The Social Life of Indian Generic Pharmaceuticals in Johannesburg

A thesis submitted in fulfilment of the requirement for the degree of Doctor of Philosophy of the Faculty of Humanities of the University of the Witwatersrand, Johannesburg.

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I declare that this thesis is my own unaided work. It has been submitted for the degree of Doctor of Philosophy of the University of the Witwatersrand, Johannesburg, South Africa. It has not been submitted before for any other degree or examination at any other university.

Manaf Kottakkunnummal,

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The University of the Witwatersrand,

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Abstract

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Abstract

This dissertation attempts to document the social life of Indian generic pharmaceuticals within the broader material culture of pharmaceuticals in Johannesburg. Foregrounding the question of value created in circulation, the study explores how conduits of generic pharmaceutical flow are saturated with the global politics of humanitarianism, locally embedded profitmaking efforts by businesspersons based on risk, cultural moorings of pharmaceutical relations, and historical specificities of locations in which pharmaceuticals have been mobilized for consumption. The central method is the ethnography of circulation. By documenting the 'moral claims' of Indian pharma capital as manifested in the public culture of pharmaceutical business, the discussion places the intersectionality of moral and material transactions at the centrestage of pharmaceutical sales and the creation of value.

Keywords: social life of Indian generic pharmaceuticals; Indian capital in Johannesburg; humanitarian goods; pharmaceutical territory; pharmaceutical relations; pharmaceutical entrepreneurship; circulation and value of generic pharmaceuticals

Contents

Abbreviations

AICC	All India Congress Committee
API	Active pharmaceutical ingredient
ARV	Antiretroviral medicine
ART	Antiretroviral therapy
BB-BEE	Broad-Based Black Economic Empowerment
CII	Confederation of Indian Industries
CME	Continuing medical education
CPD	Continuing professional development
CBD	Central Business District, Johannesburg
DLF	Delhi Land and Finance
DRC	Democratic Republic of Congo
EML	Essential Medicines List
EMR	Exclusive marketing rights
FDC	Fixed dose combination of ARV
FERA	Foreign Exchange Regulation Act
GEAR	Growth, Employment, and Redistribution Programme
GMP	Good manufacturing practices
GORD/PUD	Gastro-oesophageal reflux disease /peptic ulcer disease
GAA	Group Areas Act 1950
HCR	Hathi Committee Report
IDPL	Indian Drugs and Pharmaceuticals Limited, Hyderabad.
IPA	Indian Patents Act, 1970
KSSP	Kerala Sastra Sahitya Parishat, Trissur
LSM	Living standard measures
MCC	Medicine Control Council

MEC	Mineral energy complex
MMV	Medicines for Malaria Venture
MSF	Medecins Sans Frontieres, Johannesburg
NAPM	National Association of Pharmaceutical Manufacturers
NAM	Non-Aligned Movement
NRTI	Nucleotide reverse transcriptase inhibitors
NNRTI	Non-nucleoside reverse transcriptase inhibitors
NDH	National Department of Health, Pretoria
NDP	National Drug Policy, 1978
NSIC	National Small Industries Corporation Ltd., India
PEPFAR	US President's Emergency Plan for AIDS relief
PCMA	Pharmaceutical Care Management Association of South Africa
PLHIV	People Living with HIV
SME	Small, medium, and micro enterprises
TAC	Treatment Action Campaign, Johannesburg
TRIPS	Trade Related Intellectual Property Rights
SAARF	South African Advertising Research Foundation
SEP	Single Exit Price
WITS	University of the Witwatersrand
UAA	Urban Areas Act 1923
USFDA	US Food and Drug Administration

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Introduction

The Social Life of Indian Generic Pharmaceuticals in Johannesburg

Arguments

This dissertation explores how Indian generic pharmaceutical companies which I call Shitala, Sphynx, Eureka, Sigma, and Gemini engage in the circulation of generic pharmaceuticals in the highly competitive and complicated realm of pharmaceuticals' market in Johannesburg. The overarching question of the dissertation is this: How do Indian generic companies mediate between private markets and the public sector markets through various moral and material transactions in order to circulate pharmaceuticals? This problem leads to a theoretical question: How is the production of value of generics in these circuits characterized by an internal complication of 'politics' when logistical availability, location, and intermediation increasingly add value?

The narrative strategy of the dissertation is to follow generic pharmaceuticals such as ARVs rather than studying the examples of the companies that distribute them. The pharmaceutical products are traced in the practices of selling, logistical distribution, and dispensing. Each of these arenas enable us to narrate different kinds of production of the value. What is at stake here is not just the distinction between economic and moral value. Logistical availability forms a major arena of enterprises by actors such as middle managers.[1] The thesis is informed by a strong ethical commitment and a

[1] I borrow this idea from Julia Hornberger, personal communication, Wits, Johannesburg dated 20 December 2015.

passionate and deeply held set of analytical questions about value, claims of efficacy; care and circulation of medicines. Issues of surveillance; and implications of local manufacturing activities on labourers and systems are also covered. Shitala, and Sigma's continuous trade efforts has contributed to the scope of the study.

Broadly, the Indian generic pharmaceutical companies managed a false impression that they transformed themselves to undergo a humanitarian turn in the post 2010 mass roll-out era in Johannesburg. This is a different ball game altogether in comparison to that of the global strategies of the innovator companies. Here, the 'politics of life'—putting people under medications throughout life—joins hands with a global discourse of cheapness (Mintz, 1985; Dumit, 2012). In general, the substantial cheapness harnessed the value of generics in the circulation. The fame in the public sector, along with the rhetoric of being *local production units,* helps the companies to build proper 'commodity images' (Mazarrella, 2003) in the lucrative private sector. Indian companies directly or through their local subsidiaries sell ARVs that count as highly valuable. The merchandise accounts for 80% of total sale in ARVs in South Africa.

In many of the localities dispensing situations cut across illicit and licit trade practices (Peterson, 2014). These spaces of trading activities were historically the pockets were the poor shopped. It might be possible that treatment literacy campaigns around HIV/AIDS (Niehaus, 2014) have broadly facilitated the flow of generics at large.

Besides, borrowing the idea from Julia Hornberger, I observe how a further involution happened in the moral economy of generics' circulation as public

goods when *logistical availability* rather than access *per se* determined the *politics* and *value* of generics (Cf. Appadurai, 1986; Cowen, 2014). When severe 'stock-out' of drugs such as those used in antiretroviral therapy (ART) due to organizational drawbacks became a political issue, Indian companies offered cheaper ARVs and gained larger control over the entire supply chain. One of the suggestions drawn from socialist experiment in India is that booming public sector attracted simultaneous business tactics that were forged for market domination by entrepreneurs with trading or agricultural caste background. In Johannesburg Indian generic ARVs have clearly metamorphosed from 'global merit goods' to public goods (Kapstein & Busby, 2010).

Using the notion of humanitarian goods (Redfield, 2012) and their problematic appearance as apolitical objects, Chapter 2 shows how the politics of humanitarian efforts saturates generic pharmaceutical circulation. Humanitarian goods here connote 'simple goods' in circulation as an 'ethical response' to the failure of market or the State. They are made and circulated by 'humanitarian entrepreneurs' at a small-scale level to the 'people in need'. 'Ethical, as well as economic' terms accentuate the definition of their value (Redfield, 2012, pp. 158–159).

Anthropological studies on humanitarian goods are rare. My effort is to analyse a specific ARV product called FDC that is tenofovir + efavirenz + emtricitabine disoproxil fumarate as humanitarian goods. Fassin (2012) uses the notion of humanitarian reason to disillusion the politics of humanitarian compassion. For instance, he discusses how the discourses on AIDS consisted of 'innocent and sensuous' tales around HIV positive children. This is to produce a titillating, yet naturalized account, of suffering.

There are efforts to publicize the commodity images of some of the pharmaceuticals beyond immediate profit motives, as emerging pharma companies, their 'tenderpreneurs' (middling managers of Shitala in the context of this study), aspiring private retail pharmacists, sales representatives, NGO based activists who either people living with HIV (PLHIV) or former nurses circulate them. Unlike what happened in the early days of HIV/AIDS treatment in Johannesburg, the focus of NGOs shifted from providing medicines to managing the stock from depleting.

Indian companies such as Eureka have concentrated their functioning in the private *markets*. There is an increase in the consumption of generics for chronic illnesses in middle-class in areas like Northern suburbs (Zigomo, 2015). Self-medication, aided by pharmacists, has also contributed to the high sale of generic over—the—counter medicines among the poor. In three chapters, based on ethnographies I narrate three distinct processes of trade and manufacturing. These processes are the creation of propaganda for capitalist of expansion, brokerage between the companies and the doctors, and dispensing to patients.

The generic pharmaceuticals as commodities

This study attempts to look at the circulation of generic pharmaceuticals with illuminations from anthropological perspectives from the social life of commodities (Appadurai 1986; 1986a). How do pharmaceuticals show characteristics of a gift, a commodity, and or a good bartered, or as a combination of these? What is so peculiar about politics that generally determines the value of commodities?

Rajan (2005)'s ethnography observes how venture capitalists based in the USA and Indian politicians in Hyderabad forged processes for utilizing the boom in genomics. The information on DNA is a commodity. Given this opportunity, biotechnology firms operated with widespread propaganda that the flow of information is a gift on the part of big downstream—DNA information generating---companies to global health at large (Rajan, 2003). The companies reveal information as a part of the established practices of 'new corporate activism' in style. Besides, in Rajan's (2005) tough book there is 'a comparative investigation of post—genomic drug development marketplaces' writ large (p.14).

Anthropological literature on pharmaceuticals marks medicines as commodities implicated in social relations. Geest et al. (1996) define medicines as substances that improve the health of consumers for better. There is a dialectical relationship between medicines and diseases: medicines conceptualize disease as 'concrete'.

However, I avoid a theorization of value of pharmaceutical that relies on the idea of the bio power (Dumit, 2012) and bio capital (Rajan, 2005). To summarize, these two approaches focus on the modalities of pharmaceutical capital that produces 'surplus health'. In Capital (1867), Marx uses 'labour power' as theoretical category to analyse British Capitalism in 1830s. Everything made by workers' activity above social necessary labour time adds up as absolute surplus value. Socially necessary labour tends to change due to technological advances. Lucidly, the processes in which the healthy bodied individuals uncontaminated (?) by pharmaceuticals' consumption line up for clinical trials create surplus value. The clinical subjects in question are the

people in the Third World (Rajan, 2005). In a similar approach, Dumit (2012) argues that pharma companies insist on consumers taking pharmaceuticals above the limit of what is necessary for living well in the First World.

I concentrate on *circulation* of drugs for producing profit as expressed by Marx's commodity—money—commodity (C—M---C) formulae for trade. Generic pharmaceuticals as commodities that possess a fetish characteristic intrinsic to biomedicines. Commodity fetishism is the theology of capitalism (Rajan, 2005, p.199). The overarching claims of efficacy presents medicines to people as larger than their 'medicine—form'. Drawing from Kim's (2009) observations on Korean medicine I do not view generics as neutral objects in the interconnected networks or the domain of global health that determines the patronage of enlightened doctors and ignorant receivers. In many parts of the world some sections of the society mistrust generic pharmaceuticals for being spurious or for causing side effects.

Private companies such as Shitala and Sigma take control over 'humanitarian logistics' (Fassin & Pandolfi, 2010) these days. Recent cultural expectation of being ordinary and effective plays a huge role in the putative value of generics. The connection between the trends in the private and public sector flows is also a determinant of the total demand.

Value of humanitarianism, morality, and collective representations in society (Appadurai, 1996) are always relevant in the conduits of circulation. Even while many of the actors in the network negotiate prices in diverse and efficient ways, in retrospect, I view generics as goods that weigh more in terms

of *moral value* rather than the exchange value, and political value in the conduits of circulation in the era of the State-funded roll-out in Johannesburg.[2]

Using Durkheim's (1982; 2013) observation that society as repository of morality has coercive power, and that *morality* qualifies to be called a *social fact* (Durkheim, 1982; 2013), I approach the global representations, and nationalism (Appadurai, 1996) found on the platforms of circulation similarly. The local moral imaginations may communicate with globally made collective representations, and public culture at large (Appadurai, 1995; 1996).

Fassin (2012)'s concept of humanitarian reason considers morality very seriously. By theorizing the moral value of a commodity as relative rather than as fixed as found in Marx's theories , Lambek (2008) also provides a prism to observe how generics pass through different *regimes of morality* in South Africa. Loosely, 'a tournament of value' is visible in the way generic ARVs and other life-saving drugs circulate in Johannesburg as public goods. Rarity rather than any clear tussle between the 'desire of the consumer and the sacrifice of the seller' or the price—the prices are already very low—determines the value (Cf. Appadurai, 1986, p. 21). Tournament of value draws on the rank and file of people. There are symbolic and economic values being held as relevant:

> Tournaments of value are complex periodic events that are removed in some culturally well—defined way from the routines of economic life. Participation in them is likely to be both a privilege of those in power and an instrument of status contests between them. The currency of such tournaments is also likely to be set apart through well understood cultural diacritics. Finally, what is at issue in such tournaments is not just status, rank, fame, or reputation of actors, but the disposition of the central tokens

[2] Ethnographies of Johannesburg spotlight the city as an expanding and elusive metropolis (Nuttall & Mbembe, 2008; Murray, 2014). Health along with safety always formed the topics of daily conversations in Johannesburg.

> of value in the society in question. Finally though such tournaments of value occur in special times and places, their forms and outcomes are always consequential for the more mundane realities of power and value in ordinary life. As in the kula, so in such tournaments of value generally, strategic skill is culturally measured by the success with which actors attempt diversions or subversions of culturally conventionalized paths for the flow of things (Appadurai, 1986, p. 21).

The modes of circulation of FDCs have also struck me to set up a parallel between humanitarian goods (Redfield, 2010) and ARVs. Intensification of corporate philanthropy and state control over the ART programme is the central backdrop. So, theoretically, humanitarian goods circulate through humanitarian logistics (Sheller, 2012). The articulations of the ethical value are the peculiarity at the 'front stage' of corporate philanthropy. According to Goffman (1959) a person's social interactions involve observation of other people in action, and then judging them. There are impressions that an actor gives and gives off. People attempt to mark impressions; thus, there is an effort to maintenan settings, personal fronts, and collective representations. Individual develop into teams, and institutionalize the acts using paraphernalia for achieving this (Goffman, 1959, p.83).

Shitala and Sigma forge presentable images and rhetoric and seek reciprocity from the State to gather lucrative State-funded tenders. These efforts reach up to the level of an ideology. The State, civil society, and pharmaceutical companies have found a comfortable position in the massive circulation of ARVs and other pharmaceuticals.

Additions of value happen as market intermediaries produce knowledge on the 'emerging market'. In this new spatial context of 'emerging markets' generics connote sheer social aspirations of proletariats, denotes issues of identity, masculinities, victimhood, and lived space. In many ways pharmaceutical circulation metaphorically constructs Johannesburg as an ailing, yet a thriving body (Le Marcis, 2008).

Generic medicines imported from India also implicate 'assemblages' (Lock & Nguyen, 2010) that resonates the legacy of India in the advancement of chemical research and broader political ties between India and South Africa such as BRICS (Brazil, India, China, and South Africa), IBSA (India, Brazil and South Africa). As I noted above these bilateral cultural exchanges involves revival of historical links (Joseph, 2015, p. 68).[3] There are also interventions of patients, regulatory authorities, and global activists. This entirety denotes assemblages.

Peterson (2014) has provided a very useful political economic analysis of trade networks of life-saving medicines from India to Nigeria. Generic pharmaceuticals from India began to meet healthcare requirements after the 1980s. This happened against the temporal backdrop of economic problems. Arbitrage, trade in counterfeits, and involvement of drug traffickers lead the undertaking of generalized risk-taking by dealers and pharmacists. The services carried out by close knit people give a derivate life to medicines. This is because certain factors such as risk involved in the mercantile activity are turned into a

[3] Shitala's export amounted to $193.5 million and formed 3.3% of the total exports in 2009 (Joseph, 2015). Flemes (2009) had anticipated that IBSA partnership could be a pivotal trade agreement as far as trade in ARVs are concerned.

resource. In short, 'economic volatility' is a 'new formal' in the exchange (Peterson, 2014, p. 108).

Medical representatives attempt to foreground the use value of pharmaceuticals to exchange value. Dispensing situations involve respect, and trust. In all these situations, ethical and economic values interact with each other. A few of them become high priests of false morality because of corruption, and manipulation of trust.

In Chapter 3, my analysis directly responds to the broader debates about pharmaceutical market manipulations through gift relations and incentives (Lakoff, 2005). In the wake of what I call the 'humanitarian turn', or lack of the same thereof, I refer to the way pharmaceutical companies employ 'moral claims' to make profit through real domination.

The politics of public health is well theorized. On the circulation of ARVs *per se*, Biehl (2007) has implicated pharmaceuticals as 'the magic bullets' in settings that are biomedicalized. Even if there is no health infrastructure pharmaceuticals could provide relief.[4] Besides, I also justify this project as one

[4] The model of treating HIV in South Africa followed an approach of using ARVs as magic bullets. Interestingly, the country has one of higher per capita usage of condoms (personal communication, F. Venter, 27 August 2015, Rosebank). The guideline of HIV clinicians society included ART as a prevention method in 2014 (Meintjes et al., 2010, p. 1). In the medical jargon the use of ART for prevention is called 'pre-exposure prophylaxis (PrEP)'. In this plan risky population consists of drug addicts and sex workers who get ART as precaution (Venter, 2015, October 27). According to Pacho (12 October 2012) this 'new paradigm' is broadly called 'treatment as prevention' (TasP). New Prevention Technologies (NPTs) foreground microbicides and ART. Nguyun et al. (2012) argued that this, in turn, *remedicalizes* the prevention. The authors wrote so in an opinion piece against Vienna conference discussions that moved in this direction in 2010. However, one could argue that the epistemological approach to the disease has been similar to that of the period prior to 2010. Foucault (1973) has observed how modern biomedicine bases treatment on the ontology of death. This is to the ignorance of the feelings of patients and sociocultural context. In other words, medial *gaze* could freely travel from diseased bodies to that of healthy bodies. To add a few words on the history of condom use, Burns (2004, p. 183)

that observes how Indian companies have won capitalist expansion, and influenced local biologies (Lock & Nguyen, 2010). A bird's eye view is that they transform the therapeutic spaces scrutinized by NGOs, and politicians in Johannesburg at large (Le Marcis, 2008).

Let me elaborate this observation by emphasizing '*transformation*'. I used the social history of pharmaceutical consumption in the CBD to track the changes and continuities from the past. During the Apartheid, spatially, a kind of 'structural violence' manifested in the distribution of healthcare facilities. Temporally, there were many legal and political sanctions that prevented trade in pharmaceuticals among and by Africans. This hindered the majority's right to health. Given this anomalies, I have found that the present generic pharmaceutical circulation helps to set up connections between townships and suburbs.

The contemporary analysis of urbanism in Johannesburg gave me the most resourceful theoretical insights. The literature on the city also gives me analytical tools to observe the way transnational networks and flow of capital play out in the daily activities.[5] Using the historical data and the theories, I develop the notion of pharmaceutical territory.

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argues that African women who migrated to the city of Johannesburg in 1930s took initiatives to use contraception. People bought condoms from the pharmacies. Many of the women utilized 'menstrual 'activators', herbs, and douches'. In the Bridgman Memorial Hospital nurses perfected the knowledge on the art of using 'diaphragms, vaginal pessaries, and condoms' according to the available folk and professional knowledge in the 1940s (p.191). The notion of sexual pleasure was more oriented in penetrative sex in the city. For neophyte migrant females there was a sudden change. In rural areas men and women engaged in *interfemoral* sex on various occasions (p. 170).

[5] I take inspiration from B. Latour (2005) to see how the 'things' also becomes actants—active agents in society. Latour (2005) argues for incorporating the networks of circulation of objects into the domain of the 'social'. Hence, according to him the description of the connections or networks of objects in the field constitute an important

I also appropriate Kleinman's (1980) tripartite division of healing systems into professional, folk, and popular sectors in Taiwan. Peterson's (2014) division between licit and illicit trade and the porous boundaries that exist between both these realms in the Idumota market in Nigeria also illuminates the flow of generic medicines in the CBD area of Johannesburg.

Engagement of the State in the biological citizenship in the age of market transition is been discussed in science and technology (STS) literature. Petryna (2002, p. 138) has documented how state bureaucrats always denied the illness manifestations of cancer victims after The Chernobyl disaster in Ukraine. The victims in want of social security payments attempted to exaggerate their symptoms. Especially for getting disability entitlements, the victims had to gain expertise in sciences and symptomatologies. She draws reader's attention to the way changing economic condition hastened exposure to hazardous work in 'the zones' in the background.

I found a dominant binary of apathy of AIDS denialism and later humanitarianism rather too simplistic. The Apartheid State controlled the discussion of sexuality in the public sphere (Posel, 2005). Historical research has exposed that the South African State being a stakeholder in the MEC always favoured the mining companies. This happened at the cost of social justice, and health of the people. In continuation with this trend, the State totally detached itself from the problem of AIDS. The infected population were viewed as a security threat (Cooper, 2008, p. 68).

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part of anthropological and sociological method. For a critique of actor network theory (ANT), see Kim (2009).

Technologies of public health have never been neutral. Public Health Act of 1883 and racial segregation in 1900 propagated the allegation that unhealthy black population represented an internal threat (Cooper, 2008, p.68). The management of government initiatives between 1911 and l919 to provide support to miners with silicosis disease drew on racial differences too (Braun, 2014, p. 170). Spirometers that measured the affliction of lungs with silicosis was adjusted for white 'miners' and Black 'native labourers' differently though they worked at the same site. Besides, the circulation of spirometers fed into internationally acknowledged theories that Black lungs were smaller in size. In essence the spirometers were 'racially coded white' so that the mine doctors could deny necessary social security payments to the latter (Braun, 2014, p. 167). These developments sadly happened during an era in which the Afrikaner 'workers' showed militant assertions.

Sex, sex talk, and pleasure became a matter of serious discussion and praxis in post—Liberation era. HIV/AIDS found a fertile soil. Typical masculine response to this problem by leaders involved an attempt to repress the discussions on sexuality: the health apparatus denied the immunological explanations. Mbeki symbolized this trend. Broader issues of access to medication were approached in a totally reactionary way. At the height of revivalism of Africanism and misuse of political authority, the State even refused support from Western pharmaceutical companies.

Mbeki was superstitious about ARVs. ARVs were misunderstood as toxic and even as causing the spread of the virus during his reign (Cooper, 2008, p. 68). Legislative possibilities that are made for generic substitution also did not

come handy for the hardships of those who died without treatment during the early transformation era (Kravstov, 2011, p. 355).

Prior to the import of generics Big pharma's stand towards the early stage of HIV/AIDS crisis was characterized by 'micro politics of exorcism' (Cooper, 2008, p.51). The companies used sexist and racist idioms because most of the victims were from the oppressed groups. AIDS was never taken seriously. Being very loyal to the USA the South African State never utilized TRIPS's relaxations for having low cost generics available declaring the problem 'a state of emergency'. In this context the civil society organizations courted global movements and humanitarian associations to assert the biological citizenship of patients. Yet, the spectre of liberalization did not wait to haunt the country.

My study starts where the 'competitive humanitarianism' of the NGOs stopes (Stirrat, 2006). In the context of the marketization of economy and the humanitarian crisis wrought by HIV/AIDS, Indian generic companies took the avatar of good Samaritans to help the State. Actually, the State was compelled to intervene in public health due to raising inequalities in the access to healthcare. The curious case of the circulation of ARVs as public goods accompanies these tensions between the State and society.

While I retain the term 'State' for describing enterprises such as public tenders, and macro level issues, the term 'regulation' describes various juridico--political aspects at a micro level.

The establishment of South Africa's statutory medicines regulatory apparatus

The regulation and subsequent legislation on pharmaceuticals into the era of HIV/AIDS, evinced long and difficult genealogies: the Medical, Dental and Pharmacy Act (13) of 1928 and later the Proprietary Medicines and Appliances Bill of 1937 were passed. These legislations were emanated from the recommendations of a1935 Committee of Enquiry tasked with investigating the advertising of 'patent and proprietary medicines and appliances'. This title may mislead because the report laid new national structures with authority over the terms of the manufacture, importation, sale and registration of medicines for human consumption. These ambitious intentions were both supported and resisted by professional and commercial pharmacy.

Figure 1: Sulfapyridine antibiotics, Carboy museum (photographed by author)

The internal logic of multinational pharmaceutical industry, or pharmacracy shaped the legitimization of generics in the 1970s. There was a cultural construction where branded drugs are superior to generics or 'pirated drugs' (Retif, 1984).

During my discussion on the history of pharmaceuticals in Johannesburg with Ray, the curator of Carboy Museum in Sandton, I learned that in the early 20th century various companies marketed the same 'salt' under different brands because the discoveries were well known for a long time. Ray showed me three of sulfapyridine antibiotic medicines marketed by different companies such as M&B, Scherring, and Vergie (Figure 1).[6]

In Transvaal, as Digby (2005)'s chronicle of circulation shows in rural areas there were white men and women who sold a bunch of folk remedies such as patent medicines, *bachu*, rooibos tea, and cannabis in 1880s (Digby, 2005). Transvaal's mine workers created high demand for pharmaceuticals in the urban locations (p. 448). Pharmacists treated wounds, compounded medicines, and broadly diagnosed Africans. The racially carved out spaces and processes provided architectures of exploitation. The white pharmacists hired African apprentices. They controlled competition from colonized population using favourable juridical apparatus. Between 1920 and 1940 advertisements in the newspapers, pamphlets in African newspapers promoted patent medicines. They were all of low quality (p.450). This depicts how medicines' markets ware largely informal.

[6] Ray, personal communication dated 10 August 2014, Sandton.

Goyns (1994, p. 8) in '*The History of Pharmacies in Transvaal'* documents how 'druggists and chemists' sold pharmaceuticals for different prices at different outlets in Johannesburg. The pharmacists decided to collectively depend upon a *Blue Book* wrote by W.H. Cross of Loewenstern, Adams & Co. Ltd (a chain pharmacy). It listed the prices of the medicines. By publishing this, the Transvaal Pharmaceutical Society, the organization of pharmacists, hoped to solve 'practical issues' of circulation of pharmaceuticals and, hence, to satisfy 'members of the public' in 1912.

The variations in the price seem to have been in vogue for much longer. Till the Medicines and Related Substances Control Act (MRSCA) or Act 101 of 1965 was in effect, pharmacists could compound and sell medicines (Gilbert, 1998, p. 155). The MRSCA brought in control over the trade of schedule 1 and 2's items (Gilbert, 1998, p.55).

The original legislation was titled the Drugs (later Medicines) Control Act (101) of 1965. The Act was later renamed the MRSCA. The Council was renamed as the Medicines Control Council. Klausen and Parle's (2015, p.742) work demonstrate that the Drugs Control Bill had in part been shaped by the recommendations of Guy A Elliott, who, at the suggestion in 1962 of the then Minister of Health Albert Hertzog, had undertaken a study of 'production, control and clinical use of drugs'. This came under his discretion because of being a World Health Organization Travelling Fellow. He was appointed in October 1964. In 1965, after reviewing the different relevant regulatory and scientific bodies and laws of European countries, Elliott advised the setting up of a 'statutory drug control system that is acceptable to the State, the drug industry and the profession' (p.743). The role of the drug scare and related legal action

around Thalidomide regulation was a spur to much of this new work by the State and by medical professionals and their bodies. In 1960s Thalidomide disaster happened because the use of the chemical as sedative resulted in the birth of deformed or still born babies (Carpenter, 2010, p.25).

South Africa is not that different to the history of the FDA in the USA with the moralising and humanitarian claims held in constant tension with 'free market' arguments about competition and drug discovery (see Carpenter, 2010). In Carptener's history 'the international diffusion of FDA standards' as in the case of India is a key theme too (716). The USA nationalized the regulations in 1970s. The FDA's 'power' and 'authority' were accumulated, contested, and historically constructed. It was as much its reputation as the overt use of punitive measures that gave it a regulatory power. Reputation means 'a set of symbolic belief about an organization, beliefs embedded in multiple audiences' (p.10).

Regulation was soon decoupled from laws governing competition as in an incident that happened much later in 1987, when Stef Naude, who led the Competition Board, met with the delegates of an annual meeting of the Pharmaceutical Society of South Africa (PSSA), the pharmacists protested against framing pharmaceuticals as 'ordinary commodities of trade'. Naude, in turn, asked them to professionalize and to become 'sophisticated traders' rather than asking for an exemption from the law (Goyns, 1995, p. 107). History shows that the pharmacists formed various traders associations. (Gilbert, 2004). Currently, corporate firms and small vendors' are pitted against one another in the wake of tight competition.

Regarding generic competition the following information is available: according to Steenkamp (1979) who inquired into the cause of wealth of pharmaceutical companies, between 1930 and 1970, multinational companies seem to have enjoyed the fruits of what he calls 'free market' system (perhaps, referring to the State patronage of multinational firms) as it existed in South Africa. Steenkamp headed a commission to frame 'desirable anti-monopoly, healthcare, and import replacement measures' by appointment of the minister of economic affairs.[7]

Steenkamp recommended generic substitution in the private sector to counter exorbitant prices of 'favourably known brand name products'. He observed that the prices are set at a level of 'what the market [would] bear' even when 'the generic product [available] was superior in quality'. This was necessary given that the economy waned in the 1970s and the rand depreciated after the decline in gold extraction (Steenkamp, 1979, p. 79; Beavon, 2004).

For the first time in the nation's history South African Pharmacy Council suggested an amendment of 'an ethical rule' by in November 1984 (Karim et al., 1996). Through this amendment the pharmacists could have substituted a medication without consulting a medical practitioner.

Why did the suggestion for the legalization of generic substitution fail to impress public health experts as they could have passed 'the ethical rule' mandating that pharmacists could substitute with the proper approval of doctors?

[7] Steenkpamp reported that the pharmaceutical industry enjoyed a 'monopolistic competition' in a 'Chamberlain sense' by product differentiation that led to 'price differentials' in the 1970s. The report handed in 1975 recorded various unethical practices including 'price fixing' and the practice of companies giving gifts to doctors (Steenkamp, 1979, pp. 49–57). Steenkamp intermittently uses the term 'free market system' and 'monopolistic competition' to refer to the pharmaceutical market. Both terms do not mean the same. The former connotes laissez faire. The latter connotes simple price differentiation practised by different companies through advertising. This is confusing.

Pharmacists relied on the new ethics of generic substitution to professionalize their job.[8] Doctors remained as a conservative class.[9]

However, the relative inferiority of pharmacists against the medical authority of doctors was unlikely to be the sole reason behind the quashing of the suggestion. The answer also lies in the fact that the strict distinction between branded medicines and generic medicine did not exist in Johannesburg in those days. Besides, the patient or citizen who might be a deserving target of the compassion or the welfare accentuated by the pharmaceutical companies and public health experts was missing from the scene.

The triangular debate on substitution was documented in SAMJ in 1984. In one of articles written by R. P. Retif (1984, pp. 590–592), Director, Department of Health and Welfare in favour of the substitution, there were a lot of references to 'the indigent and the aged' and 'a man in the street' who might receive cheaper generic pharmaceuticals. His arguments cut no ice to the policy makers. In contrast, the power of the different pharmaceutical companies to influence the economy manifested more clearly.[10]

[8] In contrast, Peterson (2014) documents how pharmacists in Nigeria remembered 1980s as the golden time of the profession. Multinational drug companies enabled them to gain high profits and provided incentives. Similarly, Gabril (2014), in the case of USA, has noted how patent coverage of many prescription drugs increased the status of pharmacists. The considerable prospects of selling for cheaper medicines among the Black might have enticed pharmacists in South Africa to prefer generic substitution. Whites resorted to law and order maintaining authority to suppress competition from black healers (Burns, 1996).

[9] Doctors were always against the granting rights to drug sellers and attributing them with 'discretionary powers to prescribe'. There were a few successful amendment to MRSCA. 'Certain defined conditions' happened in the rural belt because of the dearth of doctors gave opportunity for the traders to sell drugs in the list of schedule 3, 4 and 5 (Editorial, vol 1, p. 4 cited in Gilbert, 1998, p.161).

[10] 'The Editorial' of SAMJ mainly rebuffed any chances of generic substitution. The article titled 'The Industry Replies' vehemently attacked the Department of Health and Welfare (DHW) for backing the proposal by the Pharmacy Council. Retif (1984, pp. 590–592) wrote a reply titled 'Generic Substitution: The Other Side of the Coin' contesting the very 'scientific' rhetoric of the 'Opinion' piece and the interest of the pharmaceutical industry. He defended the generic

There was worldwide reception of the generic pharmaceuticals in 1984 (Greene, 2011). There was an immediate suggestion by the government to inquire into that in South Africa and this was caused a debate among health practitioners. [11]

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substitution 'by default' on the ground of economic reasons. He also stood for the provision for 'a man in the street' to access low-cost generics. The chronological unfolding of the debates is as follows: The SAPC proposed an 'ethical rule no. 1'. MASA opposed this soon. 'The Editorial' was written in justification of MASA's decision to oppose. 'The Editorial' cited reasons of quality and efficacy retention as the basis for not allowing generics in the market.

The editorial was also of the view that the generics were Eastern European countries' export to South Africa:

> The Soviet Union has wisely chosen to profit from pharmacological research carried out in the West. When a new drug appears, they buy supplies from the West until they can copy it, then they make it themselves. Very logical, but suppose everyone adopted this attitude [sic]—research would then stop world-wide. There is in fact [sic] evidence that the bases for certain generic products marketed in South Africa actually come from Eastern Europe, a curious situation indeed [sic].

In the discussion of the pros and cons of generic substitution 'The Editorial' expressed a tone of ambivalence. Yet, the editor went even so far to argue that this particular move was a humiliation to South Africa because the country's prescribing pattern may resemble that of Mozambique and the rest of the 'Third World' (Editorial, 7 July 1984, p. 1). The editorial also furnished facts: the Federal Council of Medical Association of South Africa (MASA) had overruled the decision of the executive committee, South African Pharmacy Council (SAPC), the South African Medical and Dental Council (SAMDC), and various medical aid schemes to support moves for legally allowing generic substitution without consulting doctors. Horwitz (2013, p. 8) notes that MASA—the umbrella organization—and SAMDC were hand-in-glove with the State in support of the policies of 'separate development' or apartheid in the 1970s. Moreover, with the support of doctors the organization of pharmaceutical industry called the Pharmaceutical and Chemical Manufacturers Association (PCMA) could successfully oppose generic substitution during the Apartheid.

