out to assess through the focused group discussions the practical needs of women Dhobis. DGSY however does not engage with the strategic gender needs of women Dhobis and the policy is not gender transformative especially since it does not challenge the division of laundry work and housework between men and women Dhobis. In my opinion the DGSY’s gender sensitivity has an add women and stir flavor, since apart from the evidence of gender sensitivity that has been culled out from the DGSY documents, the scheme approaches the individual Dhobi as an abstract person, a human being who is abstracted from his/her gender and age. DGSY is thus a gender neutral scheme.

Demonstrating the appropriate technology dimension of the ‘sustainable development thought’, the following environment responsive renewable technologies are proposed for the model Dhobi ghat at Lodi Road. Rain water harvesting, reuse and treatment of water previously used for different laundry tasks for activities such as soaking dirty clothes and flushing toilets at the Dhobi ghat are proposed. Solar water heaters that would minimize power consumption and LPG based *bhattis* (furnaces) that would reduce air pollution caused by smoke from fuel wood based *bhattis* are also recommended. The appropriate technologies that DGSY envisions are congruent with Ropke’s emphasis on the importance of technological change as a solution to environmental problems “because cleaner technologies can contribute to less resource intensive and less polluting production”.¹⁴ Ropke considers the intersection of “everyday life” and technological change to study environmental impact from the perspective of a consumer (household). However, while the benefits of appropriate technologies are emphasized their side effects are not mentioned in the DGSY documents.

¹³ Ibid., 11-16.

¹⁴ Inge Ropke, “New Technology in Everyday Life – Social Processes and Environmental Impact,” *Ecological Economics* 38 (2001): 403-404.

Promotion of eco friendly washing materials in case they are acceptable to Dhobis who currently use inexpensive materials is also included in DGSY. Eco friendly washing materials and laundry detergents that are mentioned in DGSY reports such as Ariel, Tide, Surf Excel are expensive branded products that are targeted at and packaged for domestic users and are advertised for women consumers. Dhobis such as a middle aged women in Moti Bag Dhobi ghat report using such expensive detergents to cater to specific customers who “smell their clothes”. Ropke reports that he assumes that growing consumption leads to an increase in environmental impact. Dhobis are unlikely to adopt expensive materials because they prefer strong, speedily effective and inexpensive detergents. For Dhobis in the business of laundry work, impacts of detergents on environment and their health take a backseat as cosmetic concerns under the existing sociotechnical ensemble of the Dhobi ghats. As a middle aged man in No. 28 Dhobi ghat reports, it is expensive to use indigenous starching materials compared to starching agents that are available in the market. He also mentions the story of *kala sabun* (black soap) that is available in Chowri Bazaar market and which stains clothes and is still wrapped in another cloth before scrubbing clothes for cleaning as this saves expenditure on expensive soap and detergents. The Dhobi shared that *kala sabun* is still used but fellow Dhobis would not admit to using it since everyone likes to portray their laundry work as clean and modern to others Dhobis, their clients and outsiders. The compatibility of the eco friendly washing materials with the small scale sociotechnical ensemble of Dhobi ghats and the ways of life of Dhobi communities is low.

Overall, the DGSY by promoting green technologies in modernized Dhobi ghats firmly links itself with environment friendly ‘sustainable development’ action. Problematizing the adoption of green technologies, Elisabeth Shove “draws our attention to the ways in which the green technologies are adopted and used by consumers. She shows that green consumption alone is neither an expression of individual environmental commitment nor of diffusion of green beliefs in society. Shove writes that “there is a tendency in the sociology of

technology and consumption to pay greater attention to the invention and acquisition of new things than to the ways in which such novelties are subsequently deployed in practice”.¹⁵ Thus, the DGSY’s task continues with the MCD (that is to implement the DGSY) as the effective implementation of the policy for green benefits is a process that continues after initial invention and adoption of technologies and involves the ways in which the technologies are integrated and continually used in Dhobi ghats. Continuing the trend of tracking ‘sustainable development thought’ as it figures in the DGSY, the focus now shifts to the DGSY where mainstream and sustainable development merge.

5.2 Arcane technologies and the enigma of development

This chapter describes the technologies that mechanize laundry tasks and form the large scale sociotechnical ensemble of Dhobi ghats as arcane because their particular features, ways of functioning, labour requirements; expected power consumption and waste water discharge are ambiguous. Also it is unlikely that the specific designs of the technologies are invented for the Dhobi ghats with their unique context. The large scale sociotechnical ensemble borrows from technological changes in laundry work developed in a different context than that of Dhobi ghats. Ropke mentions that “the nature of the market economy is to generate perpetual technological change” and “technological changes are generally not motivated by environmental considerations” as is seen in business literature. Insights from science and technology studies accentuate the need for understanding the arcane technologies that may have both effects and side effects; anticipated and unanticipated that will have consequences for the changing sociotechnical ensembles of the Dhobi ghats and for Dhobi communities. Keeping various possibilities of new sociotechnical ensemble including the ways in which it may be incorporated and used by Dhobis and provisions for repair and

¹⁵ Elisabeth Shove, “Converging Conventions of Comfort, Cleanliness and Convenience,” *Journal of Consumer Policy* 26 (2003): 395-418.

maintenance of the new technologies may enhance the efficacy and efficiency of the development scheme that takes mechanization and technology as one of its pillars.

DGSY portrays wet washing at the river and in constructed ghats as “unhygienic”, “slow” and “backward”. DGSY mentions that manual washing of clothes involves wastage of water and presents data on the estimated amount of water that is currently used in each Dhobi ghat. DGSY also documents the types and quantities of various detergents currently in use in each of the Dhobi ghats in Delhi and the average number of clothes that are washed by a Dhobi man in each Dhobi ghat. Two highlights of the mechanization of laundry that the DGSY brings for some Dhobi ghats are, decrease in use of detergents and wastage of water. The DGSY includes comments such as “wastage of water shall be minimized”. However, the anticipated water and detergent requirements of mechanized machines are not estimated. Ropke lists the factors that enable assessing environmental impact of technological changes in consumer goods including quantities in which goods are consumed. His list includes substances embodied in products, production methods used, emissions, health effects, economic life of products and possibilities of reuse and waste generation.¹⁶ While the DGSY is rooted in the mission for pollution abatement of river Yamuna the exact environmental impacts of the new laundry technologies (large scale sociotechnical ensemble that involves mechanization) that are proposed by the DGSY are not directly mentioned in the DGSY reports. Type of machines, the exact amount of power, water, detergents, maintenance they require and especially their labour requirements are ambiguous in the DGSY.

The semi skilled men and hired workers who work with the hauz and other laundry technologies and currently occupy a prominent place in the small scale sociotechnical ensemble of the Dhobi ghats are likely to be affected by changes in the requirements for skilled manual labour that the mechanized large scale sociotechnical ensemble of the Dhobi ghats brings. Robert L. Heilbroner brings

¹⁶ Ropke, *Ecological Economics* 38:404.

out connections between diverse material technologies and the varying labour configurations that they require. He highlights that “labour saving technology will not find ready acceptance in a society where labour is abundant and cheap” and “nor would a mass production technique recommend itself to a society that did not have a mass market”.¹⁷

The small scale sociotechnical ensembles of the Dhobi ghats at present are primarily fuelled by the labour of Dhobi communities. Some Dhobis in Delhi draw upon the labour of hired workers that is readily available and abundant due to the constant influx of migrants from Uttar Pradesh. Manual labour is also comparatively inexpensive than capital for laundry activities in the Dhobi ghats.

The DGSY reports intermittently reiterate that the primary concern of Dhobis is minimizing monetary expenditure. DGSY emphasizes that the economic conditions of a majority of Dhobis are not sound and they depend on laundry work for their livelihood.¹⁸ Yet the proposed outcomes of ‘mainstream development’ as it comes along with mechanization of Dhobi ghats are cutbacks in time and labour while simultaneously the operation and management costs are anticipated to swell over time. For example after the eighth year of the construction of the model Dhobi ghat at Lodi Road the expenditure projected on operation and management of assets is expected to be hundred percent or costs alone are anticipated to be around Rs. 2,57,000.¹⁹ Electricity consumption that the large scale sociotechnical ensemble of Dhobi ghats relies upon in a big way is at the heart of the rise in operation and management costs. Ropke mentions that “core technologies” such as electricity have the potential of being incorporated in many different products and processes. He highlights that when a new core technology is introduced, a “new infrastructure has to be provided” and “new processes and new functions

¹⁷ Richard L. Heilbroner, “Do Machines Make History?” in *Technology and Society, Building Our Sociotechnical Future*, eds. Deborah G. Johnson and Jameson M. Wetmore (Cambridge and London: MIT Press, 2009), 103.

¹⁸ DGSY, *Master Plan*, 12.6.

¹⁹ *Ibid.*, 11.21.

introduced”.²⁰ Thus the new sociotechnical ensemble of Dhobi ghats that relies on electricity is likely to involve major transformations in ways of work and life of Dhobi communities.

Meeting the side effects and costs of maintaining the developed ghats with the new arcane machines requires transformations in the sociotechnical ensemble of the Dhobi ghat and the DGSY does this by harnessing the participation of local Dhobi users. DGSY emphasizes that operation and management costs have to be borne by Dhobi users who are responsible for making provisions for “revenue generation out of their earning”.²¹ Capital expenditure on the project is supported by YAP-II and III. The DGSY reports suggest that “considering the socio-economic conditions of Dhobis”, “budgetary provisions at Government level may be helpful in improvement of their services and quality upgradation”.

Participation of local communities in development projects is a trait of the efficiency/ instrumentality approach to development that is in turn firmly grounded in ‘sustainable development thought’ and action. DGSY ropes in the strategies of ‘sustainable development’ such as participation, for meeting the goals and side effects of its ‘mainstream development’ intervention (mechanization of laundry tasks). The DGSY elaborates the need for participation of local stakeholders for operation and management of the new Dhobi ghats for sustainability. The scheme emphasizes that participation of local stakeholders is to be secured by signing a Memorandum of Understanding (MOU) with the user Dhobis who would then take on the responsibility of upkeep and maintenance of the new modernized Dhobi ghats. Indirectly the DGSY ropes in a feature of the empowerment approach that views participation of the people as meaningful and as an end in itself. Participation in DGSY takes on the double work of making the benefits of the development actions endure over time and empowering and according responsibility to the Dhobis who participate in the governance of their Dhobi ghats. Local participation is a feature that is highlighted in presentation of

²⁰ Ropke, *Ecological Economics* 38:405, 419.