[11] Let me further elaborate the plot on the suggestion of generic substitution in 1980s: in a counter reply to Retif, one of the interlocutors, and other articles published in the newspapers, the PCMA opposed the move. Anyway, the PCMA 'unleashed a concerted attack on the [health and welfare] Minister's initiatives' to stand for substitution. In the words of a representative of PCMA, a certain J. G. Toerien, the generics posed a threat to the 'free trade' and hammered an 'extra nail' in the 'disinvestment coffin'. The association not only blackmailed to 'withhold' investments but also cajoled itself, in the language of humanitarianism, that the 'poor and indigent' have been availing the generics at low rates. The association promised a continuous supply only if the companies gained very high profits from the sale in the private sector (Toerien, 1984, p. 832). Along with that there were more technical attacks on the generics for their unknown 'side effects'. The argument extended so far as stating that the substitution posed a 'practical danger' to a patient. During those days, the association of industry came up with various tactics to encourage doctors to 'veto' the power of pharmacists to substitute. For doing this doctors had to routinely write 'no alternatives' on their prescriptions (p. 9, unspecified file on pharmaceuticals at Adler Archives). In 1985, PCMA, formed in July 1977, was divided over this issue. South African Druggist that owned 'Lennon limited' withdrew from the PCMA in 1985, and this was due to the latter's call to arrange finance from members to combat the ethical rule permitting generic substitution of prescription

A brief note on the history of generic substitution in USA will not be totally out of place here. Analysing the history of pharmaceuticals in the USA, Gabril (2014, p. 3) notes that active patent rights as metonym of quality was found to be existent slowly along with the development of commercial laws protecting chemical processes, the final products, and simple to market chemical names of these products. These laws were solidified by the Second World War in the USA (also see Rasmussen, 2008). Gabril makes a useful tripartite division between ethical medicines, patent medicines, and generics. Ethical drugs imply drugs that are known to the scientific world and marketed to doctors. Most of the ethical drugs were generics. Patent drug makers relied on the advertisements of an illusionary secret ingredient (Gabril, 2014, p. 2; Rasmussen, 2008).

Gabril (2014) further argues that people viewed the industry-affiliated patent rights as a marker of quality. The generics came to be understood as copies of off-patent brands. This notion was radically different from the past. Following this, 'monopolistic patenting practices, unfairly high prices, and collusive agreements between producers' existed in the post-World War II markets in the USA (Gabril, 2014, p. 247).

Furthermore, Senator Kefauver's Antitrust Monopoly Subcommittee warned of 'unfair profit margins, dishonest advertising, abuse of patent law'

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drugs. In one of the pamphlets of the Lennon (Lennon, pharmaceuticals, Adler Archives (undated)) there is a mention of this:

> The withdrawal highlighted the fact that there are a number of conflicting areas between local and multinational pharmaceutical manufacturers.
>
> Interestingly, this is the first instance of referring to 'local' production as a giant step towards corporate philanthropy by a pharmaceutical company. The National Association of Pharmaceutical Manufacturers (NAPM), which is now an association of the generic manufacturers such as Shitala, is a product of this divide.Currently, Shitala is a prominent member of NAPM.

during the late 1959 to 1963. Hence, generic pharmaceuticals as a set of copies of the off-patented drugs re-emerged in the USA.

> The 1952 Patent Act established the basic framework for current patent law, while the 1984 Drug Price Competition and Patent Term Restoration Act (better known as the Hatch-Waxman Act) established a regulatory pathway for an expedited approval process of generic drugs, thereby laying the framework for the emergence of the generic industry in the following decade. Since the 1984 generic drugs have occupied a growing share of the drug market (Gabril, 2014, p. 247).

For the first time, a debate on the legalization of generic substitution by pharmacists without doctors' consultation happened in South Africa in 1984.[12]

In fact, after the initial failure the debates on substitution faded for only a while, as ANC raised this issue again in 1990. The ANC Health Department viewed generic substitution as a possible way to contain costs in the delivery of healthcare service (Goyns, 1994).

By then, as observed in KwaZulu--Natal, medical practitioners were mainly white-led missions to convert Africans who believed in *inyangas* (traditional healers). The doctors persuaded the people to have faith in the biomedical system. They distributed pamphlets written in African languages. The pamphlets warned African men against *inyangas* because the latter 'killed and injured' formers' wives (Flint, 2008, p. 149).

[12] Let me continue with the narration of the debate on generic substitution here: the SAPC (pharmacy council) went ahead passing this ethical rule in 1985 to allow pharmacists to use their own discretion, with the consent of the patient, to substitute the generic equivalent of a medicine without consultation with the prescribing medical practitioner. The ethical rule was published in the Government Gazette with the support of the Minister of Health, Nak van der Merwe. The Browne Commission, which dealt with 'extending the functions of the pharmacists' also recommended the same in 1986 (Gilbert, 1998; Goyns, 1994). This was again challenged in the court. At last, after a Supreme Court judgment against them, the Pharmacy Council was told that only doctors can substitute a medicine, putting an end to the debate on promoting generic substitution to bring competitiveness in the private sector during the Apartheid.

Recounting the contributions of *inyangas* as pre--modern may not be justified. Black female herbalists such as Luisa Mvembe of Natal stood for the liberation of the knowledge of healing (Burns, 1996). Elsewhere in 1910 Union's doctors and chemists involved in the 'criminalisation' of the 'heretic' practices of 'native medicine men and women'. Despite their passage the influence of the Urban Aras Act of 1923, and the Medical, Dental, and Pharmacy Act (MDPA) of 1928 over the folk practices of midwives, and herbalists (*inyangas*) was not massive. Consecration of *inyangas* with purely Western healing was surely one of the aims of MDPA (p.121). Refashioning in ultra-modern garb wearing a pair glows for vaginal inspections and before touching syphilis patients Luisa Mvembe set an example of a true competitor (p.108). Problematic surveyors of health had to answer to her letters of dissent.

This was not very different from the way doctors and nurses tried to impress the people by presenting their medical services in Baragwanath Hospital in Soweto, Johannesburg, in 'humanitarian terms' (Horwitz, 2013, p. 121). While nurses impersonated 'sisters' who spread love through their 'calling', doctors (of mixed race, though majority of the doctors were white) were termed as philanthropists closer to 'missionaries' when it came to description of them treating Black patients (p. 106).

Jones (2012)'s case--study of psychiatric hospitals has documented how the broader flow of pharmaceuticals and medical practice during the Apartheid had undergone regulation by international decolonization politics in the 1950s and 1960s and thus there were spaces of miscegenation. Health practitioners, as had happened in the known case of Baragwanath Hospital in Soweto (Horwitz, 2013), resisted some of the policies of the government and even attempted to

influence primary healthcare through efforts referred to by the umbrella term social medicine throughout South Africa (Marks, 2000).[13]

In a way fitting to this argument, generics were already available in the public sector like in European countries, but extreme forms of corruption ruled in the public sector circulation of pharmaceuticals. Many scandals were reported in the newspapers about the 'collusion' among pharmaceutical companies to fix prices in the 1970s and receipt of 'financial back up' from pharmaceutical companies by representatives of the National Party. A certain G. Schepers, Transvaal Deputy Director of Hospital Services, and his wife were exposed for being on 'six week overseas holidays' sponsored by Labethica, Banstan Holdings, and Copybrook investments, a part of South African Druggists (Jones, 2012, p. 167). In the backdrop there are broader and deeper racialized economies of health. Generic substitution debates in South Africa bore same symptoms.[14]

Legally, as it stands now, a pharmacist can substitute pharmaceuticals in consultation with the doctor. The humanitarianism envisaged by generic pharmaceuticals made a leap when ARVs rolled out in the context of HIV/AIDS epidemics. However, Rispel et al. (2015) argue that the circulation of ARVs was found to face the structure of health system that represented continuity with the Apartheid. For instance, in the year 2015, in Gauteng, the Chief Financial Officer of the provincial depot Ndoda Biyela was suspended over an allegation of corruption. Various top administrators of the Medical Supplies Depot were also suspended in June 2013.

[13] One of the trends in this fashion was the movements referred by an umbrella term social medicine (Marks, 2000).

[14] I will discuss the politics of state-sponsored ARV programme in Chapter 2.

Generics impersonated ethics in the 1980s. However, there was also no identification of a citizen who stood at receiving end of welfare policies. The HIV/AIDS patients stood as strong candidates because of being the victims of the pathological neglect.

I find that an immediate explanatory step is necessary regarding the nature of *Materia Medica* regulation in the South African history. The modern colonial history of South Africa starts after the Dutch occupation of Cape during the seventeenth century (Jentzen, 2014, p. 171). Along with the Roman Dutch law, the British common law also made an advent during the Boer War of 1899–1902 (p. 172). Criminal justice interventions in Johannesburg introduced medical gaze of great precision. Jentzen argues that colonialists also tested and reassured the use of many of the medical procedures and presumably the *Materia Medica* in colonies such as India, and South Africa in the early twentieth century onwards.

Borrowing from Catherine Burns, I note that the market of pharmaceuticals was never a 'free market' (Cf. Steenkamp, 1979). Opium, cocaine, and other habit-forming drugs were highly restricted commodities during colonial times. Medical Dental and Pharmacy Act (Act No. 13 of 1928) prohibited the import and merchandise of habit-forming drugs in the absence of certificates issued by the health minister (Taitz & Gordon, 1930, p. 58; also see *Control and Administration of Drugs* (undated), Adler Archives).

The ports of arrival, 'the weight' of the packages on shipment, their transmission in the Union for consumption or for sale, and their use for 'educational and research purposes' were regulated by this law (Taitz & Gordon, 1930, p. 71). Most of the chemicals used as drugs were termed poisons. Only a

registered chemist or body corporates could sell these substances for therapeutic use in humans and animals (p. 45).

The regulations, regarding 'patent medicines' in the retail sector, have been documented. Burke (1996, p. 202) has observed how products such as Feluna pills were thoroughly advertised in African newspapers during the 1940s and 1970s. The advertisements nurtured certain notions of domesticity and feminity. Dauskardt (1990) provides one of the excellent stories on the way Black consumers bought imported patent medicines during the same period. This according to him emanates from proletarianization and urbanization of Blacks in Johannesburg. As early as the 1930s, the market recognized Blacks as great 'buyers and consumers of medicines' (Phillips 1939, p. 130 quoted in Dauskardt, 1990, p. 281).

Anne Digby's (2005, p. 440; 2006) history of self-medication provides an idea about the State regulation of western prescription medicines, patent medicines, American–Indian medicines, and African herbal/*muthi* medicines from the mid-ninetieth century to the mid-twentieth century. The colonial State was ambivalent towards traffic in different kinds of *Materia Medica* during this period.

In the 1920s the State's attitude changed: the Department of Public Health criticized quacks for advertising 'misleading and fraudulent advertisements' in African languages in Natal (2005, p. 450). Later in 1952, the governor general issued a proclamation that retained further restrictions on 'native medicines'. Restrictions on medicines were laid due to the efforts of pharmacists to professionalize their job (Ryan, 1986; Goyns, 1995). Pharmacists had attempted to monopolize the trade of poisons for medical use.

Acts\legislations	Implications
The Colonial Medical Committee in Cape Town 1830	Licensing of apothecaries (Ryan, 1986, p. 1)
Law No. 8 of 1882	Adoption of Cape Colony Medical Committee rules in Transvaal (Goyns, 1995,p.70)
The 1891 Medical, Dental and Pharmacy Act	'Shop keepers were permitted to sell poisons only on condition that they were used for the destruction of wild animals and vermin or for the treatment of scab on sheep. They were not permitted to sell arsenic or strychnine in quantities smaller than 11b. in weight and they were bound to keep a poison's book with the name and address of the purchaser, the nature and quantity of the poisons sold and purpose for which they were required. This is to avoid them from competing with pharmacists' (Ryan, 1986, p. 45).
The Medical, Dental and Pharmacy Act of 1928	'All poisons had to be stored, handled and sold in a part of the shop separate from other goods and a poisons book had to be kept in which was to be recorded the nature and quantity of poison sold, the date of the sale, the name and address of the purchaser and the purpose for which the poison was required' (Ryan 1986. p. 69). 'A person who sells patent medicines or herbs may recommend his wares, and even advice his customers as to their properties and merits, provided that any charge he makes is for the medicines supplied and not for diagnosing the disease or prescribing a remedy' (Simons, 1957, p. 85). Restrictions imposed on the import of habit forming drugs (Taitz & Gordon, 1930)
The Medicines and Related Substances Control Act 1965	Mandatory registration of medicines at MCC. Substances were classified into nine schedules (Goyns, 1995, p. 80)
The Medicines and Related Substances Control Amendment Act (Act 90 of 1997)	All medicines, including traditional medicines, to be registered with the Medicine Control Council (Ashforth, 2005, p. 223). Compulsory substitution (Section 22 F) by pharmacists came into the books (Zigomo, 2014, p. 6)
The National Drug Policy 1996	Implementation of an essential drug list (EDL) in the public sector (Gilbert, Selikow & Walker, 1996). NDP introduced compulsory licensing and compulsory generic substitution (Gray & Suleman, 2015). Incentives for

	generic local production were given (Zigomo, 2014).
Constitution of South Africa (10 December 1996)	'Section 27 (1) (a): Everyone has the right to have access to health care services, including reproductive health care. Section 27 (3): No one may be refused emergency medical treatment. Section 27 (2): The state can take 'reasonable legislative and other measures, within its available resources, to achieve the progressive realization of this right' (Forman, Pillay & Sait, 2003, p. 15).
The Competition Act No. 89 1998 (Competition Act)	It introduced 'diverstiture to avoid anti-competitive practices' and 'Parallel importation' (Gray & Vawda, 2013, p.192).
The National Health Act 61 of 2003	Decentralization of healthcare through the district health system and National Health Insurance was envisioned (Berger et al., 2013)
The Medicines and Related Substances Control Amendment Act 2002	Parallel imports, generic substitution, pricing committee, international tendering for medicines became mandatory (Joao, 2005, p. 11).

Figure 2: Major legislations that determined the circulation of Materia Medica, 1830–2013.

The above table gives an overview of the regulations that determined the circulation of *Materia Medica* in Johannesburg. The first legal enactment simply emulated the legislation that existed in Cape Colony and Natal.

Recent regulations on pharmaceutical deals give extra advantage to South African companies. Indian companies attempt to become national companies to capture the start-up advantage given to the local firms. Unlike what Marx and Engels (1848, p. 88) imagined in *The Communist Manifesto*, the commodities do not simply evade national boundaries as they spread across the globe. The movement of generics revives nationalism. Indian pharmaceutical ventures become attractive doll-houses in the garden culture of nationalism (Gellner,

1983). The Chinese wall of nationalism suddenly opens for the capital and its cheap medicines (Cf. Marx & Engels, 1848, p.88).

Karren Flint (2008) and others have narrated the relevance of Indian herbs among the list of medicines found in South Africa's past. South Asian medicinal herbs and substances travelled across the Indian Ocean.

'Indian' generic medicines in Johannesburg

Indian medicines always have been an integral part of the medical culture of South Africa since the early twentieth century. Flint (2008) observes that there has been a steady flow of herbal substances from India. Those who had *a vaidya* (being healers *vaidyas* are drawn from upper, middle, and lower ranking castes in different localities) tradition among indentured Indian labourers planted Indian medicinal plants in their gardens too.[15] Many 'Indians' of the indentured labour class earned handsome incomes as itinerant *inyangas* (traditional healers) in the rural areas of KwaZulu--Natal. Indians also owned many *muthi* (African herbs) shops in Durban because they stayed near the urban centres in Durban unlike Blacks during the days of planned segregation.

African healers incorporated substances including asafoetida, ginger, turmeric, cinnamon, cumin, fennel seeds, cloves, nutmeg, bitter oils from the syringa plant, alum, senna leaves, *tulsi* or holy basil, croton seeds, *betel* nut, frankincense, and myrrh in the African pharmacopeia (Flint, 2006, p. 381). Many

[15] Flint (2006) has observed that 'Indians' cherished an umbilical cord with India through therapeutic behaviour as many *Ayurveda* trained modern doctors travelled to set up practices in South Africa.

of the Indian *muthi* shops in Johannesburg also included many bright-coloured Indian substances such as turmeric powder in their palate (Flint, 2008, p. 170).

A modern episode of pharmaceuticals from India being traded to South Africa was recorded during the Apartheid. There is an illicit drug called mandrax. Macdonald (1996, p. 133) gives a useful account of mandrax:

> First synthesized in India in 1955 as an anti-malarial drug, methaqualone became popular as an antimalarial drug. Methaqualone became popular in Europe and the USA in the 1960s and 1970s as a non-barbiturate sedative/hypnotic with powerful effects and a high potential for abuse. Sold on the streets as 'Mandies' in the UK and 'Quaaludes' in the USA, by the late 1980s South Africa had become the world's largest consumer of mandrax. According to the South African Association of Retail Pharmacists, and confirmed by the South African Narcotics Bureau (Britz, 1994), 80–90% of all mandrax produced worldwide is smuggled into southern African region destined for the South African market (Sunday Times, 1992, p. 8).

Small-scale manufacturers of pharmaceuticals in Gujarat's coastal regions manufactured mandrax for export. Thus, instead of undergoing upgradation, older pharmaceutical factories transmogrified into illegal narcotic production centres.[16] Ghosal's (2003, p. 62) enquiry into the traffic of narcotics in the north east of India run by Burmese drug barons confirms this observation.[17]

Macdonald (1996, p. 134) has documented an instance of the Indian government shutting down an illegal plant in Hyderabad in 1995. This was after the South African police inquired the source of mandrax tablets taken as booty. The smugglers found the value of this popular drug dearer at the end of the supply chain. The same was also in demand as standard for barter with 'stolen

[16] A. Prabhala, personal communication, 23 May 2014, Wits, Johannesburg.

[17] The Burmese drug barons also imported methamphetamines to these parts of the region.

vehicles, weapons, ivory, rhino horns, and gemstones' in Southern Africa. The most common use of this drug was found in smoking with locally available dagga as 'white pipe' in South Africa, prominently in Johannesburg.

However, the recent circulation of Indian generic pharmaceuticals in Johannesburg shares more features with the flow of generics in Lagos in 1980s as observed by Peterson (2014). The industrial policy of South Africa did not promote 'knowledge-based' industries such as pharmaceuticals during the Apartheid. This is due to the overarching dominance of mineral energy complex (MEC) in the formal economy. Following a political transition in 1994 many multinational pharmaceutical companies divested (Mohamed, 2012). My contribution to the academic literature will be that of a documentation of the various transitions that generic circulation underwent in Johannesburg ever since.

A report published by the WTO and Confederation of Indian Industries (Khanna & Krishna, 2010) observes that there is an emergent pattern in the flow of Indian capital towards Africa. According to the report, it is more likely that the Indian companies start investment in South Africa. Subsequently, they step up production facilities and business operations to West, East, and North Africa. There are simultaneous promotions from the Government of India upgrading its policy framework with regard to international investment.

When I began research in 2013, there were approximately 2000 small-scale industrial ventures owned by Indians in South Africa. This is according to the data available at Johannesburg unit of National Small Industries Corporation Ltd (NSCI), a government of India body that provides small-entrepreneurs with legal and technological advice to these ventures. Confederation of Indian Industry

(CII) and Indian Consulate General's office are the main channels through which bigger Indian companies establish in South Africa. At the same time, the Website of Indian High Commission enlisted around 66 Indian companies/business organizations operating in South Africa.[18] Among these, 50 companies operate in Johannesburg. Out of the total 66 companies, there are 5 commercial banks. All the major IT sector companies have branches too.

My research in Johannesburg documents a transition in the expansion of capital as there are deployment of pharmaceuticals such as the ARVs. Third World countries promoted Indian firms' model of manufacturing capital or production-oriented investment efforts to counter the crisis wrought by HIV/AIDS and malaria (Rajan, 2003).

Current operations of Indian companies in South Africa engage in manufacturing generic drugs for the treatment of HIV/AIDS, and merchandising life-style drugs, and over—the—counter medicines. However, when Shitala entered in Johannesburg in 1993 by establishing a wholly-owned subsidiary,[19] the company was involved in selling highly priced generics targeting comparatively higher income groups (Jogee, 2009). Jogee (2009) observes how the acquisition of a local plant called Carrim's along with many of lower income population oriented products in 2005 changed the social character of Shitala's products.[20]

[18] http://www.indiainsouthafrica.com/india-in-south-africa/business-organizations.html

[19] Usually, pharmaceutical companies establish wholly owned to subsidiaries to protect their products from a weak IP regime and to play safe according to the domestic rules and regulations (Jogee, 2009).

[20] On a hot day in October 2013, I stood in the take-away shop outside Carim's. It was a Friday. The factory's clock-out time on Friday was 2 pm. The workers started to rush back to their homes in the afternoon. Pechi, an old man in his fifties (he looked more aged more than his real age), approached the take-away shop. In my long conversation I learnt that he

Tracing the case of ARVs in the post 2010s, I observe that Shitala's alignment with the State to supply for the public sector has again changed the nature of its commodities. Thus, there is an intricate relationship between public sector and private sector demand.

HIV/AIDS has had a big influence on the broader political economy of generics. According to the health department of South Africa, nearly 1.9 million people, with a CD 4 count of 350 and below,[21] are on ARVs in the public sector (Wild, 2013). Between 2008 and 2010, the government spent $538 million on ARV tenders (Brems, Seville & Baeyens, 2011).

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has been working in the factory for 15 years. So, he withstood changes in the management. He lives in Soweto with his sister, while his family lives in Limpopo. Pechi leaves money for his family with his cousin whenever he visits home. Meanwhile, he himself visits home twice a year on Good Friday and Christmas. 'It is expensive to travel', he complained. His job is to collect 'medical waste'—the pharmaceutical waste that remains after making the tablets. I asked if it makes him sick. He narrated the symptoms of drug's side effects: 'I feel choking in my chest.'He told me that he had never gone to the doctor to consult over this problem.

He also witnessed changes in the machinery of the factory as well. For instance, he remembers that Carim's bought the latest respiratory masks for workers soon as ARV production increased for government supply.

Pechi revealed to me that he drank a lot of 'cool drinks' (soda). He drinks three bottles of 1.25 litres during a day of labour. He does not eat breakfast in the morning. Instead he starts with a bottle of cool drink. During tea break he eats 'porridge' (*pap*, a maize meal) and meat or bread with cool drink. During lunch hour again he drinks another bottle of 'coke'. He usually takes the bottle to the factory and keeps it inside somewhere in shade. He added that at home, he again drinks a litre of cool drink. It is only at night that he eats his second meal. He told me he felt 'full' in the stomach after drinking cool drink and that it kills his appetite. (Pechi, factory worker, personal communication, dated 03 October 2014, Marlboro). I observed that factory workers usually drank a lot of cool drinks. During breaks, most of them bought potato chips and a big bottle of cool drink. They shared the cool drinks. A group of five bought a big two litter cool drink. The cool drinks came in a glass bottle for which they paid Rand 10. If they did not return the cool drink bottle they paid an extra Rand 2. Tatenta and four of his friends, who were permanent workers, bought cool drinks taking turns. They finished the cool drinks during the half an hour break. Tatenta told me that they are not allowed to take bottles inside the factory. This is because of Good Manufacturing Practices (GMP) regulations. When I asked why they shared the cool drinks one of the workers gave a generic reply I got from many others as well: 'you can't finish it all alone'. There are strict regulations on conviviality within the factory. When they come out of the factory during breaks, the workers tried to unwind. They drink cool drinks to 'cool down' their body, to get 'energy', and to 'kill appetite' (Cf. Ralph, 2005). Personal communication with Tatenda, 20 October 2014, Marlboro.

[21] CD4+ cells are a type of white blood cells that play an important role in maintaining a healthy immune system to help to fight infection.

The moral landscape into which Indian generics made an advent in that, according to Comaroff (2005), the access to life-saving ARVs had a larger political, and symbolic significance for PLHIV. NGOs such as Treatment Action Campaign (TAC) foregrounded access to HIV medicines, underlining how drugs signify a new life. Robins (2006), in the same context, discusses how drugs mediate the *transition* between the communities. Drug circulation reaffirms severing of the ties patients leave back after their social death, the extreme experiences of stigma, and helps their entry into a new community based on the solidarity of infected people.

Mfecane (2010, p. 294) gives a critique of oversimplified interpretation of ARV consumption. In support groups' meetings for PLHIV in Johannesburg, men associated ARV consumption with loss of masculinity. The ARVs attracted ambivalence, and even resistance among men. The 'teachers' and 'expert clients' who initiated therapeutic sessions exercised discipline and insisted on compliance. I call this 'therapeutic dominance'.

The notion of therapeutic dominance (McFalls, 2010, p. 331) comes handy to understand the new politics executed by Sigma and Shitala. McFalls (2010, p. 318) interprets the term as an exercise of power that 'combines scientific rationality and shamanic awe'. The deployment of 'therapeutic technologies' compel the patients to become 'therapeutic citizens'.

Let me elaborate on the legal changes that accompanied greater attention to HIV/AIDS. The Medicine and Related Substances Amendment Act (MRSCA) was passed in the year 2002 to amend the Medicines and Related Substances Control Act, No. 101 of 1965 (www.tac.org.za). MRSCA allows parallel

imports,[22] generic substitution of drugs,[23] and constitution of pricing committee, and international tendering for medicines used in the public sector (Joao 2005, p. 11; Laban, 2013). However, amidst juridical interventions there are ground level issues. The delay in the legal processes of acquiring registration and setting up production of the generics in consultation with the MCC was voiced to me very often by the trading class. As mentioned above, India is the supplier of the 80% of antiretrovirals to South Africa.

Parallel imports never exist in practice. While the state tenders collect ARVs at relatively lower prices through a benchmarking system, state mechanism was not successful in circulating them promptly. In this scenario, NGOs such as TAC, ANOVA, and MSF have shifted the terrain of their activism from ensuring affordability towards the interventions in the local exchange of ARVs.

ARVs in South Africa are also made by various local companies when innovator companies granted them voluntary licences.

Shitala

Before I move on to the discussion of Shitala's encounter with the pharmaceutical industry of South Africa, I will give a brief outline of the latter.

[22] Parallel import is a practice by which the government buys medicines from countries where imported generic/innovator medicines cost less. This is to supply medicines at a cheaper rate. In South Africa parallel importation is legal. However, parallel import is empirically not found.

[23] Generic substitution implies that a pharmacist is required to substitute patented drugs with generic ones unless the patient expressly refuses the substitution or a particular drug or is declared non-substitutable by the Medicines Control Council. If the generic medicine is costlier than the branded one she can say no too.

The Steenkamp (1979) commission of enquiry into the market practices of pharmaceutical companies observed that multinational pharmaceutical companies engaged in ‘monopolistic competition’ in the private market in the 1960s. Prices of prescription medicines, patent medicines, and generics were comparatively higher than in many other parts of the world (Steenkamp, 1984). Steenkamp suggested generic substitution in the private sector as a solution.

Exacerbating the problems, in the 1980s, the Big Pharma attempted to disinvest from manufacturing ventures in South Africa (Toerein, 1984). Jogee (2009, p. 24) notes that eight factories owned by Western companies were closed down during 2006--2009. They were relocated to cost-effective production centres called ‘centres of excellence’ established abroad.

According to a report by Genesis Analytics, in 2003, there were 94 registered pharmaceutical operations in South Africa (2007 quoted in Jogee, 2009, p. 24). One figure in October 2009 shows that there were 221 entities here as ‘manufacturers, importers, and exporters of medicines’ (Gray & Vawda, 2013). A total of 76 factories carried out local production. Among this, Western multinationals owned 45 and multinational generic pharmaceutical manufacturers including Teva, Sandoz, and Shitala owned 13. In early 2010s, the number of domestic and international generic pharmaceutical companies increased.

Solely from India there are more than 20 registered companies who market their products and they can be grouped into three: (1) Wholly owned subsidiaries such as Ujamaa and Sphynx; (2) Joint ventures with Western pharmaceuticals such as Eureka; and (3) branches, as partly appears to be the case of Shitala and Sigma.

Shitala is an average-sized company. The beginning of Shitala here was by establishing a wholly owned subsidiary in 1993 (Jogee, 2009). This arrival was in connection with their broader pattern of investments in developing countries such as Indonesia, Poland, and China (Bhandari, 2005). In fact, the initial investment to connect to consumers in South Africa in 1997 did not yield expected returns for Shitala (Bhandari, 2005).

Shitala retained a local character in the advertisement campaigns such as those in logos and taglines. This is visible in the sales literature and charts used by medical representatives. Overall, it has shown some autonomy in functioning from its Indian parent company till 2014.

Madona, a middle-aged woman who ran an advertising company in Melville, Johannesburg, talked to me about the 'black and white' campaign she commissioned for Shitala. She also referred to this contract as the 'reaching out' campaign. The advertisements intended to *elevate* the status of Shitala locally. She framed black and white photographs to have a realistic effect. Her main 'concept' was to portray 'ordinary people in their ordinary life'.

When I followed up this campaign with William Hart, then product manager at Shitala, he told me how in the first few instances they used the photographs of models, and later that of their staff members. Eventually, in this campaign with 12 series, only 3 had models in it. I saw the framed photographs of these campaigns hanging outside the boardroom of Shitala. It was striking that none of the ordinary people were black.

Along with this, there were other strategies for giving a local look to the advertisements. Atorvastatin was advertised with a female model in black and

white (see image 3). Her name is written on the top-right corner: Sandra 41, interior designer. She poses like a mirror reflection of Monalisa; she folded her hands and gazed straight, with light reflecting heavily from her face and torso. However, she wears an office outfit. Photographer captured the model in entirety. She wore a shirt, and skirt. A portrait was cropped out of this. There is a brightened image of a chemical structure of a molecule, as William told me, this is a 'Shitala molecule that imitates the Sasol molecule', the trade mark of an energy and chemical multinational company based in South Africa, on her torso.[24] The tagline says 'extend your life' and 'lowering LDL cholesterol'.

The advertisement also shows different dosages, brand name, and the name of the company. Despite being a huge success, the company withheld the usage of the series of advertisement because expatriate Indian staff pointed out that the same went in contravention of Shitala's global advertisements. Apart from adding a new 'molecule', the advertisements depicted Shitala's name in pure white against black background skipping original orange letters.

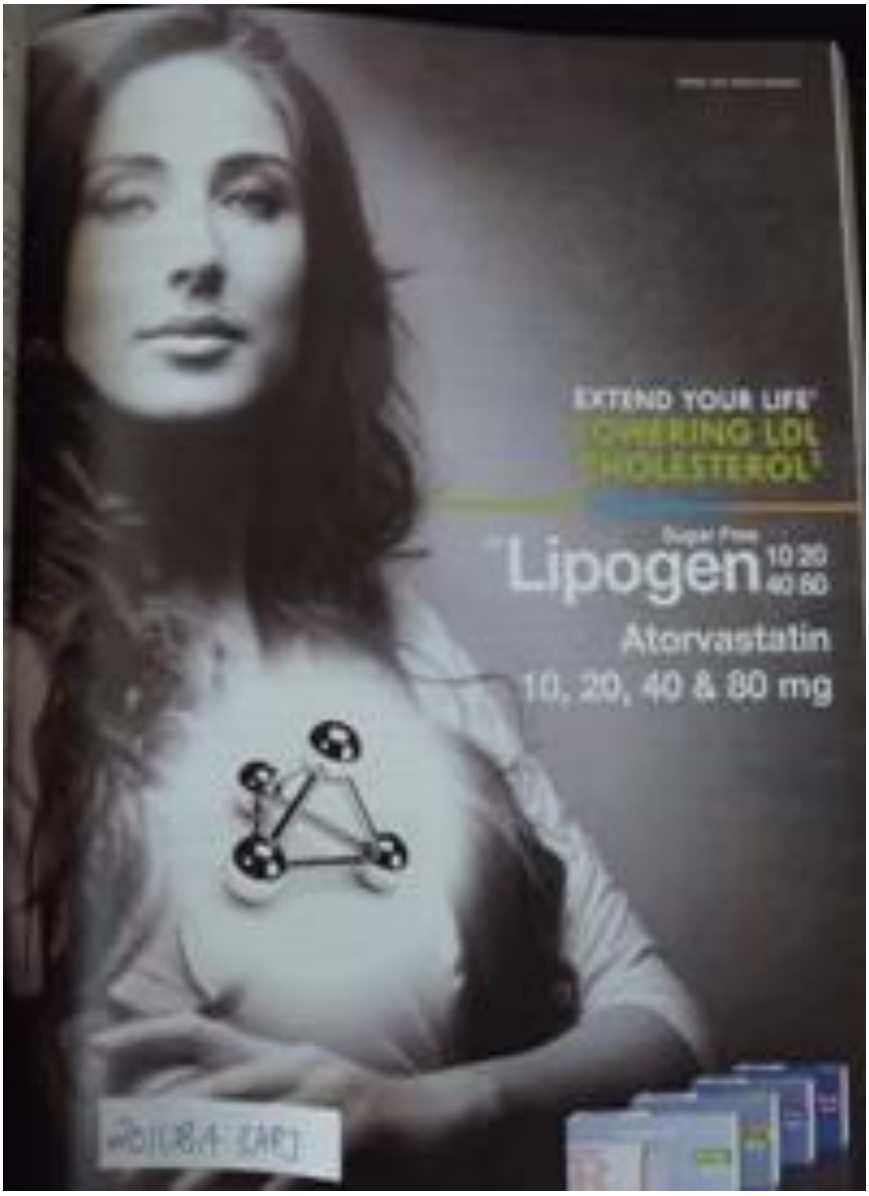
Mazzarella (2003, p. 6) in his study of advertising practices in Mumbai, India has marked how a new *swadeshi* (self-making) underscored the marketing of commodities of multinational and domestic companies and broadly the propaganda of 'consumeristic globalization' in India from 1997–98 onwards.