²¹ DGSY, *Master Plan*, 11.1.

successful case studies of Dhobi ghat upgradation and modernization in the DGSY. The concern of policymakers for the livelihoods of Dhobis is also reflected in the construction plan of model Dhobi ghat that will be constructed in the area where clothes are currently dried so as not to disrupt or even temporarily hinder, the ongoing laundry activities that are crucial for livelihood of the Dhobis in Lodi Road Dhobi ghat.²²

As the DGSY emphasizes participation, a niche for the local Dhobi *samities* and participation of Dhobi users in maintenance of Dhobi ghats is created. Reiterating that operation and maintenance is most important aspect for the long term benefit of the assets created under the project, DGSY proposes revenue collection of Rs. 200 and Rs. 250 per month from two groups of around 50 Dhobi users for generating Rs. 2.57 lakhs per year for operation and management (out of revenue generation of Rs 2.7 lacs per year) for the Lodi Road Dhobi ghat. Acknowledging the economic disparity amongst Dhobis, the DGSY mentions that the issue may be sorted out by Dhobi association but suggests the possibility of differently charging groups of Dhobis. While the DGSY commendably factors in inequality of income and wealth disparities amongst Dhobis into its proposed possible solution, income inequality at the Dhobi ghats are complex. Thus while the researchers under DGSY profile the heterogeneity and class differences amongst Dhobis the scheme itself does not specifically target reducing these inequalities amongst Dhobi communities.

Changing sociotechnical ensemble of the mechanized Dhobi ghats creates new needs and opens up possibilities for governance and management of the Dhobi ghats including joint management and public private model. Once again, the DGSY utilizes ideas from ‘sustainable development thought’ for meeting the requirements of ‘mainstream development’ that carries with it the application of science, technology, economic investment and the complexities that management of large scale sociotechnical ensembles involve. Joint management (between the government and local communities) of Dhobi ghats as outlined in DGSY may

²² Ibid.,11.17.

evolve with insights from previous joint management experiments in sites other than Dhobi ghats (such as forests) and rope in equity and gender sensitivity. After reporting the findings that “there is no defined organizational mechanism for Dhobighat Development and maintenance” and that “Dhobis own associations for resolving their issues are recognized by Government”, the DGSY outlines a plan for joint management of Dhobi ghats.²³ DGSY attempts to make Dhobis who are competitive, collaborate with each other and the State. It treads an uncharted terrain. The DGSY outlines a complex model of management that combines a centralized system that has powerful Dhobi association representatives at the top for Delhi city and decentralization of responsibility and power to local Dhobi *samities* (committees) who would resolve issues at the local level. Government mandates the inclusion of a “nominated member from the Government side” in the Dhobi *samities* who will “participate in committee to be formed for giving proper advice” and who will “keep watch on the proper functioning and maintenance of assets”.²⁴ Inclusion of Dhobis in *samities* at the local level is likely to be a contested process that would mix with issues of equity and power at the local level. In connecting the Dhobi ghats with development, some Dhobi members of the new *samities* are likely to receive legitimate power and resources for making decisions for entire Dhobi ghats and local Dhobi communities, such forces and opportunities were previously limited in the Dhobi ghats. Changing ways of governance and management adjust to the changing scale of sociotechnical ensembles of Dhobi ghats with the advent of mechanization. The new large scale sociotechnical ensembles of Dhobi ghats foster new relationships of power amongst individual Dhobis that superimpose and may accentuate the existing inequities in the Dhobi ghats. However the DGSY also holds the possibility of shaping the joint management of Dhobi ghats in a manner that is acceptable to various groups of Dhobis and the State.

²³ Ibid., 11.7.

²⁴ Ibid., 10.10.

DGSY suggests the public private model for meeting the anticipated costs of operation and management of modernized Dhobi ghats. In this model, the government owns the land of Dhobi ghats on which private companies invest in machines. This suggestion of DGSY in my opinion begins to dissolve the strand of sustainability that is weaved throughout the DGSY. In this model the government may “give” the land and “private parties may invest” money for the construction of Dhobighats, which may be “given to Dhobis on rental basis”. The DGSY emphasizes that private parties may recover their money out of the collection of rent taken from the users.²⁵ Private players are to recover their investments from Dhobi users who in turn are expected to reap huge profits from the mechanized ghats. Dhobis bear the responsibility and risk of adapting to and utilizing the mechanized ghats that require clients, labor, skill sets and resources that differ from the existing small scale sociotechnical ensembles of the Dhobi ghats. Small scale sociotechnical ensemble of Dhobi ghats that integrates sharing of laundry technologies through community (*biradari*) relationships, governance and management of the Dhobi ghat as well as of cultural and social affairs of the local Dhobi communities is changing with the DGSY.

Rationale for the mechanized sociotechnical ensemble of the Dhobi ghats is interspersed in DGSY reports alongside differing evidence that suggests that mechanization of laundry tasks that caps labour requirements, deskills labour, requires large quantities of homogeneous clothes for washing and increases costs and electricity consumption and may not contribute to a sustainable sociotechnical system of laundry for Dhobi ghats. Thus the arcane machines that mechanize laundry tasks and transform the small scale sociotechnical ensemble of Dhobi ghats into a large scale one, take a backseat in the Revised second draft Master Plan and Feasibility report for Lodi Road Dhobi ghat of the DGSY. Features of the arcane machines appear to be kept for market forces to make and for Dhobi ghats to integrate.

²⁵ Ibid., 10.10-10.11.