This period witnessed the rise of Bharatiya Janata Party (BJP), a right-wing nationalist party into power. The way Shitala's staff attempted to give local

[24] Leaving the newness of the concept 'ordinariness' apart, various advertisements of skin creams in Lennon's family almanac, in the 1940s, featured similar black and white photographs or sketches of beautiful women advertising a product holding on to their torso (Lennon's family almanac. 1942, p. 60. In 'pharmaceutical companies', Adler Archives, WITS).

appeal by changing branding methods draws on dominant nationalism in South Africa.

Figure 3: Shitala's advertisement for a cardiovascular medicine (courtesy, SAPJ, 78 (4), 2011)



Shitala's strategy in Johannesburg involved connecting to local middle-class population. The majority of the nearly 20 staff members, including the product manager I interviewed, had previous experience of working in various innovator companies.

Ray McDonald, a retired man in his early eighties, who works as a private consultant and curator of the Carboy museum located in Sandton, told me how three male delegates from Shitala India consulted him for helping with legal procedures for setting up a local manufacturing facility in Johannesburg in early 2005. They introduced him to the company and showed him a framed photograph of the then CEO. Eventually, when they set up the production unit called Carrim's in 2007 in Roodepoort, they presented him with a big coffee table book on India.[25]

The plant in question is called Carrim's. This was an old 'generic oriented company', to use a phrase used by Smith, a pharmacist at Webster pharmacy, Union Street, Jeppeestown. A Gujarati Muslim doctor used to own the plant as a family business (Murli, 2014, October 3; Jogee, 2009).[26]

According to Jogee (2009, p. 50) Shitala's investment and upgrading of Carrim's boosted local manufacturing scenario because of being a 'long-term investment'. The Western pharmaceutical companies transferred voluntary licences of some medications such as ARVs to existing local companies contributing to a 'short-term' benefit. In contrast, Shitala brought technicians from India for upgrading the plant, retained the existing workers in the factory, and sent some of them to Indian plants for training (p. 49).

The old name remained for the factory and its products. People associated the company as a South African company. When Shitala was implicated in punitive actions from the USFDA later, this was helpful to retain the market for the products.

[25] Interview dated 10-10-14 at Carboy Museum, Sandton.

[26] The doctor established another factory for making Unani-based herbal cough mixtures after Shitala purchased the plant.

Soon, the Big Pharma companies happily found Shitala's fall even after a sudden purchase of the company by Nippon pharmaceuticals in 2008. USFDA chased out many of Shitala's products from the USA accusing it of 'unhygienic' and unsatisfactory manufacturing practices at Indian plants. Shitala even paid huge sums of fine to the FDA as penalties, notwithstanding the fact that company always denied any violations.[27] The reputation and power consistently consolidated USFDA as a superior regulatory authority from 1930s (Carpenter, 2015).

This action ruined Shitala's brand credentials from 2013 onwards. This was evident as many of the retail pharmacists' including Mpumi, a young entrepreneur, refused to answer me anything about Shitala's medicines in Braamfontein. This is an area full of graffiti-painted walls, student accommodation facilities, and an experimental rooftop weekend market. She was trying to recuperate her pharmacy's business there from broader urban degeneration looming large in the CBD of Johannesburg. However, the South African Government had supported Shitala as South African Regulator promptly

[27] Eban (2013) in an online article written in CNN Money has called Indian generic drugs as 'dirty medicine'. Fisher and Rigamonti (2005, p. 6) in their articles quote a spokesman for the international pharmaceutical companies saying that Indian generics drugs as 'half the times' having no active ingredients and of 'killing patients, causing drug resistance, and giving false hope'. Ray and Badhuri's (2003, p. 2304) analysis on the political economy of drug quality in India links the notion of quality with therapeutic efficacy, safety or lack of toxicity, side-effects, impurity profile and stability of chemical ingredients, contamination during the production process, and the effects of manufacturing on the environment. According to them the market for common drugs in India is divided into two categories: a) high-quality products by a few large companies (top four companies, including Shitala), and b) many low-quality products (of small-scale producers) (ibid, p. 2309). Shitala witnessed a series of sanctions worldwide. However, after an initial ban on ARVs imitating an action of WHO in the early 2010s, the South African government supported Shitala. *The Hindu* and *The Times of India* (two Indian newspapers) on 5 June 2013 stated that the South African Regulator promptly declared Indian drugs to be 'safe' and 'efficacious'.

declared Indian drugs to be 'safe' and 'efficacious' (*The Hindu*, 5 June 2013; *The Economic Times*, 5 June 2013).[28]

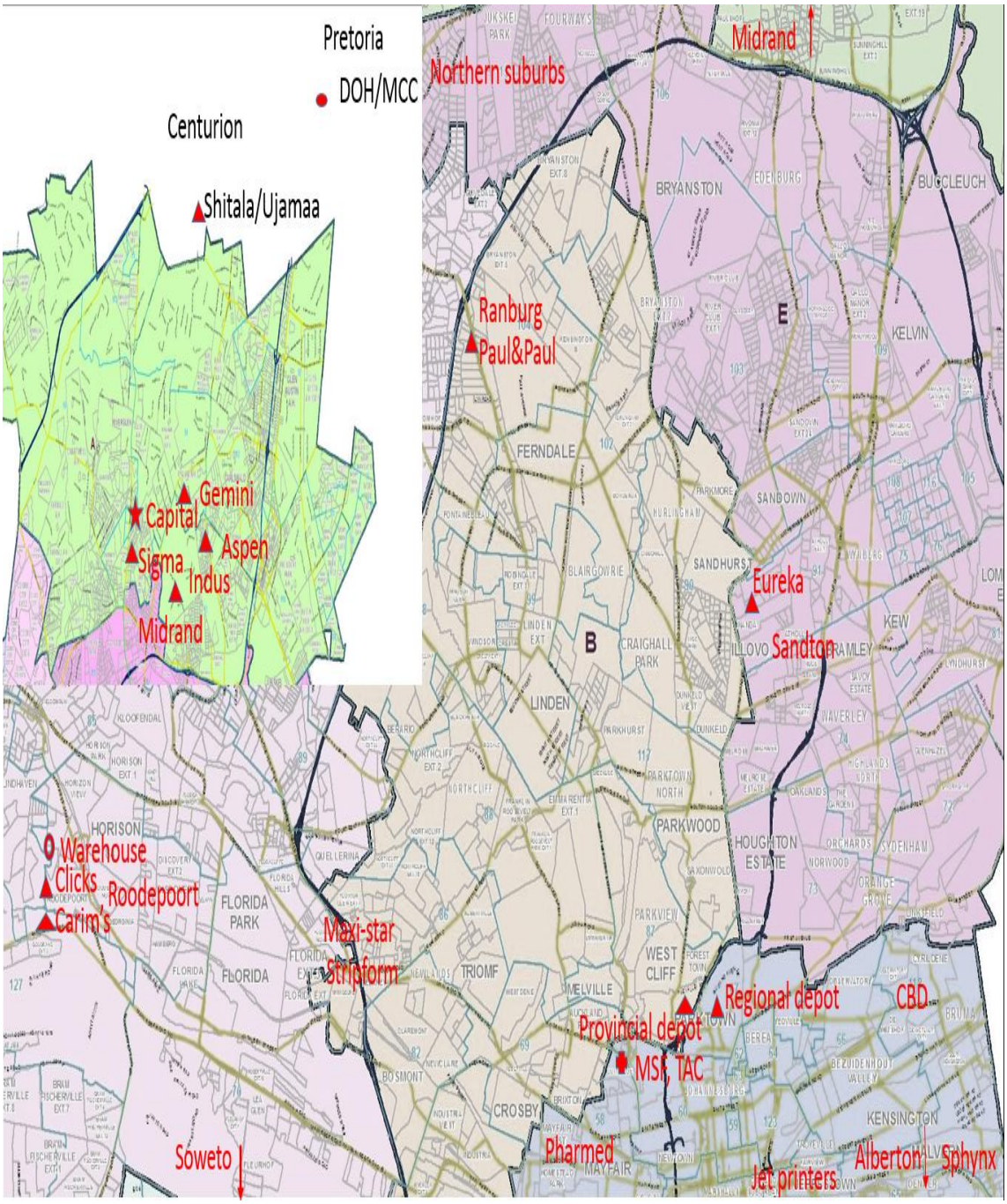


Figure 4: Indian generic companies and related firms in and around Johannesburg. Source: Prepared by the author based on City of Johannesburg's all region map (detail). City of Johannesburg Metropolitan Municipality, 2015.

The corporate office of Shitala is located in Midrand (see Figure 3). Murray (2014) rightly points out that this area located between Johannesburg and Pretoria has a high-paced growth especially as an abode of companies. According to Shitala's annual report 2012, the company has recorded a sale of $50 million, in which $305 million is in the BRICS countries.

Shitala's ARV unit, Ujamaa, grabbed 21.9% of the ARV tender in the year 2011 in South Africa. An article appeared in *The Financial Mail* in January 2015, referring to Ujamaa as 'a great SA company in the making'. This firm was seen to have found 'a niche' in providing to the public sector. However, the same article expressed apprehension on their ability to supply ARVs in time. MCC approval for starting to manufacture the ARVs at the plant Carrim's had been pending since 2012 (Makholwa, 2015, January 1).

Regarding the routes of logistics, the real movement of medicines, caste with the help of a map (Figure 3) into the prominence provides the circulation of medicines such as ARVs that does not follow a textbook model (Cf. Zigomo, 2014, p. 22).

The figure of the flow of a generic lamivudine (an ARV) from Carrim's in 2013 illustrates complex flows rather than any direct flows from a company to the consumers or to the public sector hospitals. Ujaama, the marketing wing of ARVs for Shitala, failed to win the public tender due to a delay in the registration of the above-mentioned plant with MCC for producing latest ARVs such as FDCs in 2013. Aspen, which is bound to supply lamivudine, an ARV in the regime of single pills, for the state-run ART programme, purchased finished

products from Ujamaa whenever there was a shortage, based on a contract between both the companies.[29] In the private sector, medicines are bought by courier pharmacies or regional wholesalers. Regional wholesalers provide the supply to retail pharmacies and dispensing doctors. Courier delivery use postal networks for delivering chronic medications at the place of work or at home (Coetsee, 2013).[30]

Once the medicines are packed at Carrim's they move to the warehouse of the company. The warehouse was found in the industrial zone nearby. Temporary outsourced labour is a significant character of transportation, and

[29] I met medical representatives employed by the generic companies to communicate with the regional depots to ensure the delivery of the ARVs on time.

[30] Most of the medical aid schemes, such as Gems and Discovery have delivery services for chronic diseases such as heart disease, diabetics, and HIV. If patients email the list of medications the health schemes will deliver at home. These companies sub-contract the delivery service. Discovery, the biggest private medical scheme in South Africa, has outsourced the delivery to Optipharm. Medipost is another courier company. The office of the latter is in Pretoria, with around 1500 staff. They deliver the medicines directly or by post. Medical schemes widely cut down the costs of medicines by promoting generics. Discovery health, for instance, advocates for the widespread use of cheaper generics rather than expensive generic brands that are usually 20–30% cheaper than innovator products. According to the company a shift towards the cheaper brands will fetch Rand 500 million savings for the company (Bateman, 2014). However, many of the companies offered incentives for appearing in the 'formulary' of medical insurance schemes. Dis-Chem and Clicks—two retail pharmacy chains—also have their own systems for couriering/delivering medicines (personal communication with Thato, dated 29-05-14, at Clicks Pharmacy, Caltron Centre, Johannesburg). A majority of the mail orders were placed by women and for chronic medications. Coetsee (2013, p. 341) notes that mail order pharmacies dispensed mainly chronic generic medicines (up to 64%). Originators contributed 19% of the volume and 53% of the total cost. The use of courier orders was the highest in Gauteng. However, dispensing GPs dispensed 63 % and 64% of generics among the total chronic medications prescribed by them in 2009 and 2010, respectively. Mail order is of course not in the best interests of the patients. Thato, a pharmacist at Clicks pharmacy in Caltron centre, told me that he always suggested to his patients to consult the pharmacist every month. He feels that otherwise they drop the medication when they feel the side effects. His pharmacy is located in Gandhi Square, an area inside Johannesburg that has developed into a hub of black middle class (Murray, 2011). There are at least 20 chronic patients, including the staff and students who pick up their medications every month at a post office at Wits precinct in Braamfontein. The medications are sent through 'speed service' that delivers the couriers within a single day. If the medicines are not picked up they are send back to the company by the teller. The teller calls up the patients on their cell phones. They also keep the medications in separate shelves and handle them with care. (Mfundo, personal communication, 25-06-2014, at Wits). Chronic medications, specifically ARVs, prolong life. But, the consumption of ARVs shows that person's HIV positive status when done in front of others. Patients preferred distantly located clinics due to this. The courier companies exploit the fear of social death brought by stigma.

broadly of production at Carrim's. There are permanent staff members that number around 500 and the contract workers that count nearly 200 or more.[31] Capital is a Durban-based company that recruits workers on a contract basis.[32] Akabarally is a company that imports the glass and plastic medicine containers (jars) for Shitala. Maxistar is another company that locally produces jars. Jet Printers prints the leaflet and labels to be enclosed with the medicine. Stripform Packaging supplied packages of medicines. Even there is a company that received contracts for placing rat traps at factory corners. About 80% of the active pharmaceutical ingredients (APIs) are manufactured in India and bought by Shitala from Shitala India or other Indian generic companies.

Roodeport has a factory of Clicks, a retail pharmacy chain, along with Carrim's. Aspen, the leading pharmaceutical company has a factory few kilometres away at Clayville, near Midrand, Johannesburg. The practices of sub-

[31] In pharmaceutical manufacturing the workers are alienated, and they endure the chemical effect of the substances used in the making of the medicines in their body. Workers adapt to provide 'flexibilities' in the working hours. They endure low wages, boredom, and the precariousness of contract-based work agreement aligning with broader patterns of toil in Johannesburg (Burawoy & Von Holt, 2012, September 21). Murli, a man in his fifties, who dealt with repair of machines referred to the nature of work as 'constant work': 'it is not hard work; but it is constant work'. The workers cannot leave the machine. If someone wants to leave they have to place another worker to operate the machine. Murli, personal communication, dated 03 October 2014.

[32] Teresa, the 'site-agent' of Capital at Carim's, told me that the company supplies what she calls 'casual workers'. She also told me that there is no basic salary for the workers. They are paid based on the hours they worked. When company (or the client) pays an average of Rand 6000 for the cumulative hours of work done in a month, the workers receives nearly Rand 3000. The rest goes to 'Capital' as commission (personal communication with Teressa, dated 23-04-14, Marlboro). *Mama*, an informal vendor who sells home-cooked lunch to the workers outside that factory told me that workers are 'hired' and 'fired' easily (*Mama*, personal communication, 22 April 2014 at Marlboro). Israel, a permanent worker in his thirties, hesitantly told me about his experience as a contract labour for six years before becoming a permanent blue-collar worker. He remembers that in the beginning he got paid weekly.

> Capital signed a contract with me in the beginning. Don't ask me about what happened next. That is a shit company. It robs you

Israel (personal communication, 28 March 2014, Marlboro).

'The practices of Capital are not healthy', said Parker, another permanent staff. He had worked with another contract agency in the beginning. He told me that that one was very different (Parker, personal communication 28 March 2014, Marlboro).

contracting the manufacturing tasks between these companies are very common. For instance, Carrim's now produces paracetamol tablets for Clicks. They are sold as over-the-counter drugs.

Eureka, Sphynx, Sigma, and Gemini

Shitala, Sigma, Sphynx, and Gemini are the other major Indian companies I could approach in my fieldwork, among a total of 12 companies in Johannesburg. These companies have secured offices in different parts of the city such as Marlboro, Sandton, Centurion, and even near Pretoria. Thereby, Indian generic pharmaceutical companies are able to connect to middle-class managers who live in the Northern suburbs, near Sandton city, and to government bodies such as Medial Control Council (MCC) and National Department of Health (NDH) located in Pretoria.

Shitala occupies major relevance in Chapters 3 and 4. Other companies are still important in gaining specific insights. In Chapter 2 and 4 Sigma's strategies provided me good raw material for analysing recent trends. Gemini, Sphynx, and Eureka surface in Chapter 2.

Eureka is a branch of the second largest of Indian generic companies and sells a wide range of products, including over—the--counter medicines in the private sector here. Only two of the Indian companies among the four I frequented had a considerable presence of Indian expatriates among the top managerial staff: Shitala and Eureka. There are also many young Indian expatriates who work in Carrim's as bio-chemists.

The history of Sphynx in Johannesburg is the following: JM is a middle-aged man living in Alberton, South Johannesburg. He co-owned a pharmaceutical company in Alberton, southern Johannesburg, before he joined Gemini to collaborate with his friend Charles, the current country manager of Gemini. Gemini's Indian office was interested in taking over his products and company since he marketed dermatology products. Gemini offered him a job as a manager after the deal. Later, he left the company and joined Sphynx, of which he currently acts as a country manager and manages around 20 staff.

Charles joined Gemini as he came across this new opportunity while he worked as a private business consultant. Gemini, with a size similar to that of Sphynx, has specialized in the sale of ointments, skin creams, and shampoos.

I could not build any relationship with the staff at the corporate office of Sigma, Johannesburg. In an email send to Mary, the sales manager of Johannesburg and an HR manager at its domestic head office located in Cape Town, rejected my request for shadowing sales representatives, I was informed that this decision was due to 'issues of confidentiality, and time constrains of the sales reps'. Sigma also started a manufacturing plant in the year 2003 in Durban. Yet, my selection of Johannesburg is justified, since, out of 66 'Indian business organizations' operating,[33] 50 companies operated in Johannesburg.

Private numbers of Indian generic ARVs

Investment by various Indian generic companies by setting up branches

[33]http://www.indiainsouthafrica.com/india-in-south-africa/business-organizations.html

and local manufacturing facilities in early 2000s echoed a new political message. People appreciated the efforts of these firms to supply medicines to those suffering from HIV/AIDS, and multidrug-resistant tuberculosis (TB). I want to ensure this argument is well taken with the help of the audit data of ARVs.

Steenkamp's report shows that multinational pharmaceutical companies thrived in the 'free trade' system of South Africa in the 1960s by engaging in 'monopolistic competition' that involves brand building for 'overseas products' (Steenkamp, 1984). Many multinationals decided to disinvest in South Africa in the 1980s. The companies estimated that 5% of their profit in selling medicines here is 'small by international standards' (Toerien, 1984).

In the era of Apartheid there was a flight of remaining pharmaceutical companies such as that of Kroks Brothers (Thomas, 2012). Seeraj Mohamed (2012, p. 260) identifies divestment by many companies after 1994. Most of the companies shifted listing from Johannesburg to London. This enabled the companies to consolidate 'large amount of capital' outside the turf of the regulation of South African State. The regulations expected were exchange control restrictions on residents.

Currently, top two pharmaceuticals companies in South Africa are generic drug makers. The national industry was worth Rand 28.9 billion ($2.7 billion) in terms of sales in 2011 (Zigomo, 2014, p. 6). Aspen, a local South African company stands first. Following civil society demand for issuing voluntary licenses for the ARVs, Gilead signed a 'no-exclusive licensing and distribution agreement' for circulating Truvada (emtricitabine and tenofovir disoproxil fumerate) and Viread (tenofovir disoproxil fumerate) in 2005 with the company

(Zigomo, 2014, p. 15). GlaxoSmithKlein bought over 16% of share in the company in 2009. The former's local operations merged with the latter. An agreement to market drugs in sub-Saharan Africa. However, innovator companies, viz., Sanofi and Pfizer, still have the fourth and fifth positions in the industry (Figure 5).

Corporation	Moving Annual Total (MAT) 2011 Million ZAR	MAT US Million $	Market Share
Aspen	5,128.7	736.2	17.5
Adcock Ingram	2,679.9	384.7	9.2
Sanofi	2,387.3	342.7	8.2
Pfizer	2,092.6	300.4	7.2
Novartis	1,671.1	239.9	5.7
Sigma	1,427.0	204.8	4.9

Figure 5: Top pharma companies in South Africa 2011 (source: NAPM, 2012 quoted in Zigomo, 2014, p. 13)

The most prominent Indian player is Mumbai-based Sigma. Sigma built brand credibility by engaging with civil societies and HIV/AIDS-related State initiatives here (Figure 5).

The growth of Sigma by finding avenues of regulations has been well documented in India. When India legalized the sale of progestin-based emergency contraceptive pills (ECPs) as over-the--counter items in 2007, Sigma sold an average of 200,000 units (1 unit has 30 tablets) per month thereafter. I-pill, the brand of Sigma, created an ideology and new market for progestin through advertisements (Sheoran, 2014, p. 248).

Sandoz's parent company is Novartis. This generic company was formed in 2003. This is the largest generic company in the world (Zigomo, 2014). In the figures given below, Shitala seems to have grown at slow but steady pace.

Corporation	Moving Annual Total (MAT) 2011 Million ZAR	MAT in US Million $	Market Share %
Aspen	2,300.8	330.3	25.1
Adcock Ingram	1,179.2	169.3	12.9
Sigma	1,167.6	167.3	12.7
Sandoz	810.0	116.3	8.8
Shitala	360.3	51.7	9.2
Winthrop	322.5	46.3	3.5

Figure 6: Top generic companies in South Africa, 2011 (NAPM, 2012 in Zigomo, 2014, p. 13)

Barring the therapeutic categories of HIV/AIDS and TB and a few chronic diseases such as diabetes and heart disease, big pharma's sales have not decreased in the health sector of South Africa. The 'brand loyal' South Africans bought off-patent innovator brands in the private market forming an average 19.0% of the total expenditure on medicines. Those drugs on patent protection, including biologics—one of most expensive varieties of medicines—formed 43.5% of the spending. A total of 37.5% of total expenditure attracted generics' purchase. The 'utilization rate' of generics was 54.5% out of all the medicines consumed in 2013 in the private sector (Medicines Review, 2013).

Of course, all in all, the generics have changed the lifestyle of the people. The generics affect 'local biologies'. Local biologies as a concept means the way in which biological processes are entangled in culture, politics, and society (Lock & Nguyen, 2010, pp.83–108).

Yet, studies have noted that the lower use of generics still emanate from the popular perception that Indian made medicines are '*fong kong*' (counterfeit) (Patel., et.al.2012). Patel., et al. (2010) note how consumers reveal that their 'body does not want free medicines' that are found in public clinics. This act is in resistance to the 'second class' standard of care these drugs connote. Condoms circulated freely among public also received critical reviews (Cf. Rigillo, 2009). Hence, as Kim (2009) observes on Korean medicines, generic pharmaceuticals do not circulate as *neutral* 'objects'. The networks of circulations involve attempts by businessmen to push medicines against myths about generics, and broadly, biases against the commodities produced in the East. In contrast, when Shitala bought over Carim's products, they gained a leverage of being locally made medicines (Rigillo, 2009).

Statistics show that India gained from the new politics of generics. Out of pharmaceuticals valuing Rand 12.97 billion India's import recorded a Rand 1.28 billion in 2008 in South Africa (Deloitte, 2010). Deloitte's report states that the generic market was 'brand driven'. Sigma, after Aspen and Adcok Ingram, stood third in terms of the income gained from pharmaceutical sales in private market in 2009. In Gauteng, according to 'generic pharmaceuticals tables' Indian companies gained 12.41% of the total market share in the total Rand 2598.66 million import of pharmaceuticals and medical equipment in 2013 (Gauteng Growth Development Agency, 2014).

Public sector tenders have also been reliable sources of income for Sigma and Shitala. Shitala started to export medicines from India as early as 1995, and bought over Carrim's in 2005. Shitala mainly concentrated on winning public tenders in South Africa later on.

Many of the experts in the industry told me that the companies earn only a 30% of their total profit from the public sector. However, the politics of circulation of generics is incomplete without accounting of the way public tenders 'cross feed' Indian companies such that gain in the private market corresponds to cultural viability, brand values, and profit at large. For Sigma trade in terms of public tenders consisted of one third of total annual revenue. This amounts to Rand 1 billion.[34]

IMS health's data depicts in this too. IMS is a multinational pharmaceutical audit firm with headquarters in Danbury, USA. The company collects 'invoices' of pharmacists submitted to the wholesalers. The IMS data on

[34] Shubam Mallik, personal communication, 01 December 2015, Sigma, Rosebank.

private sector circulation consist of manufacturer's direct sale and wholesaler's data. Products are initially identified on the basis of National Pharmaceutical Product Index (NAPPI) code of each product. The company sells a full set of audit data for Rand 11,000 to the companies along with a software.

Lakoff (2004, p. 257) in his study on the circulation of antidepressants in Argentina describes audit data as 'private numbers' that the companies purchased from the pharmaceutical auditing firms to manage 'pharmaceutical relations' and for expanding their market spaces.

Is it true, as the stereotype on Indian generics goes, that the companies focus on numbers rather than price in the private market as well? There are 127 products listed in the data of ARVs. The total sale of ARVs in South Africa amounts Rand 1.2 billion in the year 2014, whereas, in the previous year, it was 1.16 billion—showing a growth of 3.5%. In terms of grant value, HIV/AIDS drugs are the biggest therapeutic segment in the private sector.

The single exit price is set by the government. The following is the average price of FDCs: Atripla: Rand 457; Tribuss: Rand 400; Odimune (Sigma): Rand 396. Sigma's Odimune, the second largest selling ARV brand earned Rand 132 million and Rand 139 million in the year in 2013 and 2014, respectively. The data show an increase in the average price from Rand 382.45 in 2013 to Rand 396.95 in the year 2014. Given the increase in price the increase in revenue cannot be equated with profit. However, in the case of Odimune, the absolute share of income from the market increased from 8% to 8.8 %. Aspen's Tribus is the largest selling ARV brand with 22.7 % shares of sales in the market. Sigma's Odimune has 10.5% and Atripla, the innovator, has 6.9% of the

sales share. However, based on a mutual agreement, Aspen and GSK share 40% of the market share of FDCs.

Company	Share of Total Revenue in the ARV Market (2014) %
Aspen	34.5
Sigma	15.3
GSK	n.a.
Novagen	12
MSD	10
Ujamaa	0.9

Figure 7. Share of different pharma companies in the private sector ARV market. Source: IMS TPM ARV Market Data, 2013 (series 1) –2014 (series 2)

The data of the ARVs in the private market depicts how Sigma has created a comfortable market places in the ARV's private market, where the pharmaceutical companies get 70–80% of their total income.

The first generic brand launched in the market always got a good market share. The original drug Atripla was launched in December 2010 in South Africa. Aspen Launched Tribuss in December 2011 and Sigma launched Odimune after one year; more aggressive tactics of sales came from the latter. In terms of revenue the share of Sigma increased from 11.4 % to 11.6% of the total revenue created in the therapeutic category of HIV/AIDS from 2013 to 2014, forming a considerable share in the market.

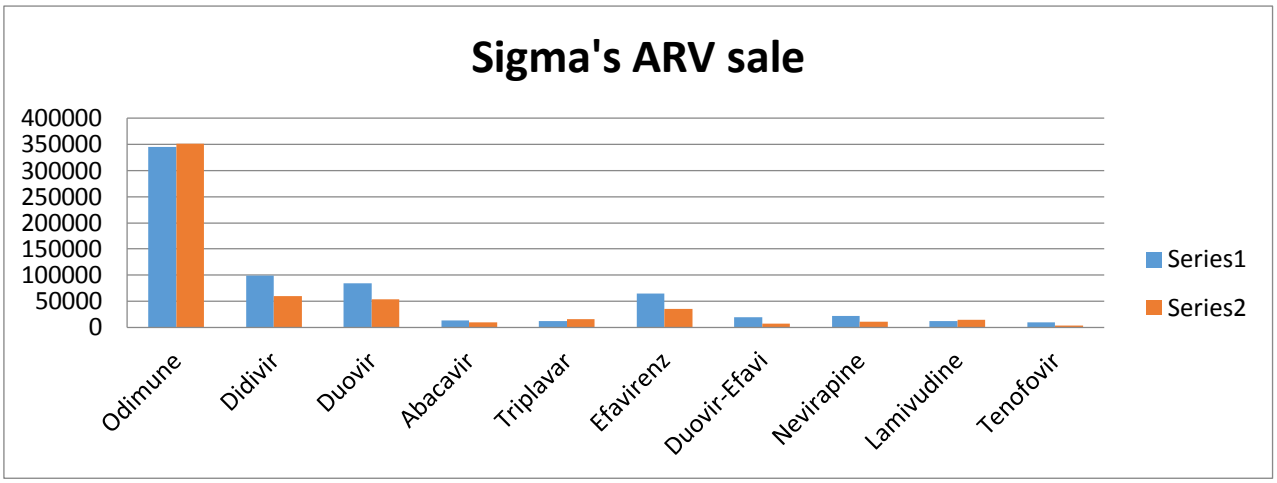
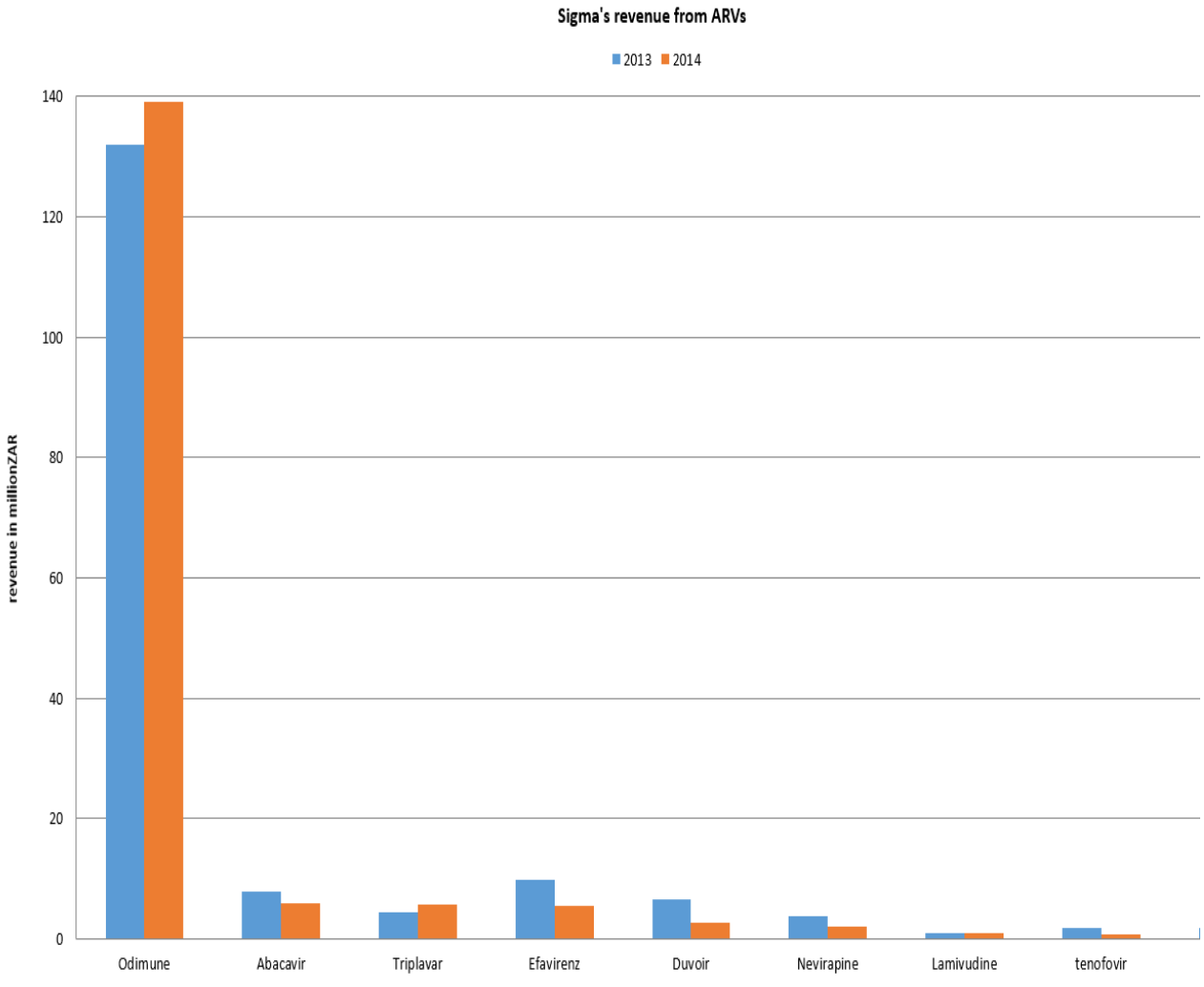


Figure 8: Sigma's ARV sale in quantity. Source: IMS TPM ARV Market Data, 2013 (series 1) –2014 (series 2).

Figure 9: Sigma's revenue from ARV sale. Source: IMS TPM ARV Market Data, 2013–



2014.

ARVs other than FDCs have a declining market since they reached the end of the 'life cycle', in which the potential of a medicine to yield money are high when they are introduced into the market before it hits a plateau and then begins to decrease. This is different from the anthropological understanding of the 'life stage' of the drugs. The life stage starts from the beginning of the commodity in production and its life through consumption (Whyte et. al., 2002; Van der Geest, 2011).

In two successive years, 2013 and 2014, the sale of Sigma's Didivir, Duovir, Abacavir, Triplavar, and Efavirenz showed a decreasing trend while Lamivudine and Nevirapine showed decreased but more stable market. Tenofovir single pills lost the popularity in the market in over two years.

Torres pharma, a small South African company, sells the ARVs of Sphynx as per a joint venture. The packages carry the brand name of Torres. Its Tyricten (emtricitabine and tenofovir disoproxil) stood seventh in the market even though the product shows a slight decrease in sales over two years. Their FDC stands eight in the whole market. The rest of the products are in the diminishing stage of lifecycle. Tyricten earned 54 and 46 million in 2013 and 2014, respectively. So, after Sigma, Sphynx was the biggest Indian pharmaceutical company in the ARV market during these two years. The company also won state tenders during this time. (Source: IMS TPM ARV Market Data, 2013 –2014).

Shitala's Ujamaa comes at the 12th position; all their ARVs are at the end of the 'life cycle'. Steve, a former sales manager, linked the lifecycle and the sale of ARVs and further explained the reason for his resignation like this:

> Any product has a limited sale age! Later, you cannot sell much. A product comes, becomes a star and then the sale becomes low. Innovators try to launch a product in every two years. Since Ujamaa specializes in only one disease area, the ARVs, there were no drugs in the pipeline for a long time. If you do not have new products your sales go diminishing. Didanosine and stavudine have gone off the market. You still want to waste your time in trying to market those drugs..? So I quit.

Only Lamivudine showed a progressive trend in sales, yielding Rand 904 thousand and Rand 2.6 million, respectively, in 2013 and 2014. The rest of the products, viz., nevirapine, tenofovir, didanosine, and efavirenz showed a decline. However, the company was the sole supplier of didanosine in the public sector in 2012.

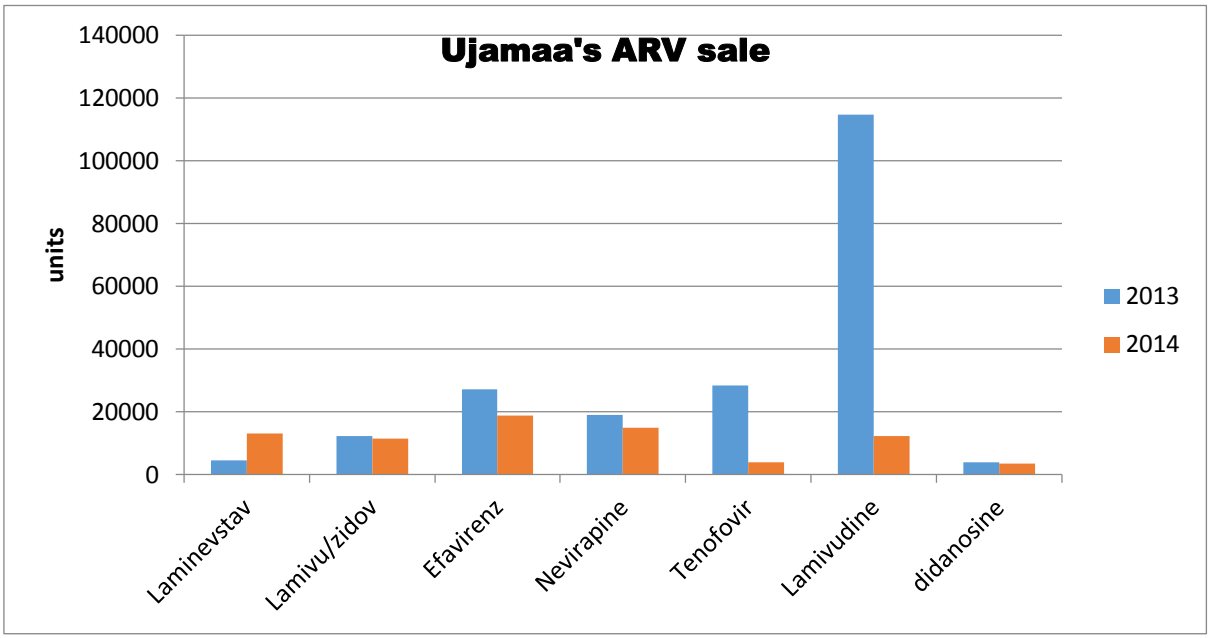


Figure 10: Ujamaa's ARV sale, quantity. Source: IMS TPM ARV Market Data, 2013 – 2014

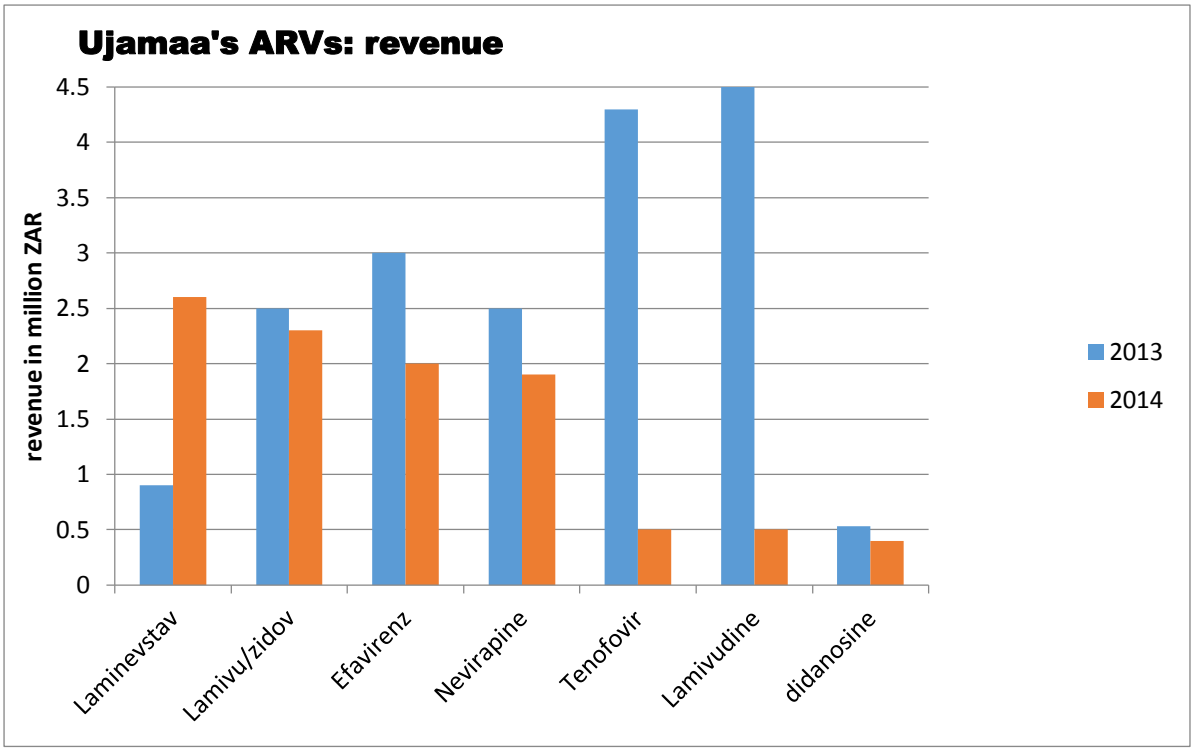


Figure 11. Ujamaa's revenue from ARV sale. Source: IMS TPM ARV Market Data, 2013 –2014.

Methodology

I shadowed four medical representatives and conducted group-based and individual in-depth interviews with around 20 medical representatives in and around Sandton city.[35] During my ethnography with sales persons, I could also interact with around 20 doctors, while I also directly interviewed 3 GPs. I have interviewed half a dozen government pharmacists at the provincial depots, clinics, and at the venue of the Continuing Professional Development (CPD) meetings of South African Pharmaceutical Association, held at Sandton. These meetings gave me access to many retail pharmacists as I interviewed five pharmacists who had a higher level of expertise, including a few production

[35] There are around 90 medical representatives within the city working for the three companies: Shitala, Eureka, and Sphynx.

pharmacists and a procurement manager at Carim's factory, at the production site. More than 10 managers in various pharmaceutical companies, two of the managers in auditing firms, and one manager of a training centre for sales reps gave me interviews on request. The chapter on 'Pharmaceutical Relations' gathers evidences from these encounters with the broader pharmaceutical industry as well as generic companies.

Three pharmacies in Yoeville and Jeppees Town, located in the CBD of Johannesburg, allowed me to do an ethnography of dispensing. This segment of my fieldwork helped me to frame Chapter 2 called 'Pharmaceutical Territory: Entanglement and Dispensing in Pharmacies'. In fact, my engagement with the community pharmacies got even more prolonged. For instance, I continued contact with Sunil till the middle of December 2015. By observing dispensing situations I recorded mundane details such as patients queuing up for medicines, the pharmacy staff having a conversation with colleagues, and pharmacy assistant's assorting of medications from wholesalers or helping some of the i*Zulu* speaking senior patients to buy medications.

The close proximity to the office of the Treatment Action Campaign (TAC) and the Médecins Sans Frontières (MSF) at Braamfontein, CBD of Johannesburg, helped in interviewing four activists with an international reach and a similar number of grass root-level activists; I followed one of the TAC activist to Jabulani hospital, Soweto, for a single day. Along with this, I combined reflections from my prolonged fieldwork at corporate offices and select interviews with middling managers to produce my chapter on logistics that attempts to capture a kaleidoscopic picture.

I also had access to limited public events such as Continuing Medical Education (CME) meetings in the medical school at the University of Witwatersrand, Johannesburg, public programmes organized by Indian Consulate, Johannesburg, and the Africa Health Conference held at Johannesburg in March 2012. Ethnographic content of the chapter that explains how generics increasingly being sold is derived from this experience.

Research period for this dissertation consisted of three years; I conducted fieldwork between February 2014 and March 2015. My fieldwork in the pharmaceutical industry of Johannesburg often reversed well-known power relations as existed between the ethnographer and the subjects. However, a majority of the individuals I interacted shared the same belonging, language/vocabulary, and attitude towards life as me (Mazzarrella, 2003). In various interviews with the staff of Indian companies I repeated that I will not use the real name of the products, companies, and people.

I framed my research question to look at the way generic pharmaceuticals sell and started my fieldwork by trying to get into Shitala to interview the staff. However, my concrete plans met with dead--ends at the very beginning. Given this, I persistently concentrated on tracing the networks around generic ARVs, based on a single moral imperative of knowing more on the question of access, health, and justice to the expansion of research into generics of all therapeutic categories.

In a few instances, my identity as an expatriate Indian helped me to get into the industry. However, most of my informants were South Africans; hence, the identity of being a Wits student helped even more to justify of my self-claimed neutrality and trust as an ethnographer and individual.

One of my early attempt at ethnography was to talk to workers during breaks outside the gates at Carim's manufacturing facility of Shitala, though later on I abandoned this pursuit because I failed to get access to the factory floor. After the Easter holidays in 2014, I started to interview workers; I thought more deeply about the nature of the production of value in pharmaceutical circulation.

Most of the time I travelled further from Braamfontein, an area in Central Business District (CBD) and the place of my residence, using taxicabs, having banter with drivers who often had many years' experience of living in the city. I also commuted in public minibus taxis many times and in these instances I was more conscious of knowing the places better to avoid getting astray.

An incidence of countrywide xenophobic violence happened in the month of February and March 2015. I also experienced three instance of 'unfriendly behaviour' or conducts that lead to humiliation, even as I intensified my fieldwork during the same period; in at least one of them my identity as an immigrant Indian surfaced as important. Barring this, Johannesburg was a good place to experience a unique form of cosmopolitanism and friendliness. By doing this and taking generic pharmaceuticals myself when I was sick, I could overcome the dualism between subjects and anthropologists during fieldwork (Srinivasan, 1993), even though, most of my encounters were not in any way unique from what a young male ethnographer might experience here.

As mentioned in the introduction, I also found a few archival materials from the Adler Museum, Wits; advertisements in the magazines for health professionals; a set of IMS data on ARVs in the private sector; and a few articles from the South African Medical Journal as timely aids for my analysis.

In most of the chapters I have drawn portraits of individuals. I have mentioned a dozen of these characters in more than one chapter. Despite the gravity of their roles in the circulation some individuals disappear after being described once. My apologies for the inability to follow up on the biographies of these individuals due to institutional constrain existent in the industry. This is one of the limitations of the study.

This section foreshadowed the way in which circulation of generics in Johannesburg fits in discussions of the circulation and consumption in pharmaceutical anthropology and the questions of Indian capital expansion. Now, I will give an overview of the themes and a summary of the discussions in the chapters and clarify how they fit into the main argument of this study—the varieties of value that arise during various processes, in relation to bodies of literature on the social life of commodities, and mainly, pharmaceuticals.

Chapter outlines

In the following chapters I contribute to the discussion on the politics of generic medicines in South Africa. Using the historical method, the first chapter explains the politics of generic drugs in the ambit of the industrial policy and the later debates on Essential Medicines in India. Hence, we could see the transition of the generics developing through erstwhile socialist planning into (false) 'humanitarian commodities' in sub-Saharan Africa.

The second chapter titled 'Humanitarian Goods? Politics of Generics' will converse with the history of ARVs; the efforts towards procurement of generic

ARVs; and their wide availability in South Africa. Drawing on a public event, along with newspaper articles, advertisements in journals for the pharmacists and doctors, and interviews, I observe the interplay between broad moral claims and concrete business interests. Humanitarianism turned into morality becomes the ideology.

Specifically after 2010, Shitala and Sigma started local plants, attempted to partake in the morally loaded politics of HIV/AIDS treatment, and complied with broader economic reforms such as BBEE, and by way of this, simultaneously expand business to selling ARVs in the private sector and selling drugs for other therapeutic categories in both the sectors. I analyse a variety of sources and see the way the political thrust and rhetoric of supplying ARVs spill over to broader business interests. This does not mean that there are hardly challenges—the advertisements, for instance, reflect anxieties as well as hopes of Indian pharma.

Building the manufacturing plants in South Africa and being prepared to take risks in a volatile economic climate are strategies aligned to establish and maintain market dominance for their products. Perhaps, this emanates from socialism in Indian policies. Pharma companies knew the rules for co—opting the State policies, even though the idea of socialism in modern India as a whole is in fact deeply contested. This idea leads to the formation two more questions for future research: How did the socialist State contributed to the growth of the business persons from trading (*Marwari*) and dominant castes in India? How did this intermesh of caste, capital and competition enable the companies in building manufacturing plants or taking of risk in South Africa and establishing complex strategies by aligning with the State?

The subsequent chapter ‘Pharmaceutical territory: Entanglement and dispensing in pharmacies’ will focus on documenting what business journals call ‘emerging market’ and what it means to different people. The term has become a euphemism for down to earth commerce and proletarianization or extensification of medications in ethnically defined habitus. The regulations regarding the sale of various molecules, the compliance of consumers over the right usage, and awareness on side effects are at times negotiated with the authorities’ help. Taste and choice is mainly available to the pharmacists, and sales representatives. Pharmacists also promote syncretism. Black appresntices, and sales persons are hired for creating commodity culture. Through the process of marketing planning, dispensing, and consumer’s practices of buying of generics, the notion of ‘pharmaceutical territory’, in the ‘risk prone emerging markets’, slowly emerges: Sales representatives and pharmacists have practices bound by informed knowledge of sales and people negotiate their access to medicines by moving across various sectors of health (Kleinman, 1980) in the urban landscape. In this way, I use anthropology and social history of commodities and market spaces in Johannesburg to place generics as commodities that mirror social tensions, and entanglements. When pharmacists sell generics to customers according to their tastes, they exploited their habits of avoiding doctors. This happens at the spaces where the poor people shopped and mingled.

The fourth chapter titled ‘Of sales reps and tenderpreneurs: Traffic in generic pharmaceuticals’, elaborates the ways in which Indian companies forge pharmaceutical relations in the private sector market by creating new networks and maintaining the existing ones. This chapter presents us with biographies of generics, especially in times when there is transition in the character of Shitala in

Johannesburg. Chapter 4 accounts availability as explained through the politics of logistics, rather than politics *per se*. logistics is important in keeping track of the value of the generics. Various intermediaries manoeuvre the availability through customary and mandatory practices in bureaucratic and friendship-based circles, and connect between Indian pharma companies and South African stakeholders. In other words, the dynamics of logistics becomes central to the production of value, especially in the public sector.

The broader literature on local scandals in public health, issues of stock-outs, audit data of private sector ARV sale, and response of civil society to this also surface in this chapter as a backdrop.

The upcoming chapter is on the politics of capitalist expansion of family owned business. Shitala, Sigma, and Sphynx started off as small manufacturing ventures. Broadly, the investment by domestic and foreign capitalists was informed by regulatory standards, and five year plans, an ideological inclination of bureaucrats towards *swaraj* (self—making) in the post—colonial India.

Chapter 1

The Social History of Generic Pharmaceuticals in India

Introduction

Shitala and Sigma in Johannesburg present themselves as the avatar of humanitarian establishments. I trace the morality attached to generic pharmaceutical manufacturing in India. There are public and private sectors. There has been a transfer of expertise, labour, and raw materials between these sectors. Powerful capitalists influenced the socialist model of growth. The State policies on essential medicines are attempted as a case study. The historical method relies on the review of secondary literature.

Vaccines and pharmaceuticals in colonial India

In late nineteenth century Western medicine attempted for domination (Bala, 1991; Arnold, 1993). Arnold (1993) has argued that the practice of Western medical science in colonial India created a site of 'interaction and conflict': 'dissent and desire, the hateful and the hegemonic was found in Indian response (p.7)' towards biomedicine. Colonial power, and the legitimization of control of over the population gave a political tone to it. Otherwise, people referred to the corpus as 'pariah medicine'. Sadly, the discipline did not develop above a colonial science's scope (p.290).

The British encounter of the climate in India enhanced the foundation of 'tropical medicine' by 1898 (Arnold, 1993; Naraindas, 1996). While the body of knowledge on tropical disease took time in shaping up, the British grew pessimistic about building India as a settler colony (Harrisson, 1999). The tropical weather was even seen as the cause of laziness among Indians. Arnold (1993) shows that climate was a metaphor of the difference between the rulers and the ruled. By and large, Arnold is of the opinion that Indians willy-nilly accepted biomedicine's role in curbing contagious diseases, its the germ theory of diseases, and its value in healing tropical maladies (p.290).

Naraindas's (1998, p. 92) study on the vaccination of small pox patients in the cities in nineteenth century India argues that patients preferred variolation and further 'cooling the body' to vaccination. People related variolation and a milder appearance of small pox in the body with an Ayurvedic explanation of the disease. The diet regimen and caring of the body after variolation went well with the rituals of the worship of the cult of Sitala, the goddess of small pox. Colonial policies emphasized on the delivery of vaccines made in England as 'nectar' of 'benevolence'. Indians were even wary of the repeated failures of vaccination in reducing the pox.[1] Resultantly, inoculators were jobless.

Harrisson's (1999) historical account on healing during 1600–1850 observes that traditional healers and Western medical practitioners learned heavily through 'multiple engagements'. Shivaramakrishnan (2006) has endorsed a middle-class patronage of Western medicine by the late nineteenth century. She observes that

[1] Van Hollen (2004), based on her ethnography of childbirth in Tamil Nadu, observes that allopathy cannot be understood using the idioms of 'hegemony' or 'counter hegemony' in India. Women often selectively complained about the way healthcare staff treated them. Beyond doubt, the hospitals even reinforced existing social hierarchies in interactions (Ram 1994,p. 20; Van Hollen, 2004).

the *vaids* of Punjab also used chemicals such as quinine in their treatment during 1900–1940 (Shivaramakrishnan, 2006, p. 193). Kumar (1997) has noted that Indians viewed Western medicine as a helpful repository of knowledge during 1980–1920.

The pharmacopeia and *Materia Medica* in England in the mid-nineteenth century consisted of galennicals and inorganic chemical preparations. India mainly exported raw materials such as 'cinchona bar, nux vomica seeds, poppy seeds, etc.' to England (Ramachandran & Rangarao, 1972, M27 quoted by Santhosh, 2011, p. 78). Later, two factories to process cinchona and opium were started in 1870 and 1871, respectively, in the public sector (Government of India, 1954 cited by Santhosh, 2011, p. 78).

Ramachandran and Rangarao (1972, p. M 27) document how tropical medicine emerged to resolve the health issues of soldiers in the British army. A few British medical scientists initiated the foundation of local production units such as the Haffkine Institute, Bombay (1904); King Institute of Preventive Medicine, Madras (1904); Pasteur Institute, Coonoor (1907); and the Central Research Institute, Kasaulli (1905).

Following this, British India even exported drugs that amounted to Rs. 1.6 million in 1908–1909 and Rs. 4.2 million in 1928–1929 (Kumar 2001, p. 380 cited in Santhosh, 2011, p. 80).

In a lecture delivered at 'The British Scientific Products Exhibition' on 3 September 1918, D.T. Chadwick, Indian Trade Commissioner, assessed that India has been helpful by way of supplying commodities such as wood, jute, and medicine to the British Army during the First World War. His list of drugs made in

India mainly consisted of secondary raw materials such as 'absolute alcohol, refined petroleum, Lysol, nux vomica, thymol, ether, quinine hydropchloridum, acidum, strong ammonia, amylum, tannic and gallic acids, salicylic acid and its sodium salt, and methyl alcohol' (Chadwick, 1918, p. 658). The War induced shortage of drugs which in turn induced the State to establish local production units.

Drug production in the public sector improved drastically: 13 % share of the domestic production against meeting the total demand in 1939 rose to 70 % in 1943. In the back drop of the Second World War, sera and vaccine production factories met the demand of domestic and export requirements by 1940. During this time, India also supplied drugs to the armed forces in West Asia and the Far East (Government of India, 1954, pp. 18–19, cited in Santhosh, 2011, p. 81).

The Bengal Chemical and Pharmaceutical Works, founded in 1901 in Calcutta, was one of the first drug factories started by Indians. Prafulla Chandra Roy, a chemistry graduate from Edinburg University, was the founder. The company produced tetanus antitoxins in 1930 (Barnwal, 1995, p. 27). T.K. Gajjar and B.D. Admin established Alembic Chemical Works in 1907 (Barnwal, 1995, p. 27).

Indigenous drug production in the era of Cold War

In the post-Independence period the production of chemicals was promoted by the State as part of small, medium, and micro enterprises (SME) (Pradhan & Sahu, 2008). Tybaji (1989, p. 3) argues that India's development strategy was an

outcome of propositions prepared during the nationalist movement. The All India Congress Committee (AICC) broadly negotiated with India's capitalist class on questions of major economic policies such as 'tariff protection, the role of the public sector, and of the specific role of planning'. Tyabji (1989) further illustrates how 'The Bombay Plan of 1944/45' was one of the manifestos of the industrialists in response to the situation.

> The Bombay Plan envisaged an expenditure by the State of Rs. 10,000 crore [i.e., Rs. 100 billion] over a 15-year period starting in 1947. It foresaw the need for extensive administrative intervention and control, and accepted the need for Government ownership of utilities and heavy industry, and the consequent need for complementary control over credit and investment institutions. Such a degree of administrative control would have been considered unusual at that time, particularly when the proposals came from the industrialist class itself. However, it has been convincingly argued that their intention was to craft administrative machinery which would safeguard their long-term political and economic interests (p.108).

Immediately, Nehru was appointed as the chair of a committee to gauge the 'implications' of the economic and industrial policies. Thus, Nehru oversaw the wedding between 'Nehruvian socialism' and 'the view point of the large capitalists' (Tyabji, 1989, p. 108). The embryo of India's economy was born then.

Despite these happenings, Gandhi, Gandhians, and Indian capitalists coincidently supported the drafts of the policies on developing small-scale industries (Tyabji, 1983, p. 3). The desire to implement the Gandhian notion of *Swaraj* (self-rule) kept the plans alive. Big Industrialists grew fonder of the model because the same did not interfere in their domain of expansion. This history is important since Pradhan and Sahu (2008, p. 1) have mapped the growth of the pharmaceutical industry as an excellent case of the ebb and flows of SMEs in

India. They emphasize the relevance of the first Industrial Policy Resolution (IPR), 1948, to begin their discussion.

Originally, the plans for making generic pharmaceuticals were associated with the ideas of socialism in more pronounced ways. The Directive Principles of State Policy clearly stated 'socialism' as a desirable model in the Constitution (Barnwal, 1995). Circulation of generics has also been a part of the State's imagination of being a 'nation' in India where 'multiple nationalisms' always existed (Alosysius, 1998).

Like in the case of South Africa and Nigeria, multinational companies had no factories for producing bulk drugs or formularies (Peterson, 2014; Horner, 2014b). Yet, during 1952 and 1968 multinationals gained 360 licences on formularies (Lal, 1990, p. 20 quoted in Horner, 2014). There were around 20 multinationals in 1956 (Tyabji, 2010, p. 9).

Prime Minister Jawaharlal Nehru had personal interest in developing domestic pharmaceutical production centres in the public sector. He did not trust US-based MNCs. He even feared the probability of unholy alliances between private sector domestic companies and the MNCs (Tyabji, 2010). The large-scale public sector industry supported model of development is broadly known as the Nehru–Mahalanobis model. Hindustan Antibiotics, at Rishikesh, Uttarakhand, in 1954, and Indian Drugs and Pharmaceuticals Limited (IDPL) at Hyderabad, Andhra Pradesh in 1961, Hindustan Organic Chemical Ltd, at Mumbai, the Madras and Bengal Quinine factories, and the factory for making opium alkaloids in Ghazipur, UP are examples (Chibilaev, 1968, p. 406). Invariably, the Soviet Union's technical assistance provided impetus for Nehru to attempt various other public sector drug production units (Tyabji, 2010, p. 4; Chibilaev, 1968).

Nehru's ministry obtained the transfer of technology from the Soviet Union for further updating Hindustan Antibiotics, the State approached organizations such as WHO, as well as Merck, a US-based multinational company (Tyabji, 2005; 2010; Horner, 2014b).

Tyabji (2004, 2010), a historian of science and technology in India, narrates the intricacies of the construction of the 'technological base' for generic pharmaceuticals. Empirically, the decisions over drug production involved time-consuming negotiations. Nehru himself intervened in major decisions. WHO got the lot when it came to the establishment of a penicillin-manufacturing plant at Pimpri, Maharashtra (Tyabji, 2004; Chibilaev, 1968, p. 405). WHO could involve scientists such as Howard Florey and Ernst Chain as well as other experts to directly negotiate with Nehru from 1950 to 1954 (Tyabji, 2004, p. 338). The Patent Act of 1911 otherwise restricted the imitation of new drugs in India (Hameed, 1988 quoted in Horner, 2014b, p. 1127).

In contrast, in 1955, Nehru's team rejected a proposal from Russia (Tyabji, 2010) in the stage of negotiations:

> The negotiations were for technological support for a pharmaceutical complex consisting of plants for the production of drugs from medicinal plants, of synthetic chemical drugs including sulfa drugs, and anti-malarial and anti-tuberculosis drugs, antibiotics including streptomycin and aureomycin, and vitamins (p. 4).

An offer of technology transfer came at the same time from Bayer to establish a standalone plant for chemical intermediaries, which was accepted. This is the history of Hindustan Organic Chemicals (HOC) at Mumbai, in Maharashtra. Later, this particular plan failed to meet mission targets (Tyabji, 2010, p. 26).

Russia's assistance dominated the public sector production plans. As mentioned above, IDPL was set up to manufacture 'antibiotics, synthetic drugs, endocrines, alkaloids, and medical instruments' (Tyabji, 2010, p. 5). IDPL ran successfully. The firm supplied antibiotics and also provided support for private sector companies in Hyderabad that made access to medicines easy.

Thomas observes that the reference to 'the penicillin project' helped the State to derive the Indian Patents Act (IPA) of 1970. The government thought that 'product patents blocked technology capacity building' (Thomas, 2009, p. 110). The politics around health and generic pharmaceuticals after the passage of IPA gave pharmaceuticals a special status among commodities within the market system. Like many other countries in the world this Act did not recognize product patents but process patents in India (Jha, 2007).[2] A patent holder generally patents products along with the process of making them. Indian companies made generics by inventing a new process of copying the drug. The Foreign Exchange Regulation Act (FERA) 1973, the New Drug Policy (NDP) 1978, and the Drugs (Price Control) Order 1979 also supplied protective regulatory mechanism for the Indian manufacturers (Horner, 2014b, p. 1128).[3]

[2] The Indian Patents Act 1970 has been amended thrice. The first amendment was in 1999. The Exclusive Marketing Rights (EMRs) were granted in retrospect from 1 January 1995. The second amendment in 2002 extended the term of patent to 20 years. This imposed the burden of proof on the infringer as opposed to the patent holder. Rajan (2012) observes these developments as two ways of 'incorporation' of India into the globalization of drug development since the mid-1990s. First, Indian citizens were incorporated into globalized clinical trials. Second, Indian manufacturers were brought into the global harmonization of IP regimes.

[3] General restrictions of foreign-investment (FERA) imposed a cap on foreign equity holdings in 'core high technology industries, including drugs and pharmaceuticals' (Incarnation, 1989, p. 199; Sahu, 1998, p. 67 both quoted in Horner, 2014, p. 1128). The NDP also restricted foreign ownership at 40%. Bulk production was also mandatory for the companies. The Drugs (Price Control) Order of 1970 monitored the price of more than 347 drugs.

After Independence, the emergent and educated middle class found (Tyabji, 1989) the liberal left parties such as Communist Party of India (Marxist) as an oasis to argue for the legitimating control of pharmaceuticals by the State (Hassan, 1980).

The concept of essential medicines always had a political undertone in the history of public health. Hence, I look at the debates on essential medicines in India.

Essential medicines

The WHO identified and announced the relevance of 186 molecules as Essential Medicines in 1977 (Greene, 2011, p. 12). Greene (2011, p. 18) quotes form a certain 'WHO Technical Report 615: The Selection of Essential Drugs (1977)':

> [The Essential Medicines] privileged prevalent conditions over rare diseases, older dugs of proven efficacy and safety over newer drugs single agents over combinations and generic names over brand names (Greene, 2010, p.18).

Between the 1970s and 1980s the Non Alignment Movement (NAM) viewed off-patent medicines as potential remedies for the diseases in the global South (p. 16).[4]

There were regulatory controls over essential medicines in India. The Hathi Committee Report (HCR) of 1975 initiated valuable public debates on the question of access to these items.

The HCR argued that the control of MNCs over the private drug industry of India was a public health challenge. The MNCs had the moral responsibility to decrease the foreign stake holdings step by step to 40% and further to 26% (Pillai,

[4] Even though Jawaharlal Nehru died in 1964, he was one of the prominent leaders of the NAM.

1988, p. 105). The HCR served as a manifesto of the activists because its suggestion that foreign companies should be merged with public sector units in the case of non-compliance.

The reports such as HCR also attempted to mark continuity in the history of the pharmaceutical capital in the pre-colonial scenario with that of the post-Independence scenario. MNCs invariably had a prominence in the sale of drugs. The State had progressively de-regularized pharmaceuticals from 1985 onwards. The HCR was never implemented in *toto*. Against this backdrop, People's Science Movements, mainly the Kerala Sastra Sahitya Parishat (KSSP), lobbied against the multinational drug firms in India in the 1980s (Drabu, 1986, p. 195).

The KSSP was formed in 1962 as a forum of science writers (Sahoo & Patnaik, 2012, p. 12) and operated with the support of a liberal left party predominantly led by upper caste Hindus called CPI (M) in Kerala in 1980s. Both KSSP, and CPI (M) strongly identified with the Soviet Union model of socialism. KSSP spread awareness on the relevance of low-cost essential medicines and stood for adopting a less medicine-dependent approach for the treatment of preventable communicable diseases (p. 12). This politics also used the idea of essential medicines to promote India as a welfare State.

The HCR strongly defended the Essential Medicine policies. There were 13 medicines on the list of essential medicines. Essential medicines bore only generic names on the packages. Resultantly, the NDP 1978 issued a mandate to impose generic names on five essential drugs: analagin, aspirin, chloropromazine, ferrous sulphate, piperazine and its salts such as adipate, citrate and phosphate (Barnwal, 1995, p. 122). Other drugs had to show smaller brand names and bigger generic names (Government of India, 1975, p. 76).

Moreover, the HCR reserved the right to prepare 34 dugs for the government (Pillai, 1988, p. 112). When the Janata Party, a socialist party rose to power, the committee reports inspired the passage of a New Drug Policy in 1978 (Santhosh, 2011, p. 98). Eventually, there were 25 formulations under government monopoly, 23 for the private sector and the rest were left for both the sectors (Pillay, 1988, p. 112). Items on the price control list were those that cornered high turnover rather than those listed as essential medicines.

Sakthivel and Nabar (2010) notes that there were 347 individual items under price control.[5] The State did not resist the demands by the MNCs for deregulating medicines from government monopoly (for gaining a perspective of the MNCs see the Rationale of Drug Delicensing, 1985). The State delicensed many of the formularies soon. The Drug Policy of 1978 mainly retained 347 APIs under license control. This list dwindled to 166 APIs in the Drug Policy of 1986 (Santhosh, 2011, p. 102). Further, Drug Policy 1994 abolished licensing of medicines in its entirety (Barnwal, 1995, p. 165).

According to the regulations suggested by HCR, the State allowed 40% of foreign stake holding in various companies. The MNCs responded to this by Indianizing many of the stake holdings. In other words, the MNCs allowed themselves to nationalize in the hope that they might retain 60% share in the aggregate demand (Hassan, 1980, p. 253). The Drug Policy of 1994 allowed 51% foreign ownership in pharma companies.

The HCR recommended the circulation of non-branded generics or ‘generic generics’ (Anita, 2010) as essential medicines in the public sector. The committee also restricted the conspicuous use of brand names in the packaging of all the

[5] Currently, there are 74 items on the price list (Sakthivel & Nabar, 2010).

pharmaceuticals. Recently, People's Drug Stores or 'Jan Aushadhi' was started in India in 2008. The project aims at providing brand-less generics through outlets with the help of NGOs and trusts, public sector enterprises, co-operative bodies and private sector institutions.[6]

Inequality in access to essential medicines is still rampant across India. One of the known cases of State neglect is that of the region of Jharkhand, central India. In the well-documented exception, a left oriented upper caste paediatrician, Binayak Sen ran a clinic named Bargrumnala to provide basic healthcare programmes among *adivasis* (tribal population) in one of the districts (Doctors in Defence of Dr. Binayak Sen, 2008, p. 56). He also tuned his efforts with the Mitanin (volunteer friend) programme. The Mitanin programme relied on community health workers for outreach.

Ironically, the State targeted Sen for allegedly supporting the Maoist and Naxalite movement. These factions of left radical movements mainly organized by

[6] The official website of the 'Jan Aushadhi' claims that this project follows the Gandhian model of trusteeship. Trusteeship implies collaboration between the private capital and the people. Notwithstanding all these, the central idea of the project is to cut the cost of advertising and marketing practices inbuilt in the branded drugs and branded generics though public–private participation. Thus, the prices of the medicines are kept low to cover expenses of transportation, profit margins, and retailing. The main challenges of this scheme are the following: (1) Doctors have the habit of prescribing branded medicines or branded generics (CII-PwC, 2013). (2) There are complaints about the lack of availability of medicines for diseases such as cancer and the poor quality of medicines or the failure of outlets to sell these medicines (*The Hindu*, 4 March 2010). (3) This endeavour did not receive much acceptance from privately owned pharmacies (Jayaraman, 2010). However, a survey by Ahire et al. (2013) has found that there is vast difference between the prices of branded drugs available in the market and generic medicines provided in 'Jan Aushadhi'. Ahire et Al. (2013) further suggests that this kind of a project can be a model for South Africa where drugs for chronic treatments such as HIV/AIDS and Malaria are very expensive and unavailable to a large section of the public. Similarly, In Brazil and Mexico there are efforts to provide generic drugs to the public. In Mexico, privately owned pharmaceutical chain called *Famecias Similares* (Similar Pharmacies) are encouraged by the Mexican government in 1997 (Hayden 2007). In Brazil, generic medicines such as antiretroviral therapy have been developed through reverse engineering and research. Brazil did not grant patent rights for pharmaceuticals before implementing TRIPS (Cullet, 2003; Cassier & Correa, 2007, p. 88).

upper caste urban leaders who have a philanthropic attitude operate in the forests of Jharkhand.[7] Kennedy and King argue that the arrest of Sen in May 2007 for organizing local people to run a clinic is a manifestation of the 'pathologies of power' (Farmer, 2005 quoted in Kennedy and King, 2011, p. 1639) in India.