The section above explored the technologies as they are portrayed in the DGSY. Possible patterns of adoption and use of the arcane technologies by the Dhobis are equally important because they play a role in influencing the effects of the new large scale sociotechnical ensembles. Literature on domestic technology and Wanda J Orlikowski's practice lens for studying technology highlight the ways in which technologies are adopted and used once they are purchased. Shove emphasizes the importance of such patterns of integration and long term use of technologies for studying the environmental impact of green technologies. Inge Ropke in Denmark, like Helen Meintjes in Soweto, Xiu Jie Wu in China and Joy Parr in Canada emphasizes that power balances inside the family and the social status of the family together influence the choice of domestic technologies that are acquired, the order of acquisition and use of various domestic technologies.²⁶ Extending their argument beyond the home to Dhobi ghats that also consume technologies, we can expect gender, age and status differences to "condition the patterns of use and maintenance of technologies" once they are acquired. Prompted by the literature on marginalization of women and deskilling that is associated with adoption of technology; this exploratory research expected laundry technologies that are compatible with existing small scale sociotechnical ensembles of Dhobi ghats to alter the configurations of gender, space, tasks and technologies in Dhobi ghats. Findings from fieldwork however, show that patterns of work including gender based division of tasks and space in Dhobi ghats endure despite adoption of laundry technologies. Therefore the ways of integration and use of the arcane machines that are to mechanize Dhobi ghats are an important concern.

Findings from the factory or mechanized laundry operated by a Dhobi in No. 28 Dhobi ghat show that as laundry tasks are mechanized, the small space of the factory becomes an exclusive workplace of male Dhobis and hired workers. Women are not hired by the factory where laundry workers work and live in the factory area. Hired workers are usually migrant workers and they reside, cook,

²⁶ Ropke, *Ecological Economics*: 414.

bathe and sleep inside the factory premises. The laundry machines and workers perform all laundry tasks including folding clothes that is undertaken by women in small scale Dhobi families residing in the Dhobi ghat. The factory hires women only during times of sudden and acute shortage of labour (such as when a hired worker runs away). Then also the women are assigned only the task of folding and packing bed sheets only and for this they are paid 20 paisa per bed sheet. With the factory, there is evidence of the ways in which mechanization of laundry tasks and transformation of the small scale sociotechnical ensemble of Dhobi ghats into a large scale sociotechnical ensemble is likely to impact Dhobi women. By reducing the requirements of skill and by making redundant the way of life and work that is in turn interlinked with small scale sociotechnical ensembles of Dhobi ghats that assign tasks to both women and men, mechanization leads to large scale sociotechnical ensemble of Dhobi ghats that shifts laundry work entirely into men's domain. Horowitz also shows how women's jobs in the American meat packing industry were allotted according to race and the jobs of white and black women were separate. He emphasizes how coloured women challenged the sexual division of labour when technological changes made women's jobs redundant in between 1950s-1980s.²⁷ In meat packing there were ethnic and gender based alliances amongst groups of workers who could oppose each other. In contrast women and men in Dhobi ghats belong to the same families and as women's jobs become redundant, they may not protest.

Ropke emphasizes that "things" have both "functional" and "symbolic aspects" and that technological changes provide consumers with new "raw materials" for "the social processes of making sense of the world and forming their own identities". Drawing upon the idea that things exercise social agency by themselves from Bruno Latour, and the meaning of 'designer technology' that the haуз has acquired as seen in the previous chapter, we can expect technologies to integrate inside the Dhobi ghat in diverse and unexpected ways. The new laundry technologies in Dhobi ghats can be variously interpreted and integrated in the

²⁷ Horowitz, *Technology and Culture* 38:208-210.

lives of Dhobi communities and Dhobi ghats in Delhi. Drawing upon Orlikowski's practice lens for studying technology we can expect the policy (DGSY) representatives and the implementing agency (MDC) representatives to influence the ways in which new laundry technologies are positively perceived by the Dhobi communities. Ropke builds upon Mackay and Gillispie's work to highlight that technologies are "culturally encoded" by their "design and marketing" and have to be decoded by consumers according to possible choices that resemble the interpretive flexibility of the inbuilt scripts that technologies have according to SCOT perspective. Dhobis from Lodi Road Dhobi ghat express pride in having *vikaas* (development) that they see entering their Dhobi ghat with mechanization. Ropke shows that consumers of technology manipulate the ways and locations in which the technology is displayed and also position themselves by referring to technologies in conversations with outsiders. Ropke highlights the positioning of different individuals who are in proximity of a technology inside the consumer unit of the family.²⁸ Extending his argument to Dhobi ghats, we can anticipate that the social status of Lodi Road's Dhobi communities relative to the social status of Dhobi communities associated with non mechanized Dhobi ghats will increase with the new large scale sociotechnical ensemble. Inside the Dhobi ghats Dhobis who have the willingness and capacity to participate in mechanization of laundry technologies are likely to benefit more than those who do not. Dhobi women are not involved as decision makers in the choice of mechanization of the Dhobi ghats and in case of mechanized laundries operated by Dhobis; women are clearly sidelined from laundry work. Entry of new laundry technologies and mechanization of Dhobi ghats can be expected to further alienate women from technology that is liked with progress and associated with male Dhobis.

Shove highlights how the washing machine is blurring cultural differences regarding the ideas of cleanliness across the world and mentions that the increase in demand for convenience goes with reliance on standardized commercialized

²⁸ Ropke, *Ecological Economics* 38:413-415.

solutions that redefine the meanings of normal and necessary.²⁹ The functions of new laundry technologies include bringing convenience into laundry work and the Dhobi communities for this dissertation interviewed across Dhobi ghats associate laundry technology with *sauhilyat* (comfort and convenience). As the ideas of what constitutes convenience and normal laundry work proliferate to smaller Dhobi ghats where integrating large scale mechanized laundry technologies is not possible due to space constraints and where the economic resources, human resources and skill sets of Dhobis are incongruent with the large scale sociotechnical ensemble of Dhobi ghats, the pitfalls of ‘mainstream development’ emerge. The side effects of ‘mainstream development’ and possibly of adopting the arcane technologies include hierarchization of the ways of work and life and a never ending quest for improvements in material standards of living that may not be socially and environmentally feasible and that may change lifestyles of Dhobi communities in unsustainable and irreversible ways.