I want to fully flesh out the political economy of essential medicines by getting into a brief discussion on junk medicines in circulation in the private and public sectors alike.

Rebranding medicines

Though Indian generic drug industry is capable of meeting life-saving drug requirements of India the medicines are still not affordability for all (Srinivasan, 2011). Private firms such as Shitala and Sigma sell their generic brands at an enormously higher price than that of smaller generic companies.

The evils of the current domestic pharmaceutical market in India manifests in the economy (Eg.'non-Essential Medicines' (Selvaraj & Farooqui, 2014, p. 163)). There are dubious antibiotic marketers, injection sellers, syrup makers, and FDC promoters among pharmaceutical companies. The companies shower unnecessary items into the highly unequal regional markets across India. Selvaraj and Farooqui (2014) explain the scenario of irrational drug:

> With over 90,000 formulation packs and associated brands, the country is not only the top generic producer but a significant share of it is irrational and dangerous. Several banned, bannable and hazardous drugs float in the market unchecked. Ten of the top 25

[7] The State initiated violent *salwa judam* (local militia) programme in central India to end the civil war between the radical left movements. In this programme, the **S**tate paid some of the locally powerful groups to attack those villagers who putatively supported the armed left movements. One of the recent infamous direct military attacks in the tribal belt is called 'Operation Green hunt'.

> products sold in India in 1991 and 8 of the top 25 drugs sold in 2008 belonged to one of the these categories—blood tonic, cough expectorant, nutrients, liver drug, sex stimulants, etc.—which are either inessential or irrational. This also includes several fixed dose combinations that are considered inessential (p. 150).

The cough mixtures are affiliated to of Ayurveda, Unani, and biomedicine. Obviously, the most popular cough mixtures claim to be ayurvedic medicines. In Bihar, eastern India, even public health facilities prescribed a lot of 'anti-asthmatics' and a wide range of 'branded and generic Essential Medicines to non-Essential Medicines, single agent to FDCs, oral, injectables, etc.' (Selvaraj & Farooqui, 2014, p. 161). The authors also observe that doctors generally prescribed irrational drugs across India.

The generic industry has a knack in producing irrational FDCs (Selvaraj & Farooqui, 2014, p. 147). An old FDC; a combination of old single pills and dosages and a new FDC; a mixture of One or two of the New Chemical Entities and an old formulations can be found in this category.

What is the dark logic behind these preparations? Selvaraj and Farooqui (2014, p. 148) observe that 'one of the APIs in the FDCs often end up increasing the cost' (Eg. a combination of ibuprofen, paracetamol, and caffeine).

Seeberg (2012) in his study in Odisha, eastern India, looks at the impact of intensive competition within the pharmaceutical firms and among private providers on health care. Generic companies exploited weak links in the health system in that region to market their drugs even illegally. Quacks and GPs prescribed plenty of generics.

Stephen Ecks coined the term 'pharmaceutical citizenship' followed by a critic of the same in the context of West Bengal, western India (Ecks and Sax, 2005).[8]

According to his ethnography Bengalis associated the problems of the mind with the ailments in the stomach. Using the cultural viability formed through bowel and stomach centred heath-talk a Bengali psychiatrist prescribe psychiatry drugs and insist on the compliance from the patients (Ecks, 2014, p. 2). Ecks argues that this ethnographic example illustrate the holistic picture of the psychiatry practice. Neologisms such as *moner khabar* (mind food) were coined. The drugs are posited as commodities that 'de-marginalize' the 'docile minds' and transform them as proper middle class or *badrolok* of Kolkata (Ecks and Sax, 2005, p, 205). Drug companies also forged pharmaceutical relationship with nonqualified doctors in the small towns to sell more (Ecks, 2014).

My recent interaction with the wholesale dealers of a *bazaar* in Bagirat Palace Street (BPS), Chandini Chawk, Old Delhi illuminated the ways in which they supply the generic medicines to a vast geography such as South Asia, and Africa. There are perhaps ethics of and fascination with the circulation of *dawais* (medicines) among Punjabi Hindu merchant class (*lalajis*), big agents (commission agents), and *naukri* folk (workers).[9]

The political intervention is difficult because in BPS market all are interested in their own business: *kam se matlab* (right to the city). The

[8] Jeffery and Jeffery's (1996) ethnography has noted that husbands inhibited to purchase Emergency Contraceptive Pills (ECPs) for their wives in United Provinces (U.P). Sheoran's recent study in New Delhi (2015, p. 243) uses the notion of *stratification* to describe the social determinants of the circulation of ECPs. Upper caste cosmopolitan girls mostly accepted the pills.

[9] Dawai market in the early morning looked very dirty: Littered plastic bags were all over. Baghirathi Palace that belonged to a Mughal aristocrat woman now hosted wholesalers (*dukans).* Ethnographic research was conducted in March 2016.

pharmaceuticals in traffic are *mals* (property). The *mal* is a commodity, capital, and object of speculative trade. People also aspired for *shauk* (happiness) and social mobility (*samaj ko bi dikana hei*) in the pharmaceuticals' exchange.[10] The pharmaceuticals are known as *nakali dawai* (counterfeit drugs) when they are out of place. This visit provided vignettes of demand-supply mechanism of a *dawai* market at the centre of the global South (Bestor, 2004).

How do *dawai dukan* entrepreneurs of Chandini Chawk sell pharmaceuticals in the domestic and the global market by negotiating with the big pharma and Indian generic companies alike? How does urban informality in the BPS's market get incorporated as vital activity (*shauk*). Does businesspeople feel bad (*sharam*) selling *nakali dawai* (spurious drugs) illegally?

To explain the present situation I follow the convention of the histories of pharmaceuticals and pharma capital (Rasmussen, 2008; Gabril, 2014).

Why stop? Many lives of Shitala

This section starts with the description of the political economy of generic pharmaceutical manufacturing in India. In continuity with the discussions in the last section, I lead the reader towards the disjuncture between Shitala and public sector units.

Shitala originated as a distributor of imported formulations in Punjab, India. Thereafter, an Indian business family owned the company for a long time. The

[10] There are mainly four classes who transact the *mal*: (1) *lalajis*, (2) agents, (3) *naukri* people, and (4) *mazdoors*. Some businessmen attempt to sell the medicines that are shipped often (*bante supply karte hei*) to Africa, and the Middle East.

company grew into an MNC in the 1980s. The crisis in legally negotiating with the international realm of IP laws, corporate rivalries, and broadly surviving global competition led to the decline of the prospects of the company. A Japanese company acquired the firm from the last family heir. Another age old generic pharmaceutical company again acquired the products and distributions of Shitala.

The availability of high-quality literature on Indian generic industry is visible. Especially after 2000, there have been new excellent studies on the history (Tyabji, 2004; 2010) and political economy of pharmaceuticals (Chaudhuri, 2005; 2008; 2012, Horner, 2013a; 2013b; 2014a; 2014b). Kaushik Sunder Rajan has produced extensive anthropological literature on India's encounter with the West in the age of biocapital expansion (Rajan, 2003; 2005; 2006; 2007; 2010; 2012; 2015). Another set of rich anthropological literature is on intellectual property rights and the industry. Many of them underscore or mention the influence of changing nature of industry in India and the repercussions resonated domestically and elsewhere (Pollock, 2011; Hayden, 2015; Peterson, 2014; Harper, 2014). Yet, there are no elaborate case studies on the social dynamics related to the circulation of Indian generics abroad.

To approach pharmaceuticals from a different angle than that of the contemporary global capitalism, pharmaceuticals are specific 'information goods'. They gain a major part of the commodity value with reference to patent laws (Kapczynski & Syed, 2013; Hemel & Ouellette, 2013). A pharmaceutical innovation could receive prizes and government grants as in universities. Patents oriented towards market is thus not a necessary evil.[11] The drugs can be different

[11] Pharmaceuticals are different as they generally circulate within regulations and with the mediation of medical experts.

commodities. Yet, in a market that is free of patent protection, pharmaceuticals' ability as a commodity to serve the business interest of the patent holders still persists. First movers advantage, value creation by providing related services, such as dispensing, prescribing, and simply making them available in different regions. This is how free computer software such as Linux and Red Hat earns profit (see Kapczynski & Syed, 2013).

Under the regime of patent laws, generic drugs are identical or bio-equivalent of a branded drug. They have the same active ingredients and similarity in functioning in the body as that of branded drugs (Kotwani 2010; Ahire et al. 2013, p. 705). By the term Indian generic drugs I mean either the generic drug imported from India or locally produced in South Africa by Indian pharmaceutical capital. To be precise they can be called 'branded generics' as they carry the brand name of established companies (Kotwani, 2010). According to the report of the US Food & Drug Administration (FDA) and UK National Health System (NHS), 'non patented molecule with a brand name other than the innovator's name' is termed as a 'branded generic drug'. A generic brand acquires a quality of brand when physicians repeatedly prescribe a generic drug. In other words, the degree of recall and preference contributes to the brand value (Kotwani, 2010).

Protected by laws framed by the Nehruvian State that followed a model of 'state capitalism' and its strong 'intermediary' bureaucracy with a middle-class background (Kaviraj, 1988), private generic pharmaceutical companies made huge profits by selling branded generics. The domestic advancement of synthetic chemistry provided resources for capitalists (Abrol, 2014). India fully complied with the Trade Related Intellectual Property Rights (TRIPS) in 2005. After this

companies such as Shitala and Sigma attempted to manufacture patented products along with off-patent products.

Along with three foreign companies, Shitala and Sigma stood among the top five pharmaceutical companies in India during 1994---1995. There were only generic companies in the top five in between 2005 and 2006. Sigma, Eureka, and Shitala marked sales turnover of approximately $1 billion (Dhar & Joseph, 2014, p. 77).

The TRIPS initiated a crisis (Rajan, 2010). The presence of Multi-National Corporations (MNCs) resulted in structural re-adjustment. The pharma industry began to mechanize manufacturing plants. Most of the labour was drawn from informal sector (Ray & Bhadhuri, 2003). Indian companies such Shitala shifted their concentration from the bulk production of life-saving drugs to importing formulations from China and marketing them for the cure of lifestyle-related diseases. Companies prioritized the finding of markets in developed countries such as the USA and countries in Europe.

Even before this transformation could happen, prominent Indian pharmaceutical companies planned for capital investments by way of acquisitions and mergers and mutual marketing agreements with multinational companies in 1970s. There were also efforts from big companies such as Sigma and Shitala to start their own research and development wings in order to sustain them to increase the returns from capital (Thomas, 2009). But, a chunk of these efforts were unsuccessful due the failure to come up with new inventions of medicines (Chaudhuri, 2008). Another strategy was that of joint ventures, such as in Eureka Pharma's agreement in supplying drugs in Africa, Latin America, West Asia, and

Asia-Pacific with GlaxoSmithKline (GSK) (Chaudhuri, 2011, pp. 45–47; Rajan, 2013).

In the recent past, global system of generic circulation is characterized by the politics of 'post patent cliff scenario' (Rajan, 2013). In this situation, when internationally companies face competition from generic producers for their off-patented drugs, innovator companies outsource manufacturing facilities to Indian companies.

The subcontracting model had consequences because of the rise in prices of essential medications such as antiretroviral drugs (ARVs) sold to the developing world (Rajan, 2013, p. 335).

Reports on the current scenario of the domestic industry show that multinational companies have excellent sales records. The deregulation of drug market after 2005 in India might explain this. In the post 2005 context Kanjilal and Mazumdar (2012, p. 28) observe the prevalence of 'stiff price and non-price war over the high end products' in the market. India also became an alliance and outsourcing destination for MNCs due to the presence of the domestic industry. Majumdar (2010, p. 10) has identified a *deindustrialization* by Indian companies due to the high competition wrought on them. Liberalization forced companies to adopt joint ventures and alliances with Indian affiliates of the MNCs.

Yet, Third-World countries attract production-orienting efforts from Indian generic companies, especially in the context of a constant demand for generic drugs to treat epidemics such as AIDS and Malaria. The operations of Indian companies in South Africa follow a diversification of therapeutic segments, viz.,

producing generic drugs for the treatment of HIV/AIDS, selling lifestyle drugs, and over—the—counter medicines.

However, legal developments show that India still exercises control over the production and circulation of drugs, especially of the right to produce and circulate the generics of off-patented drugs or drugs that acquired patent before 1995. The Supreme Court of India in the month of March 2013 produced a judgment on a case against the Swiss company Novartis. It underscored the right of domestic companies to make generic drugs without attracting legal interference on the basis of rules of the World Trade Organization. In this case, Novartis fought a seven-year legal battle to gain patent protection for an updated version of its cancer drug Gleevec (imatinib). Novartis argued that the compound was a significant improvement. The court rejected the claim observing that the compound 'did not satisfy the test of novelty or inventiveness' required by Indian legislations (Rajan, 2015).

In the ruling against Gleevec, there is an illustration of the way biology crosses paths with law. Rajan (2015) observes how 'bioconstitutionalism' is a helpful frame to capture the workings of biocapital in India. According to Jasanoff (2011, p. 5) this concept refers to the dialectical relationship between biology/technology and law. This intersection between law and society influences the civil society at large.

Jasanoff proposes an elaborate version of law as 'written and customary laws' (Jasanoff, 2011, p. 10). For her this expansion of law is to provide a holistic legal protection:

> [Law encompasses] the full range of sites and process in which individuals work out their biopolitical relationships with the institutions that regulate them (Jassanoff 2011, p.10).

In re-reading Novartis's dispute in India, Rajan (2015,p. 68) welds the politics of individualized biological citizenship with State-aided circulation of pubic goods in India.[12]

Having described the political economy of generic pharmaceutical production in the history of India I will provide a social history of Shitala that started as small company to grow to a medium-sized firm by 1975.

Shitala was found in Amritsar as an agency of A. Shiniogi, a Japanese company, to distribute vitamin pills and anti--tuberculosis drugs. Bhai Mohan Singh, a New Delhi-based Khatri moneylender acquired the company when two brothers, Rajith Singh and Gurbax Singh who owned the firm failed to repay a big sum of loan they had taken. Bhai paid compensation in 1957. He set up a manufacturing plant in Okhla, Old Delhi in 1961. This was with the technical help of an Italian company called Lepatit to produce and distribute a patented drug chlorophenicol for typhoid (Bhatt, 2011). Singh's ability was to run the company by appeasing 'business-permit-quota raj' or the regulative State of the 1970s. He gathered foreign-educated Indian pharmacists, including his son, Parvinder Singh, who has a PhD from the University of Michigan, to break the chemical structures of various pharmaceuticals and to make them locally through reverse engineering. The returns on capital was sudden in the domestic market of India (Bhandari, 2005).

[12] Anyway, I really doubt if biological citizenship was always an individualized struggle (cf. Rajan, 2015: 68; Petryna, 2002). Biological citizenship could be an individual response towards a broader collective morality. This could form a trend and an economy of need.

Damodaran (2008, p. 73) notes that Bhai could influence the post-1970 industrial scenario to great lengths:

> It is rumoured that the Hathi Committee report of 1975, which gave a huge boost to the domestic pharma industry, was drafted in Bhai Mohan's office (Damodaran, 2008, p.73).

No wonder Shitala, then a medium-sized firm, favoured HCR's mandatory sale of foreign shares to Indians and suggested the progressive take-over of the non-compliant Big pharma companies! (Hassan, 1980, p. 246).

Now let me bring your attention to the story of Calmpose as a case of successful imitation, and luring mercantile approach: Shitala's early capital multiplied from the huge sale of diazepam tablets called 'Calmpose', repackaged in India after sourcing from Hungary, from 1968 onwards (Bhandari, 2005; Obe, 2008, pp. 24–25).[13]

The sale of Calmpose seems to have dropped when doctors started to prescribe Valium after Roche launched this product in India, rather late, in 1974. However, Shitala managed to bring in the technology to make this molecule in India by 1974 and further made subcontracting deal for supplying the APIs of the same to Roche India.[14] Bhandari (2005) notes that the sales team of Shitala

[13] The Soviet Union transferred essential technology for setting up public plants in post-Independence India. Bhai Mohan's connection to political power might have helped him to import machinery from Hungary, in Eastern Europe (Bhandari, 2005).

[14] In 1973 a manufacturing plant to provide APIs was already been started at Mohali, Punjab. Shitala sold factory-made ampicillin formulations in the private sector and supplied APIs to the state-owned IDPL, based in Hyderabad, as per a licensing agreement in 1974 (Bhandari, 2005, p. 68). Another milestone is that of the API plant for manufacturing antibiotics/antibacterial at Taonsa in India in 1987 (Bhatt, 2011). Shitala also developed ciprofloxacin antibiotics through reverse engineering in 1989. Later, the company enlarged the territories of sale. When the company developed a 'non-infringing process' to make cefaclor, a quick agreement was done between Eli Lilly, the patent holder, to source the API of the molecule in 1991 (Bhandari, 2005). In a move towards an independent market in the developed world in the next decade, when the company found a new process to make flucanozole atorvastatin, a cardiovascular drug, the company filed an application for US Food and Drug Administration (USFDA) approval in 2001.

rediscovered this drug as an injectable solution for reducing pain and anxiety during surgeries in 1972.

In the 1980s, many medical students in Nigerian universities started to consume Calmpose, to 'get high' or for experiencing 'kicks' (Johnson, 1984, p. 331).[15] Johnson (1984) notes how Calmpose, classified as a 'tranquilizer', was 'fairly easy' or 'very easy' to avail, than amphetamines—globally known as 'speed' (Rasmussen, 2008)[16]

This brand has now found an additional use among medicines used for treating epilepsy in India. Calmpose became a household name as over—the--counter sleeping tablets sold high. Bhandari (2005) writes the following on the advertising strategies of Shitala:

> The marketing campaign bore a couplet composed by Ghalib, the legendary nineteenth-century [Indian] poet: *maut ka ek din muayyan hai; neend kyon raat bhar nahin aati*

Shitala also challenged an attempt to ever greening the patent on Lipitor by Pfizer. Agreements with Clinton Foundation also helped Shitala to produce generic antiretroviral medicines (ARVs) in larger quantities and to participate in the development of the first synthetic peroxide antimalarial that was called RBx 11160 with Medicines for Malaria Venture (MMV) for distributing in 90 countries in 2003 (Bhandari, 2005, p. 16, ABPN, 2006). The final product of this initiative is called Synriam (a combination therapy of piperaquine and arterolane). The product came out in India in 2012 (Sheshadri, 2012, p. 455).

[15] The first plan for investing in the African continent was made for a crisis-ridden Nigeria (also see Peterson, 2015). Peterson (2014) observed how the pharmaceutical market of Nigeria resort to generic substitution. Shitala started exporting generics to Nigeria in the 1970s and set up a local plant for making liquids in 1977. Shitala offered high incentives for Indian employees for showing the willingness to work and thrive in the lucrative market of Nigeria (Bhandari, 2005). Many Indian generic companies marketed generic pharmaceuticals to Nigeria after the 1980s (Peterson, 2014). Peterson in one instance has observed how the interest of Shitala and government players contradicted in the ARV market in a way leading to public confrontation in an event. The Nigerian economy witnessed a decline in economic prosperity propelled by oil boom by then. Many multinational companies divested. That is how Indian companies came in. However, Indian generics are among the most feared for being counterfeits. Peterson (2014) describes counterfeits found here as medicines that contain either too much or too little of active ingredients.

[16] *Tribune India*, a newspaper published from Ludhiana, Punjab reports how the Deputy Commissioner banned the sale of many 'intoxicating' drugs, including Calmpose, without a doctor's prescription in 2006 in the district (Bhatia, 2006).

(When the day of death is set, why sleep eludes me all night?). The campaign helped to increase sale in North India (Bhandari, 2005, p.49).

Calmpose was indeed a well-known tranquilizer. I quote from a satire written by Mathur (2004, 44) below:

Jeet blew a superior smoke ring. 'I've taken the first step', he informed. 'I've joined an ad agency.

Babar's eyes widened. 'Congrats', he offered.

'What'll you be doing?'

'I'll be an assistant account executive. Three thousand bucks a month, everything included'.

'Not bad, not bad at all'. Babar marvelled.

'Which is this unfortunate agency?'

Jeet began to look less Olympian. 'It's new', he said shortly.

'Name, name', Babar demanded.

'Actually, it's called Calmpose Advertising'.

Babar sank back. 'Only you could', he marvelled. 'Pray explain', he encouraged.

Jeet grinned sheepishly. 'Well, it's just been started by this bunch of guys who left their jobs at a large agency and have set up their own scene. They say they thought long and hard about the most vital ingredient required to be successful in advertising and decided it was Calmpose. So Calmpose advertising it is. Cute. No?

There were more titillating narratives on the use of Calmpose too. Chandra in (2011, p. 51) 'Sacred Games', a pulp novel writes:

Nothing kept Mary awake till the end of the week. Every morning she woke more tired. On Friday she declined a girl's night with movie and dinner, went home, and took a Calmpose. At first there was a pleasantly dozy feeling in her arms, and she wiggled her head back into the pillow, anticipating the sleep as keenly as a mouthful of chocolate.

> But then the sweat gathered clammily under her shoulders, and she had to keel up to switch the fan to its fastest. She lay under its whirl, and time passed. She tried to think of pleasant things, of Matheran in the rain, of *Kaho Na Pyaar Hai*[17] and the song on the yacht, of happy clients. She turned her head to find the clock. An hour had passed. She groped on the table to find the papery leave of Calmpose, and thumbed another one into her mouth.

However, the common use of Calmpose by doctors transformed the generic brand name as synonymous with the *diazepam*. One of the text books on 'Practical and Professional Ethics' (Guha, 2007, 60) has an accidental mention of Calmpose:

> Few years back, I delivered a lecture to some select audience, mostly psychiatrists, students of psychiatry and other people about the way in which we can deal with the nagging ethic of the use of placebos. I was advocating the model of 'intersubjective corroboration', the corner stone of people's ethics, when a participant asked a wise false question: 'Do we have to talk to concerned parties in hospitals and elsewhere when some distilled water needs to be pushed to a patient troubling much for high doses of Calmpose?' If this is application of ethics, well, god save us.

Along with Calmpose advertisements that quoted Ghalib, the ads of Volini—a pain-alleviating ointment always communicated cultural symbols. One of the advertisements illustrates various sex positions described in Vatsyayana's Kamasutra. It says 'why stop?' and thus suggests the prolongation of coitus by smearing the pain-relieving gel on aching body parts.

Kamasutra condom advertisements have already been analysed to have mediated between the erotic appeal and a nationalist pride (Mazzarella, 2003). The name of the product, use of a plump female model suitable to the dominant aesthetics of Indian femininity, and the portrayal of the couple as merely suggestive of a sex act, and hence being modest and unrevealing, added up to a

[17] *Kaho Na Pyar Hai* (The Proposal) is a Bollywood romantic movie.

'new swadeshi' (self—making) in the era when globalized tastes were visible among India consumers. Mazzarella (2003, p. 138) calls this 'auto-orientalism'. He also adds that non-sexual objects are made attractive commodities using the idioms of eroticism.

The dimensions of caste is another neglected area in broader the political, economic, and cultural background of generic pharma companies' success.

Caste, Capital, and Competition

Most of the literature on Shitala follows a Eurocentric approach. Moreover, Bhandari's (2005, quoted in Damodaran, 2008, p. 90) 'hagiographic' account of Shitala's founding members does not elaborate on the relevance of caste-based networks. The intersection of class, status, and power explains the prospects of trading castes such as Khatris in Delhi after Independence (Damodaran, 2008). Khatris, including those who follow Sikhism such as Bhai Mohan Singh's family, are originally the traders of undivided Punjab (Kapoor, 1965, p. 54). Guru Nanak and many of the Sikh gurus belonged to this caste. Bhai's family arrived in Delhi from Rawalpindi after Partition of India. Partition resulted in one of the first massive forms of modern migration to Delhi (Dupont, 2004, p. 538).

Historical accounts on Shitala classify the company as a family-owned business. Joint families existed among the Khatris in old Delhi (Kapoor, 1965). This scenario qualifies to be identified as 'modernity of tradition' among the rich (Rudolph & Rudolph, 1984). The location of Delhi as Capital seems important in the way Bhai Mohan Singh could mobilize experts from Bengal and Uttar Pradesh

and influence power elites (Damodaran, 2008, p. 68).[18] However, I could not find any specific studies that link capital flows between Hyderabad, Mumbai, and New Delhi that led to the rise of the pharma industry.

Beyond doubt, the rise of the Delhi region as a centre of capitalism has contributed to the growth of Shitala (Dupont, 2011). New Gurgaon/Delhi Land and Finance (DLF) city hosts the global headquarters of Shitala. In turn, the 'global stature' of Shitala has also contributed to the growth of the city's economy (Shaw & Satish, 2007, p. 152). [19]

The New Industrial Policy in 1980 inaugurated neoliberalism and propelled urban transformation led by DLF in this vibrant region (Srivastava, 2014, p. 9; Dupont, 2011, p. 536). Developers such as DLF emphatically hoodwinked the dwellers of various urban slums in New Delhi and villages in Gurgaon, Haryana. The developers themselves became the foot soldiers of planned displacement by manipulating ambitions and planting hatred among the kindred of the poor. The term consanguinal capitalism connotes this (Srivastava, 2014, p. 130).[20]

[18] Businesspersons from Delhi decorated important positions. To cite a case, Kumar Malhotra's family belongs to Delhi. During Africa Health Expo 2015 in Johannesburg I met two businessmen previously based in New Delhi. They entirely relocated their assets to places near Baddi, Himachal Pradesh. They wanted to try their luck in the booming industry currently protected in a Special Economic Zone (tax-exempted area) of the otherwise less developed and hilly state (see Srivastava, 2015, February 15).

[19] Public enterprises such as Indian Drugs and Pharmaceutical Limited and not private capital investment have played a broader role in the growth of Hyderabad, Andhra Pradesh. Later on, the global success of Dr. Reddy's has also added to the fame of the city (Shaw & Satish, 2007, p. 152)

[20] Delhi, National Capital Region (NCR), includes the districts of Gurgaon, Haryana; and the cities of Noida and Ghaziabad, UP. Srivastava (2014) notes how this area has become a paradise of consumerism and an enclave of new foreign direct investment in North India. Once upon of a time, the rich from old Delhi moved to outskirts such as Ghaziabad, UP. The current capital formation is concentrated in Gurgaon.

The rich people's nostalgic return to gated communities in Gurgaon from abroad was aimed at the exploitation of cheap migrant labour from the rest of North India. They also sought enjoyment of privately-managed services (that is parallel or complimentary to the efforts of public sector such as Delhi Metro), and busied at the luxury of elite configurations in these glassed villages (Srivastava, 2014, p. 127). There are hyper malls and corporate offices (p. 5).

Sigma, Eureka, Sphynx, and Gemini also have complex histories. Eureka was found in Hyderabad in 1984; it was listed as a public company in 1986. Kallam Anji Reddy gained heavily from his experience as a student in National Chemical Laboratory, Pune, and as an employee in IDPL between 1969 and 1975 (Damodaran, 2008). Penaka Venkata Ramaprasad Reddy set up Sphynx in 1986, Hyderabad. The National Drug Policy in 1978 and the patent law of 1971 influenced the development of these two companies (Horner, 2014, p. 1129).

The home of Eureka and Sphynx is the metropolitan city of Hyderabad located in Andhra Pradesh, a state in Southern India. Andhra Pradesh government directly promoted risky capital investment deals involving American genetic technology based firms and pharmaceutical firms in 2000s (Rajan, 2005)

The area manifests as one of the dynamic mobilization of caste-based solidarities. The Reddis form a dominant caste in Andhra Pradesh. Srinivasan (1994) in his case study of peasants in Rampura, Tamil Nadu in 1950s has described the political assertions of certain numerically dominant peasant castes in a way leading to urbanization among them, as rise in expectations among 'dominant castes'. A dominant caste is usually high in numbers, possesses political influence, has land ownership, and enjoys affluence.

The Reddis have cleansed their social status by competing in social conservatism generally associated with upper caste Hindus (see Larsson, 2006). This selective emulation of brahmanical material culture and values that now have formed to become the mores and reference of a secularized form of Hinduism can be referred to as 'sanskritization' (Srinivasan, 1995; Osella & Osella, 2008). In a

Postmodern religiosity and excess wealth explained elite approach to life a. Srivastava observes that the newly extended NCRdomesticated globalization (Srivastava, 2014).

way, this notion is an indigenous application of Merton's anticipatory socialization (Merton, 1966) in a society that gives high importance to exclusive conviviality and marital relations that demand unpaid domestic work by wives.

One of the best contemporary ethnography of the growth in fortunes among erstwhile agrarian castes is carried out among *Gounders* of Tirupur of Tamil Nadu (Chari, 2004). Chari (2004, p. 200) observes how homosocial networks play out through an association with 'toil' (*ulaippu*). The ex-workers' fraternity forged among these men successfully negotiate with the volatile availability of the credit. They avert risk exerted from the global determinants that control production of the clothes by spreading production into small units, subcontracting with seasonal (lower caste) male labour and women.

The Reddis used land ownership to invest in agro processing and mining. Many Reddis diversified business in the 1980s into knowledge-based capital intensive manufacturing such as that of pharmaceuticals (Damodaran, 2008, p. 117). I have mentioned before Hyderabad-headquartered IDPL, a public sector enterprise. Now, Hyderabad is a hub of pharmaceutical manufacturing units.

Sigma was started in a rented mansion in 1936 in Bombay. The founder of Sigma, Abdul Hamid, is the nephew of Sir Syed Ahmed Khan who started Mohammedan Anglo Oriental College (*the Marasat ul—ulum Musalmanan*) in 1875 (Lelyveld, 1978; Singh, 2010, p. 534). This Centre developed into Aligarh Muslim University (AMU).[21] Just as in *kacahri* (court) and old Mughal milieus, AMU strictly maintained an English language oriented, yet very community bound

[21] The Aligarh Muslim University has a reputation for patronizing Madrassas (mixed gendered schools for Muslim children that taught lessons mainly in Urdu and English), and holding excellent standards in science and social sciences in its taught programmes and research projects.. Another famous madrassa is *Firangi Mahal* (loosely translated as English Inn) in Lucknow (Robinson, 1974).

Muslims' class (Lelyveld, 1978, 1964). *Sharif* culture which denotes fictive kinship, and even affinal relations arranged between people across religion and most importantly region is a difficult milieu where those without a considerable social capital are denied access. These social relations found in Uttar Pradesh, and New Delhi, sustained Sigma's steady growth (Damodaran, 2008, p. 303; Singh, 2010). Hamid's personal life had a secular undertone. He sympathized with the Communist Movement in India (Robbins & Mcleod, 2015, January 25).

Hamid got institutional accreditation from AMU and Jamia Millia Islamia University (JMIU) for building up his career as a teacher and to conduct research in pharmaceuticals (Singh, 2010). Well-known Indian elites who dominated anti-colonial struggle such as Gandhiji, Jawaharlal Nehru, and Abul Kalam Azad maintained friendship with Hamid. Scientists groomed in India such as C.V. Raman and a few chemists from the West such as A. Rosenheim, Germany were his friends (Singh, 2010, p. 543; Robbins & Mcleod, 2015, January 25). It is now known that he could influence patent enquiry committee set up for the legislation of IPA in 1969 (Singh, 2010, p. 552). Zakir Husain, one of the presidents of India, was his best friend.

Conclusion

In this chapter I have attempted to provide a social history of pharmaceutical manufacturing from the colonial period to recent times. The domestic regulations and deregulations, the philanthropic efforts of the private companies, and the debates on the IP laws at large do not significantly correspond with the requirement for essential medicines.

Yet another distinction highlighted is that of the foreign-owned companies, Indian private companies, and the public sector companies. The survey of literature shows that foreign-owned companies invariably had a dominant presence in India.

The case of Shitala helps the reader to grasp the importance of the historical method in understanding the emergence of domestic pharmaceutical companies. The transfer of technology from USSR not only helped the rise of public sector enterprises but also the mechanical reproduction of generic pharmaceuticals by the private firms. Socialist method dominated India's growth story.

Influencing strategies of the left parties over the drug policies did not create a mass awareness. Otherwise, the influence of socialism is truly visible in the historical effort of the bureaucratic elites who usually converted to liberal left line and even while sympathising with ruling fronts. The notion of *swadeshi* (self-making) was to seen as engendered in the advertisements of the products as well as the policies on pharmaceuticals by the State in the later period. However, pharmaceuticals as public goods or commodities did not have a strong humanitarian character in India.

Indian generics circulate as drugs from 'the distant land' in Johannesburg. Most of the above-mentioned companies came to the city aiming to merchandise and manufacture. A transformation occurred in their business trajectory: the political economy of HIV/AIDS after a huge humanitarian crisis spurred the State to provide medicines. The State aligned with the Indian companies because the public health scenario is dependent on cheap Indian generics.

The social life of generic antiretrovirals as a case study is unfolded in the next chapter. I have attempted to make the opening argument on the relationship between Shitala and the

South African State as persuasive as I can in the hope that it will stay with the readers and be central to my arguments.

Chatper 2

Seeing like a generic pharmaceutical company: Are generics Humanitarian Goods in Africa?

Introduction

The previous chapter explained the socialist legacy of the generic pharmaceuticals in India's public sector. The liberal left parties contested the marketing strategies of the multinational companies (MNCs) and the delicensing of the certain medicines from the State control in 1980s. Yet, the Indian private companies and the Big Pharma had a statistically visible presence. Shitala, one of the companies highlighted, seems to have manipulated nationalist burden in the generic pills's manufacturing and commerce.

This chapter documents the way in which Indian pharmaceutical companies have transformed their trade: They did not represent themselves as business ventures with 'commercial' interests in South Africa. At least two of them—what I call Shitala and Sigma--act like handmaiden to a African National Congress ANC led transfer welfare state (Burger 2014, p.176).[1] Shitala and Sigma also co-opt civil society activism, and humanitarian politics related to HIV/AIDS to do business. This led to the dominance over market.

[1] The South African State spends a sum of R. 1 billion ($ 696 million) every year (Simelela et al. 2014, p. 260). The ART programme was historically forced upon the state. Anyway, the State is at the helm by availing medicines cajoling generic companies that have local manufacturing facilities. Almost 80 % of bulk drugs or finished formulations are India's import.

Chari (2015, p. 95) has observed that the new Indian capital influences the power centers of Africa. Rather than bypassing huge areas while expanding, as observed in the case of the mining companies in Africa, the Indian pharmaceutical capital expands to the common people (Cf. Ferguson 2005, p.380). In my case study, the common people historically resided in the 'townships' such as Soweto, and elsewhere during apartheid in Johannesburg. Many of these areas are currently identified as 'emerging markets' in Johannesburg by generic industry. Accurately, these spaces may be referred to as 'weakly governed humanitarian hinterlands' in the wake of the humanitarian crisis of HIV/AIDS.

Of course, various new laws such as the amendment of Medicine and Related Substances Act (MRSA) of 1965 in 1997 enabled processes of generic substitution, and more pervasive biomedicalization in South Africa. Yet, I am afraid that these companies always have a tendency to institutionalize their timely aids to humanitarian projects. This might threaten the political potency of Indian generic pills to magically penetrate rural hinterlands and cure the poor (Biehl, 2009).

In the context of the history of South Africa, Marsland & Prince (2012) observe that the market value of pharmaceuticals protected by patent laws, invariably weighed inferior to the humanitarian value of antiretroviral therapy (ART). In this specific situation, organizations like Medecins Sans Frontieres (MSF), Treatment Action Campaign (TAC) and the State joined hands.

I explore the intersections of *moral* and *economic values* of generics seen in the process of circulation in Johannesburg. I begin with the discussion on the background of treatment campaign.

Political economy of HIV/AIDS in South Africa

Investment by various Indian generic companies by setting up branches, and local manufacturing facilities in early 2000s echoed a new political message for providing medicines to those suffering from HIV/AIDS, and multi-drug resistant TB. The initial entry by Sigma and Shitala marked a political statement so far as South Africa's history of access to medicine is concerned. In those days, Indian interventions on the patent laws and the advent of Indian generic companies have been seen as a part of the solution (Tomlinson & Rutter, 2014).

During 1990s, R&D based western pharmaceutical companies attracted a lot of global concern due to the high price of HIV/AIDS drugs. Even though innovator companies might have enjoyed huge profits by way of being first movers in the market, gaining royalty, and by directly entering into partnerships with generic companies, it was observed that lack of ideal 'commercial prospects' inhibited their direct participation in the antiretroviral medicine (ARV) manufacturing in South Africa (Jogee, 2009).

This established a nuanced literature. Broadly, 'AIDS denialism' of Mbeki, and profit motives behind big pharma's move to take the issue of intellectual property rights into the South African court to protect proprietary rights over ARVs (for an argument in favor of the big pharma see Reekie, 2005, August 15)) have attracted criticism in resonance with the politics of 'therapeutic citizenship' (Marks 2007; Geffen 2010; Lofgren & Williams, 2013; Mahajan 2008; Hill 2014).

Post-apartheid South African State, starting from Mandela's regime, broadly adopted a liberal method for economic development with a reduced State intervention known as the Growth, Employment, and Redistribution (GEAR)

programme. It moved away from the Apartheid model of State--run companies (Clark 2014, p.104). Investment by various Indian generic companies by setting up branches and local manufacturing facilities in early 2000s assimilated well into this.

Prior to this 'structural socioeconomic paradigm' dominated the health agenda of black nationalists. Civic epistemology (Jasanoff, 2005 cited in Mahajan, 2008, p.88) borrowed from traditional healers, virological studies, and the analysis of poverty at large. The expertise and biomedical approach was a repository of the whites' symbolic capital. In a nutshell, a high risk situation prevailed. The fear that global activism was morally attacking black race were difficult to remove. HIV/AIDS/STD Strategic Plan for South Africa 2000-2005 signed off by Tshabalala-Msimang (minister of health) under the auspices of organic intellectual turned president Mbeki did not create provision for rationing antiretroviral medicines (Department of Health cited in Mahajan, 2008, p.100).

By then, despite taking this controversial position on HIV/AIDS, Mbeki government sought parliament's intervention to enable the local production of generic by private generic pharma capital (Amusan 2015,p. 71). Later, Jacob Zuma government approached the issue of availing cheap ARVs in a proactive way from the AIDS day of December 2009 onward. This is known as 'mass ARV roll out' (Coombes, 2011).

Statistics shows that India invariably gained from the new politics of generics; out of pharmaceuticals valuing R. 12.97 bn India's import recorded R.1.28 bn in 2008 in South Africa (Deloitte, 2010). Deloitte's report states that generic market was further 'brand driven'—the sale was based on the trust developed on products and the companies. Sigma, after Aspen, and Adcok Ingram stood third in terms of

the income gained from pharmaceutical sales in private market in 2009. Public sector tenders have been also reliable source of income for Sigma and Shitala. Between 2008 and 2010, the government spent $ 538 million for the ARV tender alone (Brems et al., 2011).

In Gauteng province (which contains Johannesburg city), according to a certain 'generic pharmaceuticals tables' Indian companies gained 12.41% of total market share in the total R. 2598.66 million import of pharmaceuticals, and medical equipment in 2013 (Gauteng Growth Development agency, 2014).

According to Comaroff (2005) the access to life saving drugs like that of ARVs had larger significance for People Living with HIV (PLHIV). Non—governmental Organizations (NGOs) such as the TAC foregrounded access to HIV medicines arguing that how drugs signifies 'a new life' for the patients.

Indian generic ARVs in Sub-Saharan Africa

The response of Shitala and Sigma towards broader humanitarian crisis related to HIV/AIDS in sub-Saharan Africa shows that South African case can be largely generalized. In Burkina Faso, the duo have had large share in the ARV market (Camara et al. 2008,p. 243). Likewise, the products of Sigma and Shitala came to be known 'French medicines' or 'pharmacy drugs' in the private market in Benin (Baxerres & Hesran, 2011,p. 1253). France based distributors dominated the circulation of drugs produced by Indian companies such as Sigma and Shitala. The public tenders bought some of the medicines made by Sigma and authorised the

brands by the inclusion in the national list of essential drugs to be referred by common folk as 'pharmaquick drugs'. While 'French medicines' retained the brand names of these two companies, 'pharmaquicks' had only international non-proprietary names (INN) written on the packages.[2]

Even in the case of India, Van Hollen (2013, p. 250) has noted how Shitala and Sigma has been an essential part of 'Connect project' funded by Global Fund, producing ARVs for distribution in Tamil Nadu in South India.

The following section contains a discussion and critique of the politics of humanitarian good in Johannesburg.

ARVs as humanitarian goods?

Broadly, Indian generic pharmaceutical companies strategically hide their domination in the grab of 'a humanitarian turn' they underwent in the post 2010 mass roll-out era in Johannesburg. This is a different ballgame altogether in comparison to that of the global strategies of innovator companies. Here, 'politics of life'—putting people under medications throughout life-- joins hands with a global discourse of cheapness (Mintz 1985; Dumit2012). In general, the substantial cheapness harnessed the value of generics in the circulation. Moreover, the resultant

[2] Waning et al., (2010, p.2) estimated the quantity of Indian generic ARVs circulated during 2003—2008 worldwide. This study mainly covered WHO Global Price Reporting Mechanism, the Global Fund to Fight AIDS, Tuberculosis and Malaria's Price& Quality Reporting Tool, and UNITAID as provided by the Clinton Health Access Initiative. Their analysis showed that Indian generic pharmaceuticals covered almost 80 % of 'annual purchase by volume'. This gathered a fortune of 65% of the total value ($ 463 million). Innovators got 22 % and non-Indian generic companies accounted 13% of the share. Sub-Saharan African countries mainly buy Indian generics. This include paediatric segment, NRTI, and NNRTI (Waning et al., 2010, p.4). Cameroon also follows an ideal type of a generic centred approach (Camara et al., 2008) In some French speaking African counties such as Senegal innovator brands dominate as medicines in the public sector programmes for countering HIV/AIDs.

fame gained in the public sector, along with the rhetoric of *local production* helps the companies to build 'commodity images' in the lucrative private sector (Cf. Mazarrella, 2003).

Ironically, the prices between innovator brands and reputed generic brands varied only between 20 % and 30 % in the private market (Cf. Lakoff 2005; Bateman 2014). Notwithstanding this, Indian generics flowed into the market spaces with great speed. In many of the private sector markets in Johannesburg the poor relied on generics when dispensing situations cut across illicit and licit trade practices (Peterson 2014). These spaces were historically the areas were the poor shopped. It might also probable that treatment literacy campaigns around HIV/AIDS (see Niehaus 2014) have broadly facilitated the flow of generics at large.

Besides that the further involution in the moral economy of generic circulation as public goods happened when logistical availability rather than access *per se* determined the politics and value of generics (Cowen, 2014). When the sever stock—out of drugs such as those used in ART became a political issue, the Indian companies took more risk to bid for public tenders. Thus, in Johannesburg, Indian generic ARVs changed from being global merit goods to become public goods (Kapstein and Busby, 2010). The companies tend to oversee their traffic as a prestigious enterprise to dominate broader trade.[3]

By the term Indian generic drugs I mean either the generic drug imported from India or locally produced in South Africa by Indian companies. To be precise, they can be called 'branded generics' as they carry the brand—names (Kotwani, 2010).

[3] One of the physicians who is implicated in the highly successful ART programme viewed my remarks on the humanitarian streak of Indian companies with suspicion. He was apprehensive towards my observation that they differed markedly from other ventures. The companies required to be praised, in his opinion, for undoubtedly being highly effective at driving costs of medication down. He advocated for the ART at an international level.

Just as in South Africa and Nigeria, multinational companies historically did not set up factories for producing bulk drugs or formularies in India (Peterson 2014; Horner 2014). However what Horner (2014) calls strategic decoupling from rest of pharmaceutical industry in the world at large from 1970 onwards revolutionized Indian pharmaceutical Industry. This is the legacy that Shitala and Sigma utilized to emerge as multinational companies.

Advent of Shitala in Johannesburg in 1993 and the onset of financial crisis and depreciation of rand thereafter were mostly coincidental. This move entailed internationalisation of business by Shitala in order to grow beyond the domestic market in the 1970s. Shitala also invested in other developing countries such as Indonesia, Poland, and China (Bhandari, 2005).

Shitala began by establishing a wholly owned subsidiary in 1993 (Jogee, 2009)[4]. It was initially involved in selling highly priced generics targeting comparatively higher income groups. Jogee (2009) points out how the acquisition of a local plant called Carrim's along with many of lower income population oriented products in 2005 changed the social character of Shitala's products. Carrim's manufactures ARVs of Shitala. ARVs in South Africa began to be made by various generic companies when innovator companies were granted voluntary licences.

This background is to pose questions on the acts of the pharmaceutical companies mystifying the medicines as humanitarian goods.

[4] Usually, pharmaceutical companies establish wholly owned to subsidiaries to protect their products from a weak IP regime and to play safe according to the domestic rules and regulations (Jogee 2009).

Indian generic ARVs in Johannesburg

Molecules such as tenofovir and efavirenz have replaced earlier ARVs like zidovudine (AZT). The former are used as single pills in the first-line therapy. Currently, these molecules are reborn through the form of 'single pills' or 'fixed dose combination'(FDCs) pills. One of the widely used FDCs contain tenofovir, efavirenz, and emtricitabine (Green, 2013).

The advent of the FDCs was meant to 'improve' the adherence to medication by patients, by ensuring that they do not stop taking medicines because they have to take too many different ones. Most of the pharmacists at public clinics and depots told me that the FDCs also made the stocking of the medicines much easier. Thus, the FDCs became the new favourite of the South African government as well as global humanitarian bodies.

I now critique the politics of humanitarian reason -- the politics of compassion to the suffering of others, or 'discourses of affect and values' (Fassin 2012, p.3) in Johannesburg.

Taking inspiration from Ananya Roy, I approach the dynamics of circulation of generics as similar to that of humanitarian goods.[5] How does humanitarian reason, expressed in corporate philanthropy and global therapeutic citizenship alike, endorse processes of corporate investment and sales in generic ARVs and other pharmaceuticals by companies such as Shitala and Sigma in Johannesburg?

Humanitarian politics employs the idiom of aided renaissance of public health initiatives in HIV/AIDS at the heart of South Africa. The present boon is pitted against the dark past of denial of HIV/AIDS treatment by the post-Apartheid Mbeki

[5] Ananya Roy, personal communication, dated 11-06-2015, Wits, Johannesburg.

government (Geffen, 2010). As a rejoinder I ask how Shitala and Sigma deploy humanitarian reason as an ideology to sell generic ARVs and transform themselves according to these claims in the context of the State's increasing control of generic pharmaceutical circulation. What happens to the notion of humanitarian goods when complex commodities such as ARVs enter into the circulation as a simple solution to structural problems of public health?

Interestingly, while State tenders collect ARVs through an international benchmarking system at among the cheapest prices in the world, the State mechanism was not successful in circulating them faster.

There were instances of severe stock runouts as these new pills began being circulated in an already existing quagmire of public sector roll out. Even doctors were not informed about the arrival of FDCs in the pharmacies and about who was eligible for the treatment. Pills such as lamivudine, tenofovir, efavirenz, and even older drugs such as didanosine are still found in vogue in Johannesburg. Undoubtedly, the new insertions of FDCs into the moral economy of the circulation implicate power/knowledge, and broadly politics.

All in all, FDCs—despite opposition from physicians such as Francois Venter, Wits Reproductive Health and HIV Institute (WRHI) and HIV Clinician's Society due to their lack of availability and politics of circulation that accompanied their arrival (Bateman, 2013)—entered as eminently simple humanitarian goods. Surprisingly, doctors, policymakers, and politicians soon accepted the totemic value of FDCs in the moral economy.

In this scenario, NGOs such as TAC, ANOVA health institute, and MSF have shifted the terrain of their activism from ensuring affordability towards the interventions in the local exchange of ARVs.

Park et al. (2013) in a report instituted by UNDP states the importance of another FDC clearly:

> The existence of patent protection has posed an obstacle to innovation. For instance, Indian generic companies, unhindered by product patent protection in India during that time, were able to develop a single fixed-dose combination of stavudine, lamivudine and nevirapine that dramatically *simplified* the HIV treatment regimen and allowed for the scale—up of treatment in much resource—limited settings (p.13). (*Emphasis mine).*

Three generic companies—Sigma, Mylan, and Aspen—won the separate tender instituted for the FDCs in November 2012 (IRIN news 2013). Shitala, Adcock Ingram, and others who have not successfully registered their FDCs with the Medicine Control Council (MCC) could not quote for the tender. Initially the plan of policymakers was to start the distribution of FDCs with pregnant women and new patients. This was dropped; and all the patients were eligible in October 2013 (Green, 2013). In the context of State-sponsored heavy roll out of FDCs, even the innovator brand Atripla has responded by lowering the price in the market (Leng et al., 2015).

However, the devaluation of currency over time in South Africa began to affect the flow of pharmaceuticals, including that of FDCs. Government tenders have become risky deals for generic companies. In 2015, Aspen for instance, argued with the Government that the company could not recuperate the loss incurred due to the higher prices paid for imported bulk drugs and formulations. A formally agreed

increment per year in the contract was rejected as satisfactory compensation. Aspen eventually demanded a 50% hike in the price quoted originally (Bateman, 2014).

Circulation of Shitala's generic ARVs

Here, I explore the performance of humanitarian reason as used by Shitala (Mazzarella 2010; Roy 2010,p. 133). I will document Shitala's response to the changing nature of generic ARV circulation in Johannesburg from a global merit good (Kapstein et al., 2010) or humanitarian good to public goods predominantly circulated by the State, as has been happening in recent times. Shitala and Sigma dominate the sale of generic ARVs among Indian companies with Shitala devoting most of its attention towards public sector recently. As data furnished in the IMS Health explicated, among FDCs, Sigma have acquired significant brand credibility in the private sector between 2012 and 2013.

I have adopted the triangulation method using newspaper reports from magazines for health practitioners, and advertisements of Shitala and Sigma, and interviews with activists along with ethnography.

The event in focus was held as a part of a three-day celebration of new Indian migrants' presence in Johannesburg. A cut-out of 'Incredible India' campaign was on display as I entered the neat corridors of the University of Johannesburg's business school in Park Town in January 2015. As the title 'How India Revolutionized the Healthcare Industry: Unpacking the Pharmaceutical and Ayurveda Sectors in India' suggests, the discussions in this event were to introduce healing systems in India to a wider audience.

The event illustrated a coalescence of national interest, and private capital's motives also addressed the need of a better public health system and targets to boost the feelings of nationalism in South Africa. The scale and enunciative modalities of humanitarian reason will become clearer as I proceed.

The speakers, who represented various Indian generic companies including Shitala spoke about the history of generic manufacturing in India and the present status of their companies in South Africa.

Although it was an official event, the Consul General of India, Johannesburg, attended the event with his family. In his welcome speech, he argued how India revolutionized the healthcare industry by making 'pharmaceutical innovations' which were at the heart of the 'global South'. He said,

> Most of us believe that pharmaceutical innovations happen in the North to transfer to the South. It is not always the case. One example is that of Eureka's (an Indian company) tie with a US firm for research and development of a new chemical entity.

He further highlighted India's role in accelerating South Africa's achievement of Millennium Development Goals by way of supply of medicines.Abdulla, the event organizer divided the time equally between those who spoke about Ayurveda and those who represented the pharmaceutical industry. Among the audience were a good number of people who had arrived to forge business connections with pharmaceutical companies as well some who were aspiring to do business ventures related to Ayurveda. The later left soon, whereas the former stayed back to meet company representatives and 'to build relations'.

Kumar Malhotra, the regional head of Africa and Middle East for Shitala had circulated his CV at the venue in advance. He started his career as a sales manager of the Wyeth, a pharmaceutical company in India born out of a joint venture with a Switzerland-based company called Mundipharma and an Indian firm. After joining Shitala in 2001 he served in China, Morocco, and Romania and was the head of chronic therapies for Shitala before moving to South Africa.

Kumar spoke about how Shitala helped South Africa in 'accessing affordable medications' and added:

> In South Africa, we have a deep commitment. We started local production here. We invested $ 100 million in the plant. And in the last tender we were the second largest supplier of ARVs.

In a power-point presentation Kumar established the success of brand Shitala. He also cited Shitala's ongoing merger with Taj pharma and the consequent size of operations worldwide, without talking about the company's history in detail.

When one of the speakers, a lawyer, turned around and asked a question about his experience of meeting with South Africa's regulatory regime, he replied with a smile that his experience with the legal regime has been good, notwithstanding various delays in Medicine Control Council in registering medicines. This question was relevant because one of the constant demands of generic producers and activists affiliated to TAC and MSF has been a resolution of sluggishness in the registration of the generic brands and factories (Leng et al., 2015). He further argued that when Shitala registers generics at quickly, South Africa benefits because the government pays less for medicines.

Kumar added that for rest of the African countries his company made lifesaving drugs such as a new FDC for malaria launched in 2015. Shitala, according

to his presentation, wanted a humanitarian business throughout Africa. Kumar's travels in India and Africa contribute to a 'R. 40 million' industry of travel agents in Johannesburg, his agent present at the event told me.

The deployment of idioms in Kumar's speech is in alignments with broader pharmaceutical aims, that is, the organized efforts of pharmaceutical companies to manipulate market situation in calculated ways through pharmaceutical relations and myth making (Lakoff, 2005). In other words, the rhetoric of pharmaceutical reason was found enmeshed with a new shift to a 'humanitarian reason'. The deployment of corporate philanthropy gives an easy explanation to enter into the competitive realm of sale in generics in Johannesburg (Fassin 2009; Rajan 2003). Moreover, this shift also manifests the transformations that State-sponsored mass tenders wrought on Shitala. Kumar's speech is an ethnographic example.

An advertorial appeared in *Mail & Guardian*, a highly rated newspaper in South Africa, stating that Shitala has been providing 'international quality, affordable medicines to the people of South Africa' since 1996 (advertorial supplement, 2013).

The discourse focussing on the moral high ground of Indian generic companies in South Africa has been an ongoing matter throughout the period of my fieldwork. When I interviewed Kumar at his office in Marlboro at beginning of 2014, he initially introduced me to what I call 'moral claim' in the following words:

> 95 % of the ARVs circulated in South Africa are generics. (And) they have a very thin margin. (In South Africa) winning (government) tender is important because it is for a large quantity. The margin of profit for ARVs is very low since the government always goes for the cheapest bidder. We have invested a lot of money in the plant in the last four

> and half years. We expanded our capacity to produce the required stock. When we do not get tender the capacity lies idle. Then you suffer (lose). [6]

He justified his right to win public tender on grounds of setting up a local firm, 'creating a lot of employment', and 'ensuring a lot of flexibility in the supply'.[7] In relation to this strategy, I will make the next analytical move to use the framework of humanitarian goods (Redfield, 2012) to analyse Indian generic pharmaceuticals.

The function incorporated Ayurveda and pharmaceutical industry into the rhetoric of India's national progress. The Consul General of India seemed to validate the acts of the pharmaceutical industry. Following Julia Hornberger's suggestion I argue that this is an act of translation. The Consul General translates the generics to the South African nationalist framework. The event also signifies a revival of India's national achievements in health. This *revival* enhances the entrepreneurship of Indian companies.[8]

Before I move on, let me note that anthropologists have already noted the relevance of ethics in the industry. Specifically, Applbaum (2006,p. 447) states that pharmaceutical companies use 'ethical justification for marketing' their products. This is because illness is a 'tangible form of suffering'. Hence, according to him the industry uses claims of rescuing 'mankind'. In turn, they use disease as 'an opportunity' to make profit. A more culturally specific deconstruction of ethics is important. I understand ethics as a verbalization or bodily performance of morality that converses with high culture already existent in South Africa in the context of

[6] Kumar Malhotra, regional head of Africa and Middle East for Shitala Pharmaceuticals, personal communication, 26 February 2014, Marlboro, Johannesburg.

[7] Kumar Malhotra, personal communication, 26 February 2014, Marlboro, Johannesburg.

[8] I attended a second function organized by Indian High Commissioner on December 2015 in the same business school. This time the Chief Financial Officer of Sigma repeated a similar set of humanitarian rhetoric.

HIV/AIDS pandemic. The manipulation of collective conscience is very selective. Since pharmaceutical companies have the power to speak about medicines the rhetorical performances are enunciations (Foucault, 1972).

The aim of this article is to connect rather far--fetched prescription drugs such as ARVs to those commodities conventionally referred to as humanitarian goods such as solar lamps, and poo-poo bags (Cross, 2013).The molecular structure of ARVs are complex and processes of making them require advanced technology. [9] Then, in what way are ARVs simple goods?

Let us look at facts.In 2012, Shitala manufactured didanosine, tenofovir, effavirenz, nevirapine, and lamivudine for supplying to the State. Kumar told me that he manufactured these ARVs according to a voluntary agreement between the

[9] When I interviewed the pharmacists who work as production managers and procurement officers at Carrim's, they presented a narrative of the commodity in terms of their cost of production and biomedical property. They usually described to me about the cost of the raw materials such as active pharmaceutical ingredients that go into manufacturing and wages paid for procedures such as granulation, and coating.

Warren, a production pharmacist told me:

'One of the biggest costs is (incurred) on Active Pharmaceutical Ingredients. They come from India or China'.

His job is supply raw material at viable price. He estimates whether the price that government contributes annually would be sufficient to meet the production throughout the year. The depreciation of rand in the global market has increased the cost of production by 25% as they quote the prices of raw materials in dollar. However, Warren added that the biggest cost for incurred on labour. I could not believe it. He further clarified that he was comparing the cost of production in India to reach is conclusion. Shitala tries to import medicines from India due to this. Warren says:

Generic competition is a good thing only when you have a free market. Since the government has fixed the price for the medicines we cannot have control over the price. This is the case even for over—the--counter medicines. Recently, the government has granted only 5% of the increase as annual increment from the price quoted in the of the tender.

When I prodded him further on the cost of labour he said that labour cost is more pertinent to the expert staff, such as pharmacists and biochemists. He also observed that when workers get trained and gain experience they become more skilled and they ask for a hike in the wage. He also added that they had stopped producing nearly 70 prescription drugs due to the fact that production cost does not meet with financial viability. Warren, personal communication (24 April 2014; Bateman 2014). However, in my conversation, Vusani, a worker told me that their main grievance around work in the factory is 'money'. Then he adds dramatically:

'it's not that I want more money; but I am worth of it'. Vusani, personal communication dated 24 April 2014, at Marlboro.

originator and Shitala. Shitala agreed to a pay 5% of the net profit as loyalty.[10] The newspapers in India and South Africa have abundantly covered the putative benevolence of Indian pharmaceutical capital that offered to circulate cheap ARVs in South Africa and other AIDS-prone countries in 2001 (Versi, 2012, Oct 1).

Mike Ludwig (2014, October 10)'s report on Truthout website summed up the importance of Indian generic companies by observing how their initial offer to supply ARVs to developing countries has reduced the cost of ART for a single person from $ 10,000 a year in 2000 to $ 140 in mid-2014.

In *Mail & Guardian* Sitaraman Shankar wrote how Sigma won global acclamation by offering 'poor countries with a triple-drug anti-Aids cocktail at $ 350 per patient per year—one thirtieth of prices then charged by multinational drug makers' (2002, Jan 1). The central theme of the report was the deals planned for a mining company called Anglo American by Shitala and Sigma.

I will now provide a description of advertisements of Shitala and Sigma to show how the duo found these political milieus and related response of South African government as potential market spaces to do 'commerce'—a term in the industry for doing profitable business, by taking this humanitarian turn. This is a discussion of the ideology of ads. Advertisements are modern myths. Advertisements too simply mystify the harsh realities of HIV/AIDS in the following case.

[10] The need for research and development has made the contribution of originator companies important in the industry as well in the broader moral community of humanitarian exchange—a point he and activists at MSF and TAC at Johannesburg shared with me. Rajan (2015, p. 58) calls this a 'market discourse' of innovation. Innovation narrowly connotes making new drugs.

Moral claims in the generic ARV advertisements

The advertisements of generic pharmaceuticals explicate the nuances of moral claim that Indian pharma companies make in South Africa (Chorev, 2012; Rutter & Tomlinson, 2014).

Newspaper articles show how the price of ARVs had been important in determining access to South Africa in early 2000s (Price, 2010; Nagarajan, 2013). The locus of politics has shifted towards availability of FDCs as there are incidents of stock outs. For instance, Moses, the sales rep of Sigma, told me that the company overhauled ARV distribution system recently as South Africa as a whole contributed 14% of the total ARV sale globally.

However, drug ads have taken a middle ground by focusing on the humanitarian character of the drug as well as low prices. The packaging of FDC is made 'simpler' than that of older non—cucleoside reverse transcriptase inhibitors (NNRTs) such as efavirenz. Watermeyer (2008, 56) has observed how HIV/AIDS patients closely connected to the familiarity of 'pill boxes, and containers, as well as pills themselves' in Johannesburg. When Aspen supplied Strocin (efavirenz) to public clinics in 2008 people remembered the image of 'a man holding a ball' on the packaging jar.

The advertisement of Odimune (an FDC) complies with the regulations on advertising of S4 drugs. Generics are copies. Something generic is also something ordinary. Yet, the jar and packaging is oversized to contain 30 pills. The beautiful and big packaging is the first step towards the mystification

As mentioned before, FDCs replaced older generation of ARVs. The advertisement of Sigma's Odumune, shows the price (that is, R. 390/ $ 27). It also

states "FDA approved-WHO prequalified'[11]; and additionally quotes Henry David Thoreau: 'Simplify, simplify'. There is also a shadow picture of seven hands in different colours. The ad also quotes a clinical study and refers to 'South African antiretroviral treatment regimen' as seen in many pharma ads including that of over—the—counter drugs (This is a simple ad with a picture of the package and the labelled jar. SJHIVMED, 2014, 15 (2): 31). Sigma HIV basket's tagline said: 'none shall be denied'.

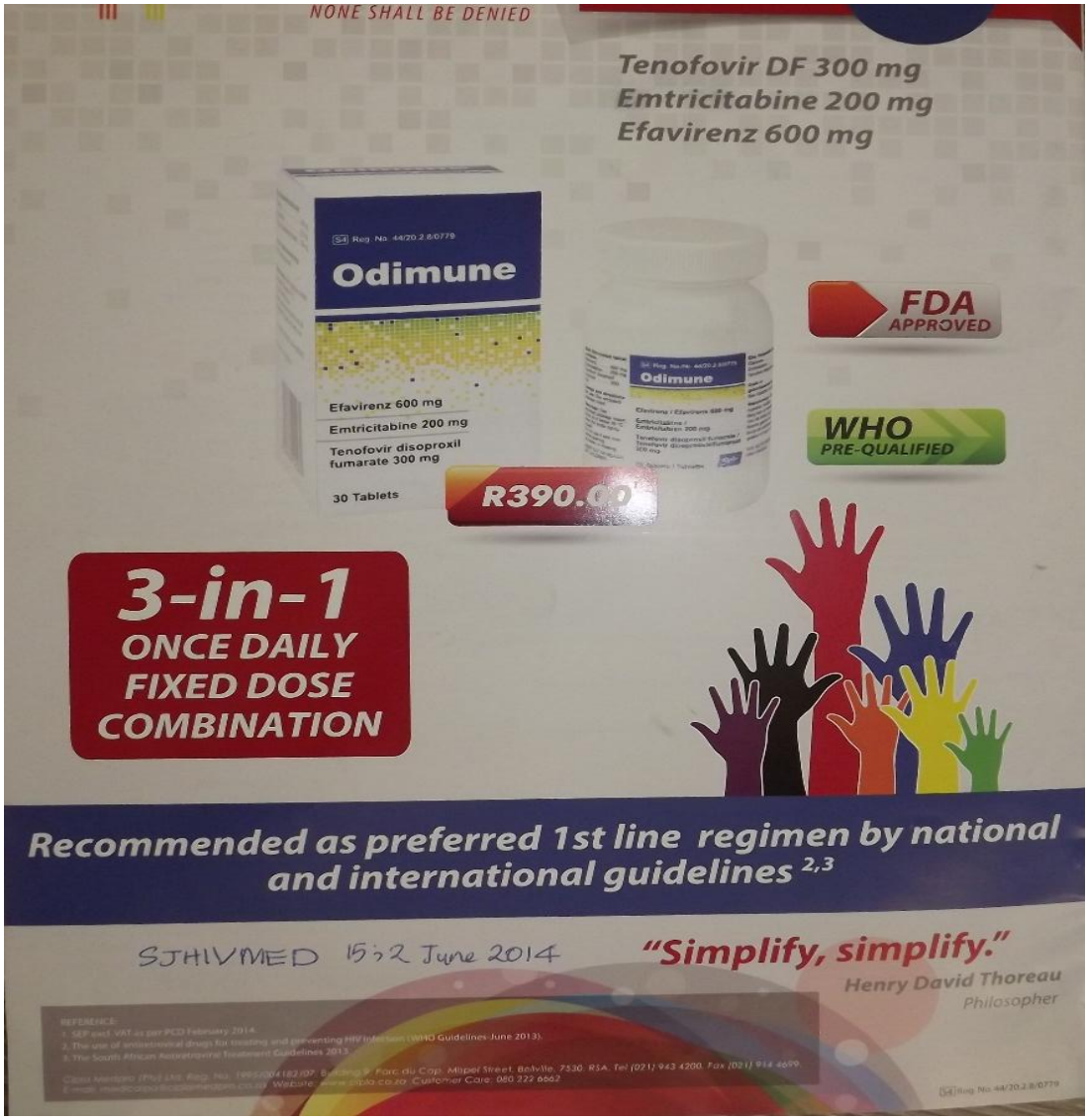


Figure 12: an advertisement of Sigma's Odimune (courtesy: SJHIVMED, 15(2), 2014, p. 20).

Shitala's factory, the rival Indian firm, is called 'Carrim's'. The ARVs, however, are marketed by another small company that has been registered as an ARV distributor. This company is a Broad-Based Black Economic Empowerment (BB-BEE) venture along with Carim's, and is called Ujamaa.

Ujamaa is a 'fully owned subsidiary of Shitala' as the company website informs. Compliance to affirmative action policies helps the companies. The Department of Health grants up to 10 points for satisfying different requirement of Black empowerment moves. In the processing of the pharmaceutical tender the maximum point is usually 100; and hence 10% of the score is calculated in this way.

Ujamaa's leaflet on ARVs says 'high quality, effective and accessible HIV treatment for the people'. The tag line is 'towards a healthy future – together' (see Figure 11). This taglines denotes how the company had totally oriented their products towards a humanitarian line as early as 2013, and by 2014, there was a clearer shift in the focus of company towards winning ARV tenders rather than selling in the private market. This strategy indeed won the company a tender for FDCs in 2014.

Except the text, 'South Africanness' is beyond measure in the pamphlet. Beadwork visible on the coffee cup and AIDS symbol connotes communities and social status among people in general. Hence, a feeling of being ordinary, mundane, and simple have been attached to the ARVs.