Throughout the depiction of exemplary case studies in the DGSY are woven the demerits of fully automated machines and of mechanization of Dhobi ghats. However the DGSY concludes that the best possible technological option for Dhobi ghats is a combination of manual wet washing (with the *hauz*) and mechanization of laundry work. Despite evidence that favours the appropriateness of the small scale sociotechnical ensemble of Dhobi ghats for Dhobis, the Dhobi communities and policy makers are embracing the arcane technologies and mechanization of laundry tasks that come with transformed and large scale sociotechnical ensembles for Dhobi ghats. This dissertation attributes the choices of policy makers and Dhobis who opt for the large scale sociotechnical ensemble despite its demerits to the charm of ‘mainstream development’ lures us and takes science and technologies as vehicles for pursuing its goals.

²⁹ Shove, *Journal of Consumer Policy* 26: 415-416.

5.3 Hauz resuscitated by post development thought

Charm of ‘mainstream development’ and mechanization of Dhobi ghats has, despite its internal contradictions persisted, and is transforming the sociotechnical ensemble of the Dhobi ghats. The previous, “traditional” and small scale sociotechnical ensemble that revolved around the hauz is cast as a backward and technologically inferior way of laundering clothes in DGSY. The range of meanings of the hauz from appropriate technology to obsolete technology that were explored in the previous chapter are reflected in the DGSY’s development intervention that highlights mechanization of laundry tasks and a large scale sociotechnical ensemble for some Dhobi ghats. But as the drawbacks of ‘mainstream development’ such as large scale sociotechnical ensembles including the various side effects and complex unpredictabilities and possible unsustainabilities such as costs of running the mechanized Dhobi ghats and the arcane machines pile up (as reflected in the previous section), an aperture is made for post development to enter.

‘Post development thought’ lives in the realm of ideas and usually falls short of tangible action on the ground. However ideas from the conceptual toolkit of ‘post development thought’ visibilize the apertures and inconsistencies in the DGSY. Streaks of ‘post development thought’ emerged as a critique of ‘mainstream development’ and its extension- ‘sustainable development’, after 1990s. Post development theorists note that development is not always inevitable, nor always desirable.³⁰ They seek to articulate voices that call for diverse worldviews, laid out on nonhierarchical, potentially nonlinear nominal scale, alongside the requisite knowledge, institutions and ways of life. Post development alternatives comprise of celebration and defense of traditional and cultural diversity and involve active resistance to the market forces (neoliberalism). In

³⁰ Andrew Mc Gregor, “New Possibilities? Shifts in Post-Development Theory and Practice,” *Geography Compass* 3, 5(2009):1689.

rejecting the superior versus inferior binaries and linearity that run through the mainstream development approach, post development thinkers often tend to take on the other extreme and romanticize poverty and rural lifestyles. Vinay Gidwani offers a concise criticism of post development that takes us beyond the limitations of alternatives provided by post developmentalist thinkers who romanticize tradition and may be seen as contributing counter metanarratives or unpragmatic ideas. He highlights the “imaginations” and “capacity for agency” that “subjects of development” can exercise. Gidwani emphasizes the ways in which subjects of development can “appropriate”, “reinvent” and “creatively impede” “development programs imposed upon them”.³¹ Also, in shielding communities from modernization, post-development’s advocacy may simultaneously curtail the opportunities of people who desire to modernize. The ways in which development of Dhobi ghats and effects of the DGSY are creatively incorporated, impeded, imagined and reinvented by Dhobis are yet to unfold. From the ‘post development thought’ what we can tangibly take at the moment is an “intervention” or strategy of post development.

‘Post development’ intervenes by resuscitating the traditional, culturally unique small scale sociotechnical ensemble of Dhobi ghats that revolves around the hauz. ‘Post development thought’ then rescues the meaning of the hauz as an appropriate technology and renders obsolete the meaning of the hauz as an obsolete technology. The Amish community in America recognized the intimate link between technologies and society and selectively chose a few technologies that could be incorporated without major modifications in their lifestyle.³² Putting into practice the choice between perceiving the hauz and the existing built environment of Dhobi ghats as an appropriate technology and as an obsolete technology lies with the Dhobis and policy makers. V. Sujatha’s depiction of indigenous technology as “appropriate” for local needs mentions that “indigenous

³¹ Vinay Gidwani, “The Unbearable Modernity of ‘Development’? Canal Irrigation and Development Planning in Western India,” *Progress in Planning*, 58 (2002):13.

³² Jameson M. Wetmore, “Amish Technology: Reinforcing Values and Building Community,” in *Technology and Society, Building our Sociotechnical Future*, eds. Deborah G. Johnson and Jameson M. Wetmore (Cambridge and London: MIT Press, 2009), 297-318.

knowledge” is “created, sustained and modified in the living experience of ordinary people”. Indigenous knowledge and technology are “time consuming”, “cumbersome”, “require skill” and “cater to local markets”.³³ She highlights the strengths of indigenous technology of leather processing including durability and the benefits of indigenously made leather for health and environment of indigenous leather producers and users. In contrast are positioned the “protagonists of modern technology” who argue that vegetable tanning methods are “inefficient and obsolete” and organize training programmes for modern methods for which there are few takers as leather tanning is associated with a community’s way of life.³⁴ Drawing upon Sujatha’s article we can see the haуз as crucial to the way of life and needs of small scale Dhobis and the local clients who favour cost effective, durable products (clean clothes) that the small scale sociotechnical ensemble of Dhobi ghats provides. However, in contrast to leather tanning technology, the haуз cannot be perceived as more environment friendly and better suited to health and environment needs of local communities.