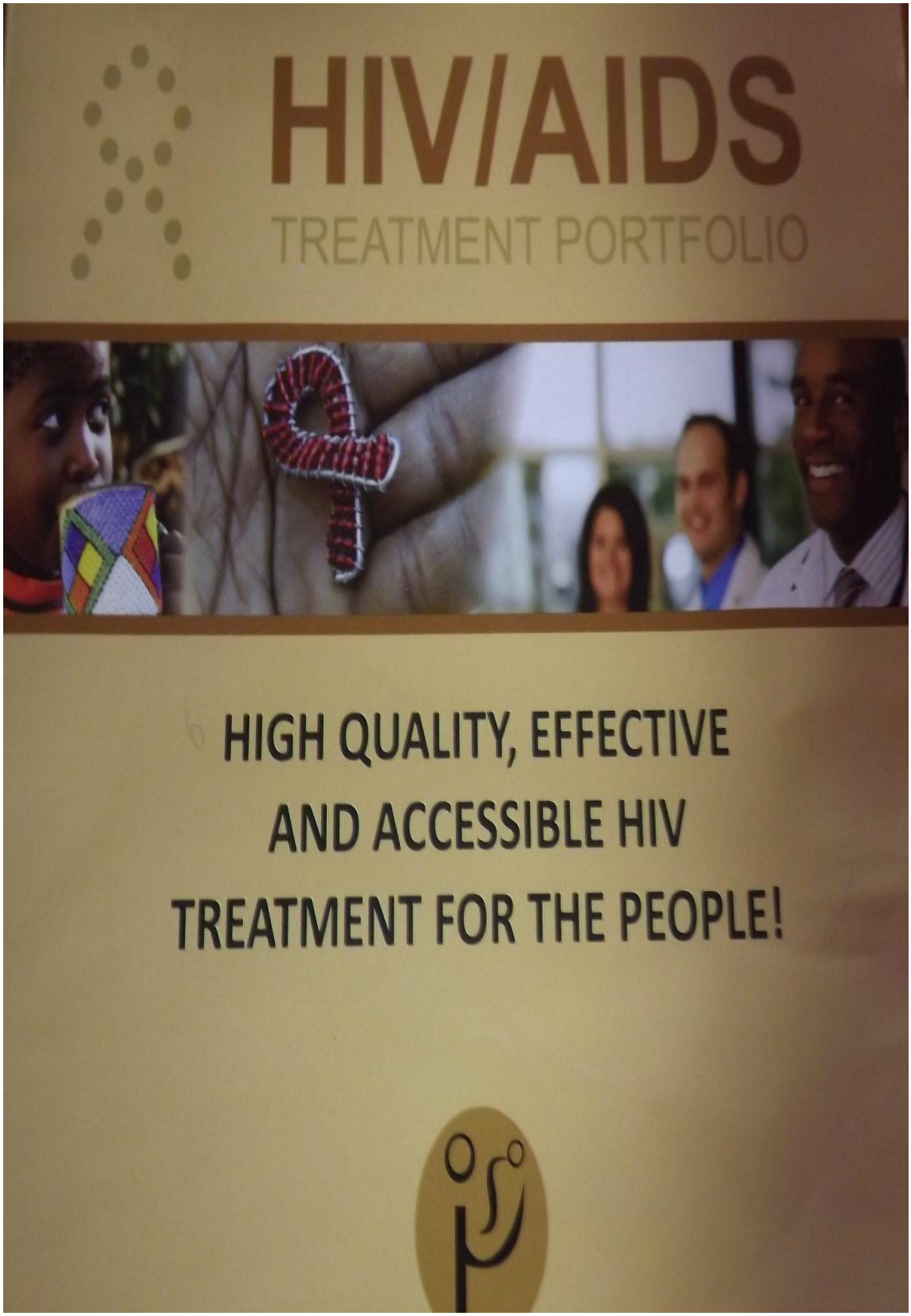


Figure 13. A leaflet of Ujamaa's ARVs (source: Ujamaa, 2013, filed flyer).

Redfield (2012) theorizes humanitarian goods as simple commodities. They circulate as easy solution to the problems in the Third World, and, especially in Africa, these are an easy solution to poverty and prevention of diseases born of unhygienic conditions. ARVs are not 'simple commodities' *per se*, as they are highly regulated and prescribed by doctors. However, as Sigma's ads, newspaper reports, and WHO documents pronounce, they have become 'simplified' commodities and simple solutions to the problem of HIV/AIDS infection.

Profits and moral claim

The following is a discussion on the statement made by Kumar on the margin of profit. In a personal communication with me earlier in 2014 he had said that the margin of profit for ARVs is very low.

However, at the public event held a year later Kumar justified the higher prospects of pharmaceutical industry stating that 'knowledge based industry' that mobilizes 'good molecular chemists, mathematicians, and IT professionals in India' has the highest scope for returns in the hierarchy of business. It is also important to note that his opinion might have changed over the span of a year since Shitala won public ARV tender at the end of 2014.

There is no dispute over the fact that the rate of generic ARVs are much lower in the public sector in comparison to their retail price in the private market even in

2012. However, there are various places in which Kumar's first claim of low profit does not hold. Madhav says:[12]

> ARV business is highly profitable. Once you win the tender the government wants high output.

He and his colleges remember even making 50 batches per month; one batch being 1.72 million tablets approximately. Madhav, who oversaw the production of ARVs when Shitala had won a tender and had claimed that his ARVs are 'complicated medicines', justified the high margin of profit[13]:

There are further processes of coating and encapsulation as additional finishing. They are also highly profitable medicines for the company.

The assertion of the regional manager in 2013 contrasted with observations of Madhav. I interviewed some workers in the factory as well.

> According to Tetenda, a young permanent worker at the factory, they used to make three million tenofovir and 1.5 million lamivudine[14] a day.[15]

The notion of value in discussion here by the pharmacist follows the logic that cost of production can be equated to the value of commodities. In other words, since they are biomedicine generics, they are fetishized. I recount this discussion to show how even a simplified logic can complicate the rhetoric of value and provide impetus to move towards a more nuanced analysis of corporate business.

[12] Madhav, production pharmacist, personal communication, dated 11 March 2014, Marlboro, Johannesburg.

[13] Charley, the medical representative of Shitala justified the higher price of certain dosage of a generic drug with the argument that 'they are complicated' when she explained about them to doctors. Ethnography conducted on 10 September 2014.

[14] Tenofovir and lamivudine are two first-line antiretroviral medicines frequently circulated in the public sector of South Africa.

[15] Tatenda, personal communication dated 24 March 2014, Marlboro, Johannesburg.

Winning tender ensures a smooth reproduction of capital through renewed performance of humanitarianism as well as production. Besides, public sector circulation boosts the sale in the private sector. The ARVs circulate massively and adds to the brand value of the product.

> Winning government tenders means a lot. The product reaches larger people… The government circulates them. A larger number of households will be exposed to the product. Only price will be different (in the private sector). So, government will be doing the marketing for you. You only pay for any selective services in the distribution chain.

This was stated by Steven, a former Sales Manager of Ujamaa, as we talked about the generic ARVs at his house in a middle-class suburb in Ranburg, on a warm Saturday afternoon in September 2014.[16]

Steven elaborates on the circulation of ARVs as public goods and how their spill over effect can bring profit to the shareholders of Shitala.

In brief, in this article I attempted to elaborate on the virtue or moral value of generics as the distribution process play out Johannesburg. Recent anthropological literature around humanitarian goods really helped me to compare and contrast. Humanitarian reason, hence is an ideology of recent pharmaceutical circulation as Didier Fassin (2012) observed.

Using these concepts I have observed how Indian pharma companies such as Shitala considered philanthropic concerns as a way to build their business interest. In this pursuit, complex medicines such as ARVs become simplified humanitarian goods. This is even beyond Biehl (2009, p.10)'s narration of the way the Brazilian government uses ARVs as a 'magic bullet', by the 'delivery of technology regardless of health care infrastructure' or Kalofonos (2010, p. 375)'s observation

[16] Steven, personal communication dated 07 August 2014, Oak Advenue, Ranburg.

that ARVs flow to Mozambique as ‘postcolonial palliatives’ for free along with food from rich countries. ARVs and other generics of Shitala exist in the continuum of broader trends in which ‘commerce’ and ‘morality’ intersect and interact with globally produced ‘local’ milieus of ‘vulnerability’. While writing this article in 2015, I saw that there is a clearer transition of FDCs towards becoming more of a public good rather than a humanitarian good in the strict sense of the term.

I want to analyse various aspects of the claim Kumar made to meby analysing the ‘procreative intent’ to refer to the intentions of the transfer of capital and knowledge or *technology transfer* from India (Jogee, 2009).

Going back to the discussion at the opening section, we can see that the argument of the regional manager of Shitala shows how he articulates his right as the generic producer. This invocation asserts the moral right to win the government tender because they set up a local plant. This is a moral claim where there are chances of a failed claim. Indeed Shitala did not win much of the government tender barring a few orders in 2012. In the words of the manager this failure for failing to register ARV production at Carim’s led the facility to ‘fall sick’—sick because Shitala incurred loss from the idle fixed capital.

Hence, winning tender is important for Kumar to exist as a ‘middling manger’ in the circuit of humanitarian goods, rather than just gaining profit (cf. Larner & Laurie, 2012).

Contemporary civil society activism has targeted legal reform. Generic companies, HIV physicians, and activists alike blame the Medical Control Council (MCC) for delaying the applications for registration of generics (Leng & Sanders, 2015). As of now, import of medicine from other countries is illegal when it is not

registered in South Africa. An individual may to fly with her medications from abroad for her own consumption (Park et.al, 2013). As a solution to the existing problems of access and availability all of the actors in the public health system wanted a simple procedure to register generics. This politics presents generics as akin to other humanitarian goods pure and simple.

However, generic pharmaceutical companies approach law with care. This is because the relationship between the State and the companies is mediated by law. Public sector procurement is also institutionalized. This makes the reciprocity between Shitala, the one that makes the moral claim, and the State, the one that grants the reward for having a local production, a complex and non-visible matter.

Recent reports on price show that the government enjoys a privileged position in the circulation of ARVs. This price is usually one of the lowest prices in the world. However, the barriers in registration of generic pharmaceuticals at MCC and, in the peculiar case of Shitala, the delays in availing a certificate for a renovated ARV production plant, caused a lot of problems in terms of ensuring logistical availability between 2013 and 2014. After offering medicines at fancy low rates, companies such as Aspen have also attempted to increase the margin up to 100 %. This was when Rand's exchange value depreciated in the global exchange market. Following this line, other companies such as Sigma and Mylan have also demanded more than 60% hike in the prices quoted initially in the tender (Bateman, 2014).

Activists such as Lotti Rutter and Julia Hill—they work at TAC and MSF, respectively—have a different standpoint on prices. They feel that the ARV prices are fixed at the highest margin. They agreed on the need to simplify the law and to increase ARV circulation's velocity. Both of them along with two other activists at MSF I interviewed later, named Shanin and Fezile, told me how 'generic companies

are (very) profitable'. They brought out the following problematization: 'the competition brings down the prices not the goodwill of the generic companies'.[17]

However, activists have found themselves in a catch-22 situation. Like generic companies, activists rely on innovator companies for availing new medications. Rajan (2015) calls this as market discourse of innovation. This discourse limits the notion of innovation to the development of new products.

The current (2015's) procurement price is R. 90, R. 238, and R. 1501 per person per month for first-line, second-line, and third-line regimen, respectively. The third-line regimen is supplied by the innovators. Patients who develop resistance to therapy's first line due non-compliance or simple deterioration of their medical condition are shifted to the second- and third-line of medicines. 16.9 % needs to move to second line in South Africa in the same year. That is quiet a hefty portion.

Julia Hill elaborated on the failure of the judicial system and law in addressing the issue of the cost of medicines in South Africa and further pointed out how the patenting procedure is extremely obscure.

> You need to have very specific information on whether a drug is on patent. Till then a generic company does not even know about the products. (Otherwise) They don't know how to proceed as they can even face legal challenges.

She also added on the relevance of the initiatives at the international level such as the medicine patent pool at Geneva in contributing to the legitimacy. Patent pool involves negotiation with original manufacturers to make their intellectual property available to the pool.

[17] Lotti Rutter, personal communication dated 11 April 2014, at Treatment Action Campaign office, Braamfonten, Johannesburg; Julia Hill, personal communication dated 25 April 2014, at Medecins Sans Frontieres office, Braamfontein, Johannesburg, South Africa.

The activists are gatekeepers of collective morality of exchange. At time the circuits that produce the morality of exchange are argumentatively non-institutional as in the case of MSF. However, these networks are powerful and global in outlook and reach. Redfield (2010) has offered a criticism of MSF being reminiscent of other institutions in the context of Uganda. However, NGOs such as these mobilize civil society and in Durkheim's terms act as churches that ensure the adherence to collective conscience.

Coming back to the law, Warren, the procurement manager at Carrim's factory, also told me how the procedure for registering new generic medicines takes a long time. The formalities are much easier. He gave me an example of their application for introducing FDCs into South African ARV market when I interviewed him in 2013:

> We have submitted a dossier to the local government. It takes two to five years here to get the permission. In Kenya, I know instances where it took only six months (to get permission to produce the medicine). South Africa is the only country in which the application takes a lot of time. Here it's easy to get registered but, takes a long time in processing.[18]

There are various practices of arbitrage by the companies for fishing in the troubled waters. 'Dossier farming' is a malpractice where pharmaceutical companies resell their registered products to other companies at a much higher rate. The companies allegedly register more than one application and, thus, create a flood of applications referred to as 'backlog' (Leng & Sanders, 2015, p. 4). The registration of generics enjoys State patronage, yet MCC is not directly connected

[18] Warren told me how the procedure for registering new generic medicines takes a long time, even though the formalities are easier. Ujamaa's application for their approval for production and distribution was pending when I interviewed him in April 2014. Personal communication dated 24 April 2014, at Marlboro.

with bodies that make medicines available in the public and private sector. Warren's grievances tell us about the failure of morality and the institutional mechanism of circulation.

Durkheim (1893; 2014) describes this situation as 'anomie'- a loss of morality in the wake of sudden changes, in a different context, for instance, in his study of suicide in Europe. According to Durkheim, anomic suicide happens when sudden changes, such as economic crisis, happen in a society in a way that disturbs the social integration of individuals to institutions. But, in the case of scandals around stock outs and related risk of drug resistance for PLHV, it is sure that there is an element of arbitrage, as well as the failure of the government mechanism.[19] Unsurprisingly, NGOs have shifted their activism towards ensuring effective logistics. I will discuss logistics in Chapter 4.

The generics escalate competition between sellers and bring the prices down. This is an ethical or moral tone present generics market. Following Lambek (2005) I propose that generics perhaps surface in the different 'regimes' of ethics. Obviously, their new modes of affiliation changed along with broader political value over time in South Africa.

To dwell on value question, Lambek (2008, p. 135), elaborates how the value of the beef is also dependent on the value attached to the sacrifice of the cow. Pointing out Marx's writings, author observes how the ethical value of cow's life has been found as absolute/constant in the theory of capitalism. Non-capitalist societies such as that of Sakalava of Northwest Madagascar attributes a relativity to ethical

[19] Second-line ARV regimen is more expensive than the first-line regimen. When patients shift to the former as they gain drug resistance to the latter, the cost of the treatment increases manifold. The drug resistance can happen due to non-compliance or due to the response of the body.

value: complicity of the cow or the willingness of the owner of the cow towards participating in the sacrifice counts.

The (lack of) health of those who did not avail medicines is the sacrifice here. Some prefers branded medicines. In retrospect, consuming a branded drug could be a highly unethical practice during an era of Apartheid as a majority of population did not avail enough pharmaceuticals and other remedies.

In a later period, the construction of ethical value of ARVs, however, is the product of broader humanitarian trends. Fassin (2012) in his discussion of Nkosi Johnson's premature demise observes how ARVs have assumed a highly symbolic significance these days. Scholars such as Comaroff (2007) and Robins (2007) have observed this trend. Appadurai (1986) discusses how politics determines the value of commodities. The political value of generic ARVs incorporates various forms of moral values as they circulate as 'simple goods' in the post-ARV rollout era in Johannesburg. Given all that, it will be worthwhile to ask whether this *morality* and *politics* that I have been constructing here is a functionalist one or an anarchist one in essence.

Conclusion

Using the case of FDCs I narrate the mood of entrepreneurship and temporalities of circulation. Politics, a façade of humanitarianism present in the profit making ethics of Indian business firms are major themes. Similarly, the promises offered by a modern as well as a State sponsored distribution of pharmaceuticals to control HIV/AIDS are pertinent (Cf. Scott, 1998).For this

purpose, in the above discussion I dwell on the poverty of ideology of compassion leveraged on the provision for biomedical knowledge and related commodity fetishism of pharmaceutical companies. The circulation of generic ARVs in Johannesburg shows that there is an elective affinity between the profit making ethics of the branches of Indian corporates, and the passion of grass-root level health workers, and broader political actors to provide medicines for the citizens.[20]

Lack of established local pharmaceutical manufacturing firms, and a rather insufficient infrastructure to distribute medicines has only promoted the growth of private generic pharmaceutical companies; chain, retail and courier/mail pharmacies; and various NGOs over last decade.

Let me add here that the State legislations and broader civil society movements materialized the scene for these dynamics in Johannesburg. Section 22 F of the MRSC amendment Act of 1997 legalized generic substitution if accompanied by a doctor's permission. National Drug Policy 1996 directs promotion of local generic pharmaceutical production ventures. In fact, the original MRSC of 1965 was further amended many times after 1997. All these amendment seems to have promoted generic substitution. The amendment in 2002 introduced an international bench marking system to procure medicines at the lowest price.

As a critic of present situation, I would argue that, AIDS patients as subjects of compassion have acquired extreme coherence in these discourses. They have become the microcosm of the relationship between the State, capital, and civil society. The shifting terrain of treatment regimens, schemes, and budgets still tend to follow broader trends. Yet, medical practitioners implicated in the programmes

[20] At times my description is strident. My ethnography is limited to interviews and observations at a few sponsored seminars.

refuse to accept that Indian companies exploit the humanitarian crisis. Adoption of HIV prevention methods such as condoms and self-initiated changes in life style by individuals are far from gaining recognition.

Based on the social history and ethnography of pharmaceutical markets in Johannesburg, in the next chapter I will extend the discussion of the moral character of pharmaceuticals, linking ‘townships’ and ‘city’. One of the departure points in the next chapter is my focus on informal markets for pharmaceuticals.

Chapter 3

Pharmaceutical Territory

Entanglement and Dispensing in Pharmacies[1]

Introduction

In this chapter the main discussion centres on the following questions: What is the relevance of informal pharmaceutical trade in the broader circulation of generic medicines? How do the processes in pharmaceutical territories differ from the way marketing executives superfluously imagine consumption patterns? Consequently, I observe how and why the dispensing situations in generics in Johannesburg is better understood in connection with spatialized consumption practices rather than merely with reference to the difference between licit and illicit trade in medicines (Peterson, 2014).

Through the description of the process of forging marketing plans, dispensing, and consumers' practices of buying generics, the notion of 'pharmaceutical territory', in the 'risk prone emerging markets' surfaces in this Chapter. Sales representatives and pharmacists have practices bound by informed knowledge of sales, and people negotiate their access to medicines by moving across various sectors of health in the urban landscape in Johannesburg. This is a complex picture of generic pharmaceutical circulation when I narrate entanglements and when pharmacists sell generics to customers according to

[1] I thank Sharad Chari, Julia Hornberger, Catherine Burns, and anonymous reviewers of the JSAS for their comments.

their tastes, exploiting their habits of avoiding doctors, in spaces where the poor shop and mingle.

In the processes of sales planning, dispensing, and consumer's practices of buying generics, there is a notion of 'pharmaceutical territory', hence the key concept. Andrew Lakoff (2005) has mentioned how pharmaceutical companies delineate territories. Audit data help companies to develop this space. Each 'brick' shows the prescription patterns of doctors. However, he did not develop the notion of territory. I carry the notion of territory by exploring the spatial practices around selling pharmaceuticals in Johannesburg in the past and present. Advertising managers imagine a nascent pharmaceutical market; sales representatives and pharmacists follow strategies to increase sales in these locations, and people negotiate their access to medicines by moving across various sectors of health (Kleinman, 1980). So, emerging market—a term used in the industry to specifically refer to new lower middle-class' consumption centres—has a different empirical appearance in my ethnography of the practices of selling and availing generic pharmaceuticals.

Throughout this chapter, following suggestions from Sharad Chari, I use the anthropology and social history of Johannesburg—of commodities and market spaces in particular—to place generics as commodities that mirror social tensions in the city.

A history of pharmacies in Transvaal written with the advice of South African Pharmaceutical Association (Goyns, 1995) has stories of a few who have been called 'pharmacy greats'. Those earned a fortune by selling pharmaceuticals at 'crossroads' of the city where racially diverse clientele mixed and shopped took this title. These crossroads were located in the CBD area of the

city in early days. I identify these spaces as locations of 'entanglement' where racially diverse people aspired for new political orders, acquired new tastes, and imagined new forms of racial embodiments (Flint, 2008; Nuttall, 2008).

Nuttall (2009) picks up the example of 'Pinky pinky'—a central character in a series of paintings by Penny Siopsis and a mythical demon that troubles youngsters—to elaborate on the mythologies in Johannesburg, She explains the ambiguities around (gendered) racial encounters, to make a broader argument that there have been spaces of 'entanglement' in which racial identities are re-thought.

Flint (2006, p. 3) looks at medical pluralism, produced by way of using Indian and African herbs in Durban, as spaces of entanglement between Indians and blacks. She posits that amorphous imaginations such as *tokoloshes* (a local African apparition said to be short, hairy, and possessing a large penis and that plays mischief in Indian houses) and *ufufunyane* (local African interpretations of Indian and/or white spirits) that possess African school girls exemplify as a manifestation of shared identities. These demons are similar to that of Pinky pinky. This is to elucidate her argument on *muthi* shops in Durban that medical pluralism contributed to the development of shared cultures between Indians and Blacks.

Participant observation at four pharmacies in the Central Business District (CBD) area of Johannesburg fleshes out layers of ignorance on the part of consumers and manipulation of taste as pharmacists dispense in the spaces of entanglement (Nuttall, 2009). In addition to that, ethnography, along with interviews with managers in the pharmaceutical companies, and medical representatives provide all the background information for this chapter.

Ethnographic narrative elaborates on the dispensing situations. How do pharmacies refashion themselves for certain kinds of patients and then stock multiple set of medicines? There are four case studies in the following pages. My relationship with pharmacists in my neighbourhood in Braamfontein has also benefited me in framing the arguments.

Let me attempt to introduce the notion of pharmaceutical territory with clarity by bringing the politics of location in Johannesburg into focus.

Territory, consumption, and commodities in Johannesburg

Van Onselen (1982) narrates the history of Johannesburg through the accounts of selling alcohol. He considers that liquor sale granted black mine workers a predominant status as 'consumers', though later when their addiction to low-quality liquor affected their ability to work their importance as 'workers' came into the limelight. Workers continued to consume cheap illegal liquor that flowed to Johannesburg from Mozambique, following a legal prohibition in 1896 (van Onselen, 1982, p. 74). In the later period, the sale of spirits resulted in a tussle between mining capital and distilleries, and this spilled over to political cleavages, and even caused street fights between the police and gangsters.

The history of liquor trade and brothels is old enough to enable Van Onselen (1982) to chronicle the history of work, capital, and social contradictions in the city in the nineteenth century. He documents the history of commodity culture in the context of the birth of white working-class institutions marked by a total absence of a family-centred life in suburbs such as Jeppestown

in the east and Fordsburg in the west, while African miners stayed at the digging site. Therefore the history of selling goods denotes practices of social segregation and shows how these practices dialectically defined 'territories' in their lived form.

Health services were also spatialized. The idiom of sanitation was important in segregating people into different territories during 1900–1909. Swanson (1977) with the concept 'sanitation syndrome' observes how the concept of infectious disease was a social metaphor for broader racial segregation and disciplining of population in Cape Colony and in other cities in early twentieth century South Africa.

Fortunately, these areas have an even broader history of being locations for pharmacies in early Johannesburg. These days the pharmacies dispense unnecessary medicines, alternative medicines, and S2 medicines. These practices are not new here.

'Territory' in the history of pharmaceuticals in the CBD

To mention the early trade in pharmaceuticals in CBD, a certain Iko Sonnenberg set up a tent called 'apothekar' in Commissioner Street, Johannesburg, in 1886. Later, he expanded this into two stands in the corner of Noord and Harrison Streets. This grew into Loewestein & Co.—a manufacturing firm that had its own patented disinfectant in 1890 and 'condition powders'[2] in

[2] Conditioning powders are used for ensuring hygiene in animals. www.merriam-webster.com, accessed on 24 April 2014.

1892 (Ryan, 1986, p. 8). Edwin Adcock started with a pharmacy in Rissik Street, near Braamfontein in 1890, in the partnership of Thomas Jolly.

Ryan (1986) notes how Adcock aggressively marketed pharmaceuticals among growing Afrikaans-speaking urban population in the 1930s. It is shown that these sections of the Afrikaner poor settled in Johannesburg from rural areas leaving behind their farms, following a rise in life prospects in the Witwatersrand during the mid-1880s (van Onselen, 1982, p. 364). Adcock aggressively marketed products by publishing advertisements in Afrikaans language (Ryan, 1986), growing into Adcock Ingram, a big South African generic company at the present. According to Ryan, growing reluctance towards consuming Dutch medicines among these sections helped to scale up the sale of pharmaceuticals.

Additionally, many companies also revived Dutch remedies and came with ‘patent medicines’ (as explained in Chapter 2 this term refers to medicines that are prepared with a secret formula and sold with a high level of advertising) or ‘new preparations’ to sell to urbanizing black population in the Witwatersrand in the 1930s (Dauskardt, 1990, p. 281).

Specifically noting the advent of big pharmaceutical companies in Johannesburg city, John Christie, a Scottish migrant pharmacist started his business in 1907 and subsequently set up pharmacies in Fordsburg, Langlaagte, and Mayfair—locations in the CBD of Johannesburg known as working-class areas then, though a racially mixed population lived there later. Philip Brother, a Jewish trader, ran a pharmacy in Johannesburg in 1939 because there was a friendlier environment for Jews (Goyns, 1995). Max Braude, a pharmacist trained in Russia, founded the Transvaal Drug Co. in partnership with some

others in the north of the Vaal river. Later, he founded a company in Kerk Street in Johannesburg.

A certain Sive brothers bought over the Transvaal Drug Co. in 1931 (Goyns, 1995). They along with H. L. Karnovsky established a pharmaceutical business in Johannesburg. This company merged with South African Druggists, associated with Lennon brand, earlier, and Aspen Pharma Care currently. Increased connectivity through a railway line set up between Johannesburg and Pretoria in 1894 helped businessmen set up associations such as the Pharmaceutical Society based in Pretoria (Ryan, 1986).

Thomas (2012) gives a biography of the Kroks brothers—twins born to a Jewish trading family migrated from Lithuania to South Africa between 1925 and 1926. The 'sociological imagination' of commodity life of skin-lightening creams shows that being Jews the Kroks brothers were familiar with Blacks; and this familiarity translated into exploitation through selling cheap creams that contained the harmful hydroquinone to Black South African consumers to make huge profits.

Thomas (2012) paints the commodity culture of skin-lightening creams and networks of pharmaceutical capital in Johannesburg during the 1930s in the backdrop of urbanization among Africans, struggles against Apartheid, and emergence of new material culture in relation to aesthetic practices among a majority of Blacks. There was high sale of creams from a pharmacy of the Kroks brothers positioned at a node where racially diverse clientele shopped, at Noord Street, Johannesburg.

Devon pharmacy—the manufacturing unit of the Kroks brothers, that was located in Noord Street at the northern boundary of CBD—was at the heart of the commercial district of the entire city. This particular street in the CBD and the market that grew around it was a node that connected people using train and bus transport. African workforce passed through this area to commute to the inner-city, making it the 'busiest Black shopping and community area' in the 1930s (Thomas, 2012, p. 4). The Urban Areas Act (UAA) in 1923 and the Group Areas Act (GAA) in 1950 restricted Blacks from living in this area, but urbanizing Black people frequenting the CBD during Apartheid made the street area into a centre of anti-Apartheid politics.

As mentioned before, Louis Gelvan—a 'pharmacy great'—ran a pharmacy in Martinadale, Sophia Town till 1963. Goyns (1995, p. 96) in a booklet published by the Pharmaceutical Society writes how 'he was accepted by the volatile and sometimes violent population of Sophia Town' to be called 'doctor'. The report also notes that following the GAA, he was barred from trading there and he opened a new pharmacy in Sauer Street, in Roodeport, Johannesburg. It was near a bus station and a taxi rank. According to the author, this enabled Louis's clients from Sophia Town to reach out in 'full force'.

Dauskardt (1990) makes an interesting observation; he notes that the rise of pharmaceutical consumption among urban Black population in Witwatersrand has been linked to mass advertisements in popular African newspapers by Western companies and an attack on herbalism by the Black people with a modern outlook through magazines such as *Drum* from the 1940s onwards. According to him, many highly charged ideological attacks did not deter herbalists from selling medicines as they responded to this by modernizing the

packaging. From the 1940s around 10 % of the advertisements of medicines were that of processed and bottled herbal medicines (Dauskardt, 1990, p. 281).

Let me bring your attention into the fact Africans did not have the legal rights to run pharmacies or to do business in pharmaceuticals by the UAA (Beavon, 2004, pp. 139–141). The Act categorized pharmacy as a 'specialist business' venture, along with drapers, outfitters, and laundries; and due to this till late 1970, townships did not open a pharmacy. Instead, townships such as Soweto only had shops that sold goods of 'basic necessity' or 'reasonable need'—mainly staple food. Only hawkers could sell necessary medicines on an informal basis here, and it happened only when the municipal authority showed mercy. Even after the 1970s, there were weird rules that restricted Africans from owning more than one business to make sure that they do not infringe on white-owned business.

However, in the 1990s, some of the Indian families bought the shops in CBD. This was after many of the business ventures shifted their offices to northern suburbs (Beavon, 2004, p. 207). Hyslop (2005) notes how Gujarati traders with their links with ANC, and, possession of sufficient capital assets, bought shops from white/Jewish ship-owners in suburbs, the CBD of Johannesburg and Krugersdorp during the period of political transition, that is, between 1985 and1995. This explains Sunil's (one of my informants) ownership of the pharmacy. This information will also help us to place the ownership of pharmacies in Yeoville, Noord Street, and Jeppestown, near Park Station in historical perspective.

In the following section I will elaborate on what 'pharmaceutical territory' means as a concept.

It is known that the companies allocate each medical representative a 'territory'. The allocation of 'territories' is based on the data provided by audit firms such as IMS Health, a multinational company and Impact Rx, a South African company.[3] To my surprise, I have found that these audit firms classify the private health market as a 'First World' market.

Lakoff (2005), in the context of Argentina, has elaborated on the notion of territory in explaining the calculated ways of forging pharmaceutical relations using audit data. The audit firms track prescriptions, classify into therapeutic categories, and divide them into different bricks, representative of specific areas.

Peterson (2014)'s ethnography have observed the booming sale of generic pharmaceuticals in Nigeria after the 1980s. Kinship-based networks of Igba traders outperformed pharmacists who traded in branded Western drugs to gain excessive control over the main pharmaceutical market, based in Idumota, Lagos. Therefore, licit and illicit practices of sales merged. This happened due to two reasons: majority of generics were counterfeits and generic circulation revived illegal drug-trafficking networks. The strength of her ethnography is the reading of circulation of pharmaceuticals in this way in the context of structural adjustment policies implemented in Nigeria after the oil extraction bubble burst. Borrowing from Lakoff (2005) and Peterson (2014), I coin the term 'pharmaceutical territory'.

Unlike sales reps, marketing managers have a broader notion of pharmaceutical territory. In practice, the industry also uses more commonsensical divisions of the space like that of the suburbs and townships, and that of the white and Black populated areas. In various discussions of

[3] IMS health bought over impact Rx in the year 2013 in South Africa.

marketing strategies I heard how lower income groups in townships are potential consumers of generic prescription medicines. These perceptions also probably altered their construction of the 'generic' medicines, in positioning.

Throughout this chapter I use the concept of pharmaceutical territory to describe a certain politics of location in Johannesburg, as this is central to the ways in which generic pharmaceuticals are sold to gather profit from the poor. These spaces are peculiar because these are the locations where the lines between illicit and licit blur, and the movement and consumption of goods in turn invariably produced these spaces since Apartheid. This concept is also important because sales plans of companies and practices in pharmacies are technologies of making the poor pay, and this practice benefits Indian pharma companies.

An ethnography conducted by Julia Hornberger on policing in Jeppeestown, Johannesburg has shown that the management of licit impression dominated in the front-stage activities whereas in the backstage there were illicit friendships between people and the police (Hornberger, 2011, p. 36). Largely, people drew on the contrasting meaning of the policing created by these techniques. A few mobilized their 'own police' to negotiate with the law and order.

Coming back to the spatial aspect Vearey et al. (2010) observe that the spatial segregation in Johannesburg influences the picture of health and the spread of infectious diseases such as AIDS. Hence, I will add that medicines, such as alcohol in early history, have become crucial in keeping the workers both as 'workers' and 'consumers', especially in the context of the spread of HIV/AIDS (le Marcis, 2008). ART promotion also aimed at reinstating workers of their labour power.

Even HIV/AIDS treatment scenario is not clean. There are neatly packaged and advertised alternative remedies found to be in vogue in various pharmacies in Johannesburg. Le Marcis (2008) has observed their wide use by PLHIV. In my ethnography at one of the pharmacies I will explain how these patterns are important for consumers as well as pharmacists.

The ethnographer could observe that Johannesburg City Center (CBD) is a place where many of the people living in townships such as Soweto shopped even after the 2000s (Beavon, 2004, p. 251). This is because townships did not have enough shopping centres. These days, most of them shop while travelling to CBD for work. The CBD area happily accommodates these groups in order to fight the impending threat of urban degradation and fall in sales. This happened because the rich gentrified from these areas towards the northern suburbs.

The description follows is on what the marketing manager at Eureka, one of the Indian pharmaceutical companies that won a considerable presence in the over—the—counter selling of products in Johannesburg, thinks about his sales territories. This will help the reader to contrast the conceptual geography of market by sales managers with the empirical reality of dispensing. [4]

[4] Mohan, an expatriate Indian, amidst the hustle bustle of India's Independence day celebrations on the 15 August 2015 in Johannesburg, informed me that Eureka, where he is a financial manager, shies away from participating in public tenders and concentrates on the lucrative brand-driven generic sale in the private sector. After success in over—the—counter medicaitons for allergy (levocetrizine) and the basket of central nervous system drugs, Eureka, now, intends to expand the sales of various brands from Johannesburg to smaller cities.