Flexibility of the haуз in washing a variety of clothes, frequently, in small quantities and its possible benefits of saving water and electricity (but not detergent) while utilizing Delhi city’s abundant supply of labour are un eclipsed by post development thought’s restoration of the meaning of the haуз as an appropriate technology. The meaning of manual wet washing as an appropriate technology is not highlighted in DGSY but it is mentioned in the results of research undertaken by DGSY and is reflected in the stand that DGSY takes by not eliminating manual wet washing (that is likely to involve the haуzes) from the large scale sociotechnical ensembles of the to be mechanized Dhobi ghats.

The DGSY optimistically integrates technological changes and environmental considerations as it moves forward on the linear path of ‘mainstream development’ and utilizes strategies from ‘sustainable development thought’ for the process. For example the DGSY pursues large scale mechanization of laundry

³³ V Sujatha, “Leather Processing: Role of Indigenous Technology,” *Economic and Political Weekly* 37, no. 47 (2002): 4672.

³⁴ *Ibid.*, 4674-4675.

tasks for some Dhobi ghats and involves local communities whose participation is critical for the sustenance of the development intervention. Backed by exhaustive research on the ways of laundry work in Dhobi ghats in Delhi the DGSY forms a mine of information on Dhobis and Dhobi ghats in Delhi. Its research enables it to tailor technological solutions that are specific to Dhobi ghats such as LPG based *bhattis* that are proposed alongside solar panels as green technologies for Dhobi ghats. This chapter describes the large scale sociotechnical ensemble of the mechanized Dhobi ghats that arrive as arcane at present and by drawing upon the impact of mechanization of laundry tasks on women in the factory of No. 28 Dhobi ghat. However, this dissertation takes an optimistic stand regarding the environment friendly and sustainable possibilities that the transformed sociotechnical ensembles of Dhobi ghats also hold. The most crucial contribution of DGSY to environment issues is that it creates and enables Dhobi ghats to be niche markets for specific renewals of laundry technologies that are environmentally conscious and which would otherwise not be possible given almost exclusive focus of production and business on profits.³⁵ The drawbacks that this chapter identifies in the DGSY are all drawbacks of ‘mainstream development’ path that Dhobis and Dhobi ghats are choosing to walk upon. Actions of policymakers and Dhobi communities who choose development with its application of science and technology to induce constant improvements in material standards of living (for some) show, that development is enigmatic and despite its innumerable drawbacks and side effects holds a charm that is hard to resist.

³⁵ Ropke, *Ecological Economics* 38: 413-416.

Conclusion

Dhobi communities and Dhobi ghats, like their traditional occupation of laundry work are ubiquitously, if invisibly, present in Delhi. This dissertation provides a glimpse into the ways of work and lives of Dhobi communities inside Dhobi ghats in Delhi and contributes to understanding the vibrant and relatively undocumented sites of Dhobi ghats. My attempt in this dissertation has been to understand the dynamics of gender and laundry technologies inside Dhobi ghats in Delhi. This research investigates gender based division of laundry work in the communities of small scale laundry workers and tracks the complex changes in gender based allocation and meanings of laundry technologies. Changing meanings of the built environment of Dhobi ghats and the key laundry technologies therein are also documented.

Insights from Dhobi ghats contribute to understanding gender difference as part of a dynamic process that is constantly made and enacted. Differing constructions of physical strength that are assumed to be inherent in men and women and the assumed attributes of technology users and performers of various laundry tasks facilitate this process of gendering of people and technologies. This study also shows that the three perspectives on technology ('technological determinism', 'constructivist' and 'technology in use') all enable an understanding of the technology - society interface and yield similar insights, even as they privilege in their analysis one aspect each. The technical is privileged by the technological determinists, culture-as it is built into material technologies by constructivist approaches, and the culture that surrounds the use of a technology in the third perspective.

Evidence from Dhobi ghats highlights that women work more, and longer hours, than men as they perform housework and laundry work. In fact, it is apparent that women's laundry tasks are laborious and repetitive. These are also often monotonous and involve just as much physical strain as men's tasks that are of shorter duration and involve a more visible display of physical exertion. In

smaller ghats women sometimes undertake all of men's laundry tasks in addition to their own work. Washerwomen who visit client's houses to wash clothes there clearly perform a task that is labeled as physically strenuous. Findings regarding the actual quantity and range of work that women do inside Dhobi ghats destabilize the idea that different amounts of physical strength are embodied in men and women. However, despite the actual amount and range of work that women do, Dhobi communities continue to perceive women as physically weaker than men. Dhobi communities also perceive that operating different laundry technologies requires laundry workers with differing amounts of physical strength and dexterity. Laundry technologies and tasks are therefore perceived as gendered or more suitable for men, or women, on the basis of this double construction of physical strength that technologies require, and the supposed bodily differences between men and women that creates a distinction between them on grounds of physical strength, and hence capabilities.

Insights from the study show that technologies being used inside Dhobi ghats do not contain gendered scripts that prescribe differential abilities and tasks for technology users. Rather technologies become gendered as they are roped into the ways of life, gendered norms and patterns of work. From amongst the three perspective to technology utilized in this dissertation, the 'technology in use' perspective that emphasizes culture and rituals of use, and integration of technologies in the lives of users, forms the dominant frame for understanding the interface of laundry technologies and Dhobis in the ghats.

Use of technologies in different ghats is diverse and context specific. Both technological determinism, and the constructivist approaches to technology (that involve a variant of social determinism that is also encoded in material technologies by its designers) fall short of explaining the diverse ways in which laundry technologies are integrated in the small scale sociotechnical ensembles of various Dhobi ghats. The similarities in integration of new laundry technologies in the small scale sociotechnical ensembles of different ghats indicates that culture may be viewed as an integral part of the making, and of the material, of the technologies that are designed for gendered patterns of work in the Dhobi

ghats Role of culture in the modifications of sociotechnical ensembles is bigger than the role of technical components for the small scale sociotechnical ensemble. The purpose of new laundry technologies in the small scale sociotechnical ensemble of Dhobi ghats is maintaining a Dhobis family's share of clients and reaping greater profits from a similar scale of work. The role of technical aspects of material technologies in transforming the small scale sociotechnical ensemble into a large scale one however is bigger than the role of culture and rituals of integration and use of that technology, as the context in which the mechanized laundry tasks are envisioned and the technologies designed differs from the local context of Dhobi ghats Mechanization transforms the sociotechnical ensemble of Dhobi ghats and changes the ways of life and work. The purpose of mechanization involves also mainstream development, and a significant increase in material standards of living with an expanded scale of work. Technological changes and cultural changes are therefore intimately linked, and both influence changes in the other.

Again, gender is not encased in material technologies and nor do technologies by themselves reconfigure gender based division of work. Masculinity and femininity or the stereotype features and abilities that women and men are perceived to have are culturally constructed and continually enacted. Gendered work ropes in secondary assumptions regarding physical strength of technology users and human beings as a rationale to justify differential allocation and performance of work for women and men.

Masculinity and femininity as two compact constructs with their stereotypical characteristics for men and women are further complicated by the markers of class and duration of residence in Delhi. The occupation of different women and men within the Dhobi community, in turn highlight the differences within laundry-workers themselves. Dhobi women who identify themselves as housewives do not participate in laundry work, which includes folding clothes. Men belonging to Dhobi families who have expanded their scale of laundry work hire workers who perform various tasks, including washing clothes. Women and men who have diversified their livelihoods, and no longer rely on laundry work as

their primary source of income, do not perform manual washing of clothes. In fact, they consider those who continue to work within the built environment of Dhobi ghats as inferior to themselves. Women are barred from working in the washing area of Dhobi ghats as they are incorrectly perceived to be physically weak. Ironically, the same standards do not apply to men; for instance, men from wealthier families who do not perform laundry work, but provide for their families through other means, are not perceived as physically weak. Constructions and hierarchies of gender difference overlap and intersect with the hierarchies of economic and social status. Dhobi ghats provide a miniature capsule for learning about the interface between gender and technologies in the context of communities engaged in traditional and small scale laundry work in Delhi.

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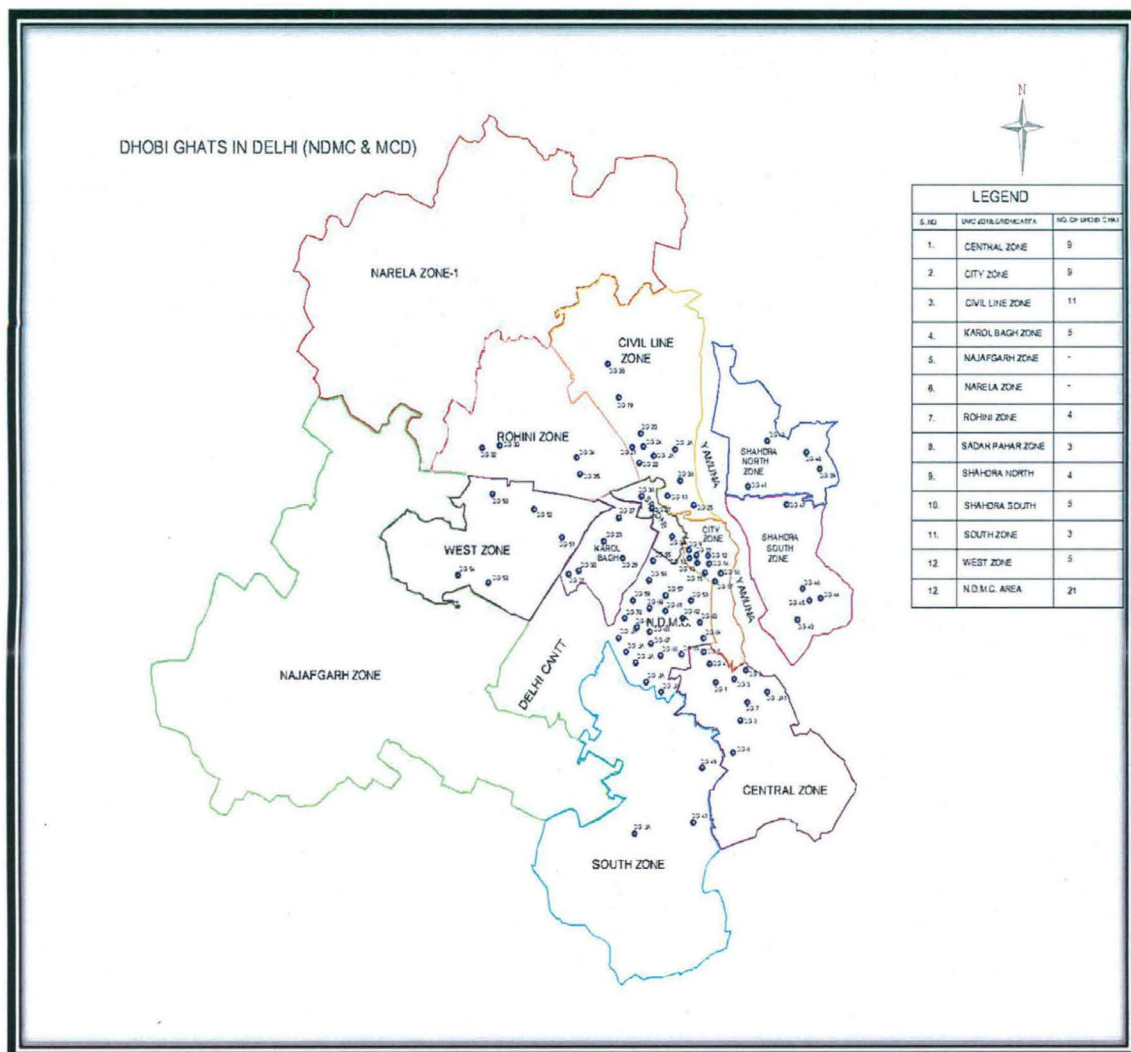
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ANNEXURE I

Map showing locations of Dhobi Ghats in Delhi



Source: Tetra Tech, Dhobi Ghat Sudhar Yojna for Delhi under Yamuna Action Plan-II, "Scenario of Dhobi Dhobi Ghats," *Second Draft Master Plan*, 5.5.

ANNEXURE II

Questionnaire and Interview Guide for Dhobi families

Date and Time of filling this questionnaire/ interview guide:

Research Participant's Personal Profile

Full Name:

Mobile number (if applicable):

Place of Residence

Family size:

one person

2-4persons

5-8 persons

Religion:

Hindu

Muslim

Christian

Other

Caste and sub caste (please specify):

Dhobi

Kanojia

Other

Duration of stay in Delhi and in the particular ghat (in years):

60+ years

50+ years

20+ years

-10 years

Previous residence (whether house was demolished):

Places of origin/native place (and *piyar* of the married women):

Native state (please specify district):

Other

Bihar

Madhya Pradesh

Shahjahanabad

Uttarpradesh

Household income per month (Rs.): (to be asked the interview is over)

-5000

5-10

10-20

20+

Profile of Dhobi family (attached)

Interview Guide for Dhobi families and group discussions:

Do you have a **washing machine or washer machine**?

Yes No Since when?

What made you decide to buy or not buy it?

Who decided to buy it?

Who operates it?

Do you have a **hydro machine**?

Yes No Since when?

What made you decide to buy it or not buy it?

Who operates the hydro machine?

What kind of **iron** do you use?

Coal Electric

How come? Since when?

How did you iron before?

Where do you buy the coal? How much of it is used?

Who are your **Clients**? How many are they? (please tick the correct option and specify the names, location)

Homes(*kothi/ makan*) Hospitals Restaurants Hotels/
Guesthouses

Organizations Other

Details of clothes, frequency of trips:

What **mode of transport** do you use? Does your family own a vehicle?

Bicycle Two wheeler Car Public transport /other

Who does which **laundry task**?

1. Fetching, counting and delivering clothes (*kapdon ko lana, ginti karna aur wapas le jana*):
2. Sorting clothes (*alag alag karma*):
3. Soaking clothes (*bheegona*):
4. Scrubbing clothes (*dhulai*):
5. Rinsing clothes (*pani se nikalna*):
6. Wringing (*neechodna*):
7. Drying (*sukhana*):
8. Keeping a watch on the clothesline (*kapdon pe nazar rakhna*):
9. Collecting from the clothes line (*sukhe kapde ekatha karna*):
10. Ironing (*press karna*):
11. Folding (*folding/ tay banana*):
12. Buying soap (*detergent khreedna*):
13. Bringing coal (*koyla lana*):
14. Preparing the iron (*taiyai karma*):

Which of the tasks are heavy and which is light (*halka kaam*) work?

Why do some people do some tasks and not others?

Are there special hand laundry skills that are not being used (taking a backseat) due to mechanization?

Who washes and irons clothes of your own home?

Who is in-charge of cooking food and other chores in your home?

Can you continue to reside here, near the ghat in the quarters if you change your occupation?

Would you like to change your occupation? How come?

ANNEXURE III

Interview Guide for Dhobi communities

Questions for the community

How many people live here?

Who built the ghat where you wash clothes?

How is the ghat area shared? Who uses the stone slabs when?

Have the stone slabs always been there?

Where does the water come from?

Who pays for the water? Do people share the cost? In what ways? What happens in case of a conflict?

Where did the water come from before MCD? Did you wash near the river? Did your grandparents wash at the Yamuna river before arrival of MCD water here?

When did you start boring water?

Can you continue to reside here, near the ghat in the quarters if you change your occupation? What does being a Dhobi mean to you?

*A sun of transfiguration still can shine
And night can bare its core of mystic light*

~ Sri Aurobindo ¹ ~



¹ Sri Aurobindo, *Savitri* (Pondicherry: Sri Aurobindo Ashram, 1993), 200.