Kiran's musings

Kiran, an advertising manager I interviewed at Eureka (an Indian company in Rosebank), seemed confused about the territory in which he wanted to sell. When I interviewed him he had finished a campaign called 'harmony of senses' for positioning CNS drugs. For over the counter medicines, he had a clear idea of the magazines and places where he would advertise the products. He listed magazines such as *Drum*, *You*, and *Huisgenoot* (this in Afrikaans) in which he wanted to advertise. This decision depends on his advertising budget; along with the print advertisements, the company also places wobblers in pharmacies located in Sandton, co-sponsors races and other events, and advertises on television.

He belongs to a Gujarati-speaking family. Gujaratis have a history of migration from India to South Africa as 'passenger traders'. He had been working for the past two years. He was eloquent about his strategies in 2014 that commonsensically linked diseases, territories, and people.

Kiran had a working theory on the afflictions of the majority of the population. He premised this on a pre-theoretical notion, of a causal connection between their social habits and their mental and physical health. 'People do not eat healthy: they have red meat, wine, Coke and Pepsi'. He further added a few words on the marketing of his CNS drugs; antipsychotics and antidepressants; pills for Alzheimer's and epilepsy, including the classes of medicines called anaesthetics and hypnotics. According to him, a majority of people suffer from 'huge depression' and schizophrenia. So, CNS is one of the central categories

that yield high profit. The sales of antibiotics and acidic and pain reliever segments follow in priority and yield.

At his comparatively small and simply furnished office, gifts and calendars filled the racks. Showing a calendar that carried the legend of his positioning of CNS drugs, he explained to me his concept of 'harmony of senses for a sound mind' as an analogy of different instruments used to create a concert. Similarly, different pills ensured sound minds. The advertisement pictured different musical instruments for different molecules. Then he added:

> In India people live in joint families. Here, you have fiercely independent women, unlike our women, who sacrifice for their family. You see the results: during Christmas those who do not have family are in depression.

The fact that the sale of CNS drugs goes up in December convinced Kiran of the value of his comparison between a very traditional concept of family and gender relations in India and those that currently prevail in South Africa. Inadvertently, he also identified women as patients of depression and being generally unhappy.

Actually, the rise in sale of CNS is a riddle for those who work in the pharmaceutical industry—CNS drugs topped at the list of blockbusters in 2013 (Medicines Review, 2013). Charlie, a sales representative of Shitala, was very curious about the consumption of antidepressants across racially segregated sections of society. She discussed this with a majority of doctors because she thought that Africans stigmatize antidepressants. One of the young doctors in Sandton gave us a general idea about 'how ladies lived in big houses and popped up a pill' to remain happy, alluding to the middle-class membership of consumers. The old stereotype of whites as usual consumers of psychiatric drugs

is still found valid by many pharmacists I interviewed, even though according to them the racial distinctions are fading. Hence, the 'emerging market' is even more intriguing.

Coming back to Kiran, he illustrated how Nexium is one of the biggest selling products because of culinary habits and diet. He has been successfully selling Omzol (omeprazole), an S4 generic brand for treating *gastro-oesophageal reflux disease /peptic ulcer disease* (GORD/PUD). By showing me a view of Rosebank city through his glassed office room, he pointed to the street below and said dramatically:

> Here, there is [a] huge traffic in the evening. Once people get stressed in the car, they start to drink aerated '*bakwaz'* [unhealthy drinks]. They eat at KFCs and McDonalds. They eat a lot, and when parents shop they expose children to burgers. In general, people in this country eat so much. So, gastritis medicines sell a lot.

His product for the treatment of common allergy (levocetrizine), a Schedule 2 (S2) medicine, is priced R. 30. A low price, according to him, enables people across different Living Standard Measure (LSM) categories, to buy the drug. Based on the audit data and LSM measure, he identifies the strong and weak points of every generic drug's sale. Kiran's musings show his fantasy of marketing to a racially diverse clientele and the resulting confusion in him. However, many others such as sales persons and pharmacists are clear about selling pharmaceuticals, as I illustrate below.

Emerging markets and new sales territories

In the broader marketing studies there is a notion of territory. One of the popular marketer's tools is LSM. According to this, as the existing literature on marketing practices shows, marketers identify a considerable 'emerging market' along with 'traditionally existing' market (Klemz et al., 2006). Race is an idiom through which the former are identified. Emerging Black middle class, called Black diamonds are consumers who float in the emerging markets. The literature perceives Black middle class as brand conscious, rich, and educated elites (de Bruyn & Freathy, 2011). However, some critics such as Lewis Gordon argue that this category is more exaggerated than its real size; and in terms of disposable income, Black middle class is not rich as this notion suggests.[5]

To elaborate on LSM, the South African Advertising Research Foundation (SAARF) relies on 13 variables, including that of poverty or wealth, shopping habits, ownership of durable goods, access to health care, access to formal financial transactions, along with rural–urban divide to produce these data. The LSM is a dominant marketing tool (Cant, Strydom & Jooste 199, p. 172 quoted in Herselman, 2008, p. 42). Yet, Herselman (2008) notes that this technique, with the sole focus on consumption, ignores how the poor, especially Blacks, spend a considerably huge proportion of their income on food, health, education, and other basic requirements.

Bank (2007, p. 162), in his study of paraffin stoves in Johannesburg, argues that traditional Xhosa values of cooking, spatial convenience to use them at small matchbox houses, and perception of cheapness have made paraffin a product that denotes gendered responsibility; and this lead to their common use

[5] Lewis Gordon, personal communication, dated 06 August 2014, Johannesburg.

in the spaces known as townships where the Blacks were segregated during Apartheid.

Similarly, is it possible to know the ideological basis of the consumption of generics by the poor who live in the townships in Johannesburg? The ethnographic material presented in the following section will highlight deeper contradictions in the territory. Pharmaceutical circulation widens the reach of market but conforms to the observations of existing ethnographies of sale of skin creams in townships. The dispensing situations in the pharmacies further highlight the unavoidable nature of medical pluralism in the pharmaceutical territories.

As noted, generic pharmaceutical companies have a slightly different notion of the emerging market in comparison to the common usage of the term as one that connotes the consumption of middle-class Blacks. Townships and lower income groups are the locus of trading. Most of the Indian generic companies have medical representatives covering townships. When I followed Lungile, a pharmacy sales representative of Shitala, I found that she visited pharmacies in the townships to market her products. Gemini, as I will describe later, another Indian generic company has identified Black young population as the 'target market' of various skin creams.

Pravin Pillai, a young marketing manager of Sphynx, told me that he mainly orients the products towards 'emerging markets'. These emerging markets for him are various townships and the district of Soweto. While I interviewed the medical representatives and Pravin—their team manager—in a group, David, a young medical representative in his late thirties who works in these townships, listed the names of townships. He had a long career with

Sphynx and he acted as a lynchpin between the company and townships. Elisa, a young colleague, stated how David's ability to speak *iZulu* helps him to sell his products in the townships.[6] David who listened to this conversation did not say anything more on this.

People in different areas in Johannesburg consume different generic brands. And different pharmacies sell different brands. People of low dispensable income even receive generics of molecules that are cheaper than expensive ones from their doctors. For instance, public sector clinics often substituted molecules, depending on availability. One man approached Joseph, a pharmacist at Francia pharmacy, Yeoville, complaining the lack of effectiveness of medicines he availed from Yeoville public clinic. Having checked the medication, Joseph informed him that he got a different molecule instead of a generic substitute of what doctors prescribed.[7]

In pharmacology shifting between molecules is known as chiral switching, and this is not always used for the benefit of the patients. Nair (2014, p. 58) in her study of the pharmaceutical market in South Africa notes how innovator companies attempt to increase their revenue by advertising the enantiomer of an already existing racemic pharmaceutical product as being more effective clinically. This results in the effacing of the already marketed racemic pharmaceutical product, which is more proletarianized, due to the availability of generics and lower prices.

[6] Group based interview dated 03 March 2015 at Sphynx Pharmaceuticals, Melville, Johannesburg.

[7] Many of the low-income people did not have medical aids. Industry called them 'cash patients'.

By and large, generic companies have inconsistent notions of the 'pharmaceutical territory' as a perceived territory. While we were talking about ways of selling in the townships, Pravin intervened in the conversation and added that he does not 'position' his drugs for townships in terms of packaging and advertising.

> We do not go after a target population. A person in a township or someone in Sandton is equally our targeted consumer.

He justified this by saying that all customers brought them business. Elisa added that as a team they presented their products as being of higher quality than the Aspen's (the top generic company) sales persons detailed about their products. This was true because comparatively well-off people also consume generics, especially for chronic diseases such as cardiovascular diseases even in affluent areas of northern suburbs.[8]

Let me stick to the discussion of emerging markets a little bit more by describing how Gemini, a company that sold various ointments and creams, planned sale in the Soweto Township in Johannesburg.

During the internal marketing day of Gemini, a subsidiary of a prominent Indian generic pharmaceutical company, John, the country manager, was present along with eight others to spend a whole day in the small boardroom to plan the

[8] As we were talking about the ads of Indian generics at her office in Pretoria, Lara, the editor of SAPJ narrated me a radio advertisement of Sigma. She recollected the dialogues: 'The advert starts with the voices of heartbeat. One person is in a township in Soweto. Another person lives in Sandton. The ad says: can you say which is which? They play the heartbeat again. Obviously you can't find the difference in the heart beat. They say: "neither can we. That is why it doesn't matter where you live". It is a brilliant ad. It says everything. Just in few words' (Lara, personal communication dated 17 October 2014, Pretoria). This ad represents Sigma's cardiovascular drug as a marker of equality in post-Apartheid South Africa. Marais (2001, p. 1–6) observes how the political transition in South Africa is partial. The political economy is characterized by continuities with the past before 1994. The ad, hence, offers a mythology of equality and, more provocatively, an offer of reparation. The product in advertisement is a lifestyle drug. So, the ad erase the differences between essential drugs and lifestyle drugs. Hence, the mirage of medicine ads.

marketing strategy for the second quarter of 2015. Gemini used the 'ordinary looking' photograph of a young Black model in the advertisement of their skin cream, Demelan. Veronica, a middle-aged woman who worked as the product manager told me that they intended the photograph to look ordinary whereas John remarked that Black young women were the immediate target population.

Among Gemini's strategies to sell among the poor, there was 'a risk prone strategy' of distributing Demelan creams to college students in the Soweto campus of the University of Johannesburg, at an event called 'call for inspiration' where women from all over arrived as speakers, and between 300and 400 young women were expected to be present in the audience.

John was very happy about the plans with Veronica and Amahle, her assistant, and handed over the full responsibility of this single-day venture in direct promotion of creams to the duo. This according to Veronica is a calculated risk project on a 'pilot' basis. For this, she also planned to make dermatologists as part of the team. Later on, John called this as the 'Soweto angle' of sales.

One of the dream plans for 'direct sale' was to sell the skin creams, scalp sprays, and shampoos of Gemini in the hair salons of various townships at comparatively lower rates—removing conventional outlets like pharmacies from the chain of the sale. The plan for the next quarter was to begin with 10 hair salons in Soweto, where hair dressers will sell the products 'in their chit chat with customers'. Veronica also plans to give training to those who work in the hair salons.

Apart from advertising on radio, magazines, and in the public toilets of various shopping malls in Sandton city, Gemini also manages a Facebook page

for marketing Demelan. The page has illustrations of a few models, but, the advertisements give space to ordinary women with their 'testimonials'. The real-life photographs with testimonials of individuals other than supermodels, testifying the use of the products, have been paying off good results to Gemini's plan. The meeting had made a unanimous decision that Demelan will have more testimonial campaigns in the future.

When I visited the Facebook page of Demelan, I spotted the comment of a certain Maiphephi—one of those testified—on how she 'felt proud to appear in the advertisement of Demelan cream' (see figure 13).[9]

[9] On the same page, Black political icons such as Winnie Mandela, and Margaret Ekpo have been presented to commemorate important days such as the Youth Day and Women's Day. Female icons are chosen by the public. Similarly, Gemini conducted a contest for the making decorated little displays for Demelan; and to win this contest pharmacists had to make use of advertising images, a piece of pink cloth, along with a replica of a mask provided by the reps, though many added balloons, candles, and star-shaped paper cut-outs of their own. In a meeting that I participated, we judged different photographs that Elizabeth, a sales rep, captured on her smart phone in accordance with, as John wrote in a piece of paper, (a) effort, (b) use of advertising materials provided by the company, and (c) attractiveness. In both, the competition winners won prizes.

Figure 14: A testimonial advertisement of Gemini's Demelan cream (Source: Move magazine, August 15, 2014)

Demelan is a normal skin cream, though Veronica has been proud of the fact that her product is 'cortisone free'. But, Gemini presents the cream as a 'clinical' product rather than a cosmetic item. A group of attractive female medical representatives receive 60% of the allocation for sales promotion of the cream. John justified this expenditure stating that Demelan is 'consumer driven'. 'Guerrilla marketing' is a term John used to describe the general strategy; and Gemini has found a compulsion to do so, since multinational brands such as Ponds spend around R. 6 million for advertising a cream for blemishes. By adopting a guerrilla method, Gemini sold the stock worth R. 1 million in Quarter

1 (between January and April) and aimed to sell another R. 1.2 million in Quarter 2 (between May and August).[10]

In this advertisement of Demelan, the ordinary face of a Black woman, while evoking political consciousness of being ordinarily black and normal, playfully interacts with the semantic notion of fair skin. Juliet, one of the sales representatives, told me that women prefer to whiten their skin than make the skin simply 'glow' (Cf. Thomas, 2006) to create a myth in which the cream fights against the not-so-serious but 'clinically' (i.e., biomedically) undesirable 'dark patches' or hyperpigmentation (figure 13).[11] Let me also add here that the Indian of origin of Demelan qualifies the product as marking continuity with the past usage of Indian spices and herbs by itinerant *inyangas* and their sale by *muthi* shops. The top down approach in sales by marketing executives does not make the creams less interesting.

As mentioned above, the audit data on the industry guide decisions regarding the sales plan of generics in general. Lakoff (2004) has defined auditing data as technology of mistrust. This is because the data mediate gift relations between doctors and the industry. In this case, the use of data is a

[10] On the internal marketing day of Gemini, John, the country manager was present along with eight others to spend a whole day in the small boardroom of Gemini. John pointed out that 'clinical presentation' as a strategy had a strong business motive:

> I am worried about Demelan. If we go to the aesthetic world and compete with big guns like Ponds we will end up losing. So, we will keep a clinical base. Our strategy has to be that of testimonials and word of mouth. And I believe that customers can relate to this…

He told this to everyone.

[11] I have found that there was no elaborate division of labour in the advertising strategies of generic pharmaceuticals, as sales reps and managers along with an advertising agent framed the plans for the sales expansion of a skin cream, Demelan, at Gemini. Tapping into local 'mythologies' linked with ordinary life and ordinary things, knowledge proletariats such as sales reps have found to be contributing to the making of value, broadly forming 'commodity illustrations' (Mazzarella, 2003). Practices of commemoration and technologies of the formation of the self, such as, testimonials, akin to the cultural trends prevalent in the post-Apartheid South Africa (Combes, 2011) has been found to have been mobilized to add value to the circulation of generic pharmaceuticals or in building a knowledge base of marketing.

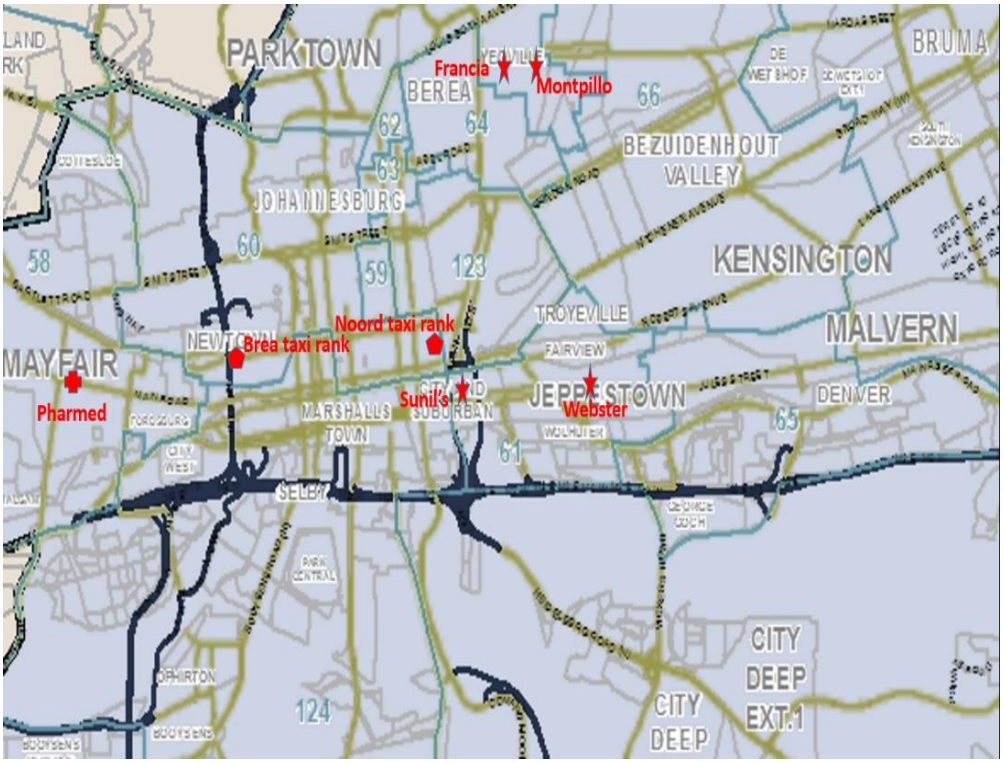
symptom of collective amnesia in the industry about the health-seeking behaviour of the poor. Hence, it is not really surprising that marketing executives have superficial and overly formalist understandings of markets and consumption of generics.[12] However, during my fieldwork in the pharmacies, I ask how lower-income people availed medication. Before I elaborate on the ethnography I will attempt how territory has been important for pharmaceuticals as a commodity for consumers.

Righteous pharmacists, and 'patients': Dispensing generics in Johannesburg

My ethnographic fieldwork in four pharmacies located in the CBD area makes perfect sense in the context of a rich, social, political, and economic history (for a map of the pharmacies see figure 12).

[12] I thank the anonymous reviewer of the JSAS for this observation.

Figure 12: Pharmacies in the backgroung of the map of Johannesburg, Source, prepared by author based on City of Johannesburg all regions map (detail). City of Johannesburg Metropolitan Municipality, obtained on 08-10-2015.



The social history of sale in goods and services in CBD from the nineteenth century, along with the ethnography, brings out the ground-level realities in the emerging market spaces of generic pharmaceuticals and illuminates the notion of 'pharmaceutical territory' below.

First, I start with the description of dispensing situations in a pharmacy called Sunil's—owned by Sunil, a Gujarati trader in Noord Street.

Sunil's

Even though generic pharmaceuticals bring Sunil a very small margin of profit, he gets a good profit when he buys bulk generic drugs and repacks them in small airtight plastic pouches for retail sale. In the case of pain killers such as

diclofenac and paracetamol the initial investment of R. 1000 in buying bulk drugs doubles to R. 2000 when he finishes the sale. Pharmacy assistants count the pills and place the pouches within the reach of pharmacists. Sunil told me that selling cheap generics at lower margin requires a staff loyal to him.

How does cheapness add value to a commodity? Mintz (1985) has documented the circulation of sugar/sucrose as cheap source of calorie among English working class in the early twentieth century. The most common use of sugar was in making tea. Workers ate cheap machine-made bread (with or without jam) with tea to speed up their life. The change in the global status of sucrose as a commodity of the rich into a cheap product also made a new lifestyle possible. The new lifestyle added new value to the labour in the Industrial Age.

Chari (2004, p. 155) in his study of the fashion knitwear industry in Tirupur has noted how Gaunter females' casual labour added value to the products at various levels of production. Initially, raw cotton called *kapas* transformed to lint for final use. In older times, female labourers received 2 ½ annas (an old measure of money) for picking *kapas* whereas men got 4 annas for the same job. Gaunter men added further layers of value when the *kapas* was converted to lint because they could mobilize the brokerage of ginners (middlemen in the cotton supply chain), thanks to their agrarian background and access cheap credit due to their political links. They added comparatively cheaper self-effort (*ulaipu* translated as toil) to the already cheaper lint at production units. Eventually, when Gaunters played safe according to the games of the global arbitrage they became self-made capitalists (p. 161).

Similarly, the cheapness of generics raises the potential for pharmacists to create more value. Cheapness creates an ideology of increased use value. So, generics connote cheap health. Pharmacists could combine generics with predominantly (or comparatively!) cheaper herbal medicines to produce additional value while dispensing.

Sunil's customers live in faraway locations in Johannesburg. They are travellers from various townships since his pharmacy is situated next to the taxi rank in Noord Street. He always presented choice of products to the customers; and when the customer finally takes a call, he calculates the amount of profit and the extent of trust gained within a fraction of a second. He explained his righteousness like this:

> They (customers) take your advice like a gospel. We also tell them how to take the medications. Of course, some of them come in like they come into a supermarket. But most of the time they respect you for your knowledge.

He further elaborated the 'sacred' nature of his commodities, informing me that he always kept a variety of medicines since people came to him from faraway places and tried to avoid a situation in which a customer returns without any medication. Martha, his pharmacy assistant, told me how people in Soweto know about this pharmacy very well.

Sunil, himself a qualified pharmacist, gained the trust of the people with his friendly and humble character. His persona spread like magic when an assistant from India, who was not qualified, worked along with him.

While historically Noord Street has been a centre of Black urbanization (Thomas, 2012), Noord taxi rank, which is called in local slang as 'MTN taxi rank' is still the central 'rank' to go to the CBD when people arrive from other

areas of the city (Woolf, 2013, p. 306). To cater to the 'pedestrian traffic' the taxi rank has a huge surrounding market area (Makhetha & Rubin, 2014). There are various informal and formal street vendors with stalls rented from city authorities, who sell pirated CDs, books, clothes, and vegetables at uniform prices in a dull way (Beavon, 2004; Makhetha & Rubin, 2014). South Asian migrants also own a lot of shops that sold home appliances, curtains, and general articles.

Sunil identifies his customers as lower-income groups. I talked to Peter who came to the pharmacy to buy medicines while on way to Gandhi Square. Johannesburg is a city of urban mobility even though the mobility could be superfluous at times. Hence, I refer to the customers as 'mobile', owing to the eminent sociality around generic pharmaceuticals, porous boundaries of different sectors of health systems, in which 'patients' sought health (Kleinman, 1980), and the way patients shifted between various generic brands. I use the term mobile consumer to also connote the way they use mobile phones to access medicines.[13]

[13] The cell phones are also used in the ART programmes, especially in collecting the reports of stock-outs during 2014. Stickers showing a communication telephone's number are pasted in hospitals in Johannesburg. There is a partnership with Vodacom that enable patients to send 'please call me' messages to the given number. These messages can be sent free of cost. There is will be an advertisement along with the messages. The advertisement was sponsored by Pick & Pay, a retail chain, and Medipost, a courier pharmacy. Whatsapp, an online communication site, is also used for reporting. A young girl sits in the office of South African Medical Society, in Norwood. She receives calls in the seven languages spoken in South Africa. The patients or healthcare workers report the stock out. A majority of the stock-out reports are HIV/AIDS related. This programme was started in September 2013 (Nadine, personal communication dated 17-06-14, Norwood). In fact, 'Stop the Stock-outs' is a multi-country campaign. The campaign operates in African countries such as Kenya, Uganda, Malawi, Zambia, and South Africa. The campaign uses cell phone technology. The stock's depletion are reported through text messages (Africa: Text messages highlight drugs stock-outs, 2009, *Humanitarian News and Analysis*, 17 September 2009). These processes exemplify how prepaid technologies have found uses as 'techno political devices' among the poor in Johannesburg along with humanitarian goods such as ARVs (von Schnitzler, 2013).

To narrate an example, a young man approached Sandeep, Sunil's pharmacy assistant, and showed the photograph of the medicine package. He soon left since Sandeep did not keep the medication. In a similar incident at Francia pharmacy in Yeoville, someone approached Joseph, the pharmacist, and asked for a cream that could cure the rashes of a friend of his. He came with a photograph of a friend's hand on his smart phone. This indeed helped him to get his medication because Joseph wanted to know if the rashes were due to eczema or fungal infection. Joseph dispensed a generic medication after he saw the photographs. Hence, these photos help consumers to buy for their friends and relatives.

During my participant observation at Sunil's, I secured a position near the toiletries and over—the—counter medicines. Sunil stands in front of me at my left. Shelves decorated with prescription medicines, and attractively placed expensive tins of immune boosters behind him attributed to his persona.

Sandeep has been working with Sunil for more than five years. Sandeep does not have any secondary education. He left the job of a supervisor in a diamond-cutting factory in Surat, Gujarat, to migrate to South Africa. However, in practice he acquires the status of a pharmacist. He also listens to patients' narratives and dispenses them medications. Mpho was more of a silent staff in the pharmacy, and she assists Sunil and Sandeep to dispense medications, keeping herself busy at the medicine racks, except when she sells over the counter items, standing opposite me past the interior in which patients line up.

Mohan, Sandeep's brother, (Sandeep brought Mohan to the pharmacy to work as a cashier. Mohan has been working for a year now. Since he was not very fluent in English, he preferred to talk in Gujarati with his co-workers, and in

Hindi with me) counts cash. Martha, a thin woman in her fifties, occupies a place next to me when she gets some free-time after cleaning floors and shelves. As a native *iZulu* speaker she has a big role in selling over the counter medicines, *muthi* medicines, and other things such as toothpastes. Martha has been travelling every day from Soweto to the pharmacy for the past 10 years.

'Patients' come into a spacious interior of the pharmacy (except for the position of a chest of drawers with a transparent surface in which Sandeep displays various *muthi* products with *iZulu* nomenclature). Sunil has set up chairs in a corner, facing me, and a water purifier for the use of customers that stood right next to me. Water helps many customers to begin the ritualized consumption of medication at the pharmacy itself. Patients undergo transubstantiation by swallowing pills under the auspices of the pharmacist. This could also lay bare the fact that patients are neophytes into the biomedical capitalism. The beliefs in age old treatment traditions create conflict at the pharmacy floor. At the same time people look out for cheaper solutions. Above all, generic pharmaceuticals initiate a healing process. Healing starts at Sunil's shop. In another notable instance, a mother came in to sit in the chair and started breastfeeding her baby, connoting the space as more of a private one.

Sunil speaks Gujarati fluently. His staff including his wife, Ananya; Ameer, his pharmacist in charge; Mohan; and his brother Sandeep also converse in Gujarati. So, Gujarati works as a uniting semantic factor among the staff in the pharmacy except for two. Sandeep called Sunil *bhai* (brother) and his wife *bhabhi* (sister-in-law).[14] This shows how the staff members have created a fictive kinship with the owner. Martha described Ameer, the main pharmacist, as *maulana*. This is because of his pious Muslim appearance and religiosity. Ameer

[14] The use of these terms to refer to non-relatives is very common in North India. The formation of these fictive kinship ties cuts across religion and caste.

shied away from talking to me, saying that he is busy during trading hours and preferred to stay with family after work.

Mostly, I went to the pharmacy on Fridays when Ameer was busy attending *juma* prayers or took a day off. So, I could not observe Ameer at the pharmacy in detail. The dynamics at Sunil's pharmacy is similar to the 'game room' that sold cheap crack in high volume in El Barrio with respect to the relationships between the owner and the workers, except that many of those who sold crack were addicted to the substance at some stage (Bourgois, 2003). Bourgois (2003)'s documentation is on how a crack-house manager effectively manipulates kinship networks to ensure loyalty and discipline among his workers.[15] In her study of pharmacies in Dakar, Senegal, Patterson (2014) also observed how female entrepreneurs flourished by cultivating their professional skills as they worked in pharmacies and studied pharmacology through the support system provided by marital ties.

Two 'pharmacists' worked simultaneously behind the counter. Sunil's pharmacy mostly, though not entirely, sells generic pharmaceuticals without a prescription. However, he does not dispense medicines ranging from Scheduled 3 to Scheduled 5 without prescription. This is illegal. Hence, all in all, his practice falls into Kleinman's (1980) folk sector. According to Kleinman, folk sector is legal; however, folk healers are not organized in a way professionals are. He gives the example of bone setters and herbalists as cases that emerged from his study in Taiwan.

[15] Bourgois (2003) observes that the search for a respectable job compels individuals to opt for illegal economy. They leave the legal economy behind, choosing street corner jobs despite low wages and high risk.

Sunil has prescription drugs, over the counter items, herbal drugs, greeting cards, creams, and antiseptic lotions. He also sells 'love magic' perfumes that came in blue and red, lucky oil, magic *muthi* powder, sea water, toothpastes, and soaps. However, he never sells medicines to individuals with medical aid. This is because Sunil hardly had patients enrolled to a medical aid facility; and only a few approached him with a prescription. Buying and maintaining software that synchronizes medical aids with his pharmacy at the event of each purchase incurred an extra monthly cost and additional labour for pharmacists. Beyond doubt, this investment in his pharmacy will not get him any return. While 'patients' avoid doctors and go to Sunil to get medications, he trades medicines according to their tastes mixing his 'prescriptions' with more expensive *muthi*/herbal medicines, over the counter drugs, and S2 drugs.[16]

Sunil admitted that people respect the pharmacist. He described to me his experiences that some of them, especially middle-aged people, came from faraway places because they knew the person behind the counter. As I described

[16] However, some of the alternative medicines such as enhancers of sexual stimulation also have the same organizing principle as that of the generics. I have found a cappuccino sexual enhancer that is marketed as a generic medication at Montpillo pharmacy in Yeoville. The pharmacists and the assistants received T-shirts from the sales representatives. There are also networks that sell herbal products to treat HIV/AIDS (Le Marcis, 2008). When I visited a pharmacy at Braamfontein, I saw a pamphlet titled 'SAM Selenium: nature's strongest immune booster' and 'SAM selenium: the miracle mineral' (In the first pamphlet, the word 'nature' is italicized suggesting that it is also the name of the producer). Along with that there was a copy of a report from *SA Health Reporter*. The title said: 'Howard Armistead: living with HIV for 30 years'. Howard Armistead's photograph is given—he is a healthy-looking middle-aged man. The piece is written by a certain Taoli Tutubala, dated 1 December 2013. The 'report' cites various studies on the efficacy of this 'traditional' medicine, including a study conducted at the Harvard University. Biomedical idioms such as 'chemical properties' and 'instructions for dosage' are also described so as to denote efficacy. Pamila, a pharmacist at the retail pharmacy in Braamfontein, told me that patients buy this medicine along with ARVs. She said that patients take this product to boost their immune system. The bottles are displayed at the counter. A bottle that can be consumed in one month costs R. 130 in her shop (Pamila, personal communication dated 05 July 2014, with Pamila, at Braamfontein). However, people also take vitamins such as Centrum multivitamin tablets marketed by Pfizer to alleviate the impact of side effects. Usually, the doctors prescribe them along with ARVs (Nkosi, personal communication, dated 03 July 2014, Wits). The vitamin B complex tablets are distributed in public clinics along with ARVs.

before, a large number of people who came to his pharmacy (as well as other two pharmacies in Yeoville, where I did ethnography,) do not approach the pharmacist with a prescription. Sunil told me how a majority of them could not afford to consult doctors. The everyday life of pharmacists in all these pharmacies consists of listening to illness narratives of the patients and giving them medication.

Patterson (2014, p. 62) observed similar patterns in Dakar where free consultation and dispensing, along with spatial and social access attract patients to female pharmacists' clientele while many consulted doctors only during emergencies.

Sunil told me how the pharmacy is different from 'a supermarket'. He added that he stands behind the counter and dispenses medicines with an 'intention'. However, the amount of profit determines his choice of direct dispensing. Some cost-effective generics gave him the same amount of profit as that of a costlier one. He opts for the cheaper one in this case to arrive at what he calls 'a win-win' situation for him and the consumer. However, in many cases customers ask for a cheaper one, and pharmacists choose a cheaper one.

People avoid doctors even when they were in serious pain. Two women who clean shops in the mall came to consult Sunil. Following a brief conversation in which Sunil asked one of the women if she ate a lot of fried food and instructed her to control her diet; she lifted up her uniform and showed her terribly swollen left leg. Sunil gave her some medications and asked her to place her legs up while she took rest. She had to come back to him a week later. It was evident that she and her friend were impressed. Her friend, a middle-aged woman, later returned to get medications for herself.

Sunil spends a considerable duration of time with each patient. Before he gives medications he listened to their symptoms and asked a few questions. If patients had pain he asks them to identify the locus.

For instance, when one middle-aged man complained of chest pain, Sunil asked him detailed questions such as whether he had a problem with 'wind'. He also used a iZulu term for 'wind' when patient did not follow. Patient continued to complain of 'feeling pain everywhere'. Although Sunil suggested him to get a medical check-up, he continued to ask questions.

S: Do you take cold drinks? Maybe, you eat a lot of fried food?

Before the patient could say anything, he got a tablet to consume one a day.

In the discussion of urban culture called Y generation culture Nuttall (2009) notes how Rosebank shopping mall has emerged as a new centre of entanglement in terms of new embodiments supported by fashion in Johannesburg. Sunil's pharmacy is also a space of entanglement. However, there is a break between the taste of the consumers and that of informed medical choice, thereby allowing Sunil to mediate.

Additionally, the value of generics produced here is based on a different kind of circulation rather on mere biomedical reason. Their aura comes from being close to, or being dispensed along with alternative medicines, and popular placebos such as vitamin tablets that fit into the cosmology of the people (Harper, 2014). Similar to the manner in which Donna Patterson illustrates the practices of female pharmacists as ambitious entrepreneurs offering diagnosis and prescription services for the poor in Dakar (2014, p. 62), a pharmacist is an

alternative ‘doctor’ here. The non-white identity of the pharmacist also seems to facilitate the way patients escalate their illness narratives in contrast to sales practices of medical representatives who mainly build up a profession in a setting like that of the northern suburbs in Johannesburg, appealing to doctors. I will discuss this in more detail in the next case study.

Montpillo

Montpillo is large enough to accommodate seven staff, customers, and medicines. In a way, the empty space gives a false impression that the business is low. Goodman usually sits next to Sylvia and chats with her, selling over—the--counter medicines, and guarding a glassed shelf in which he locks up expensive *cappuccino* and other sexual stimulants, Himalaya creams for piles, and other alternative remedies, to avoid theft. Two Congolese doctors (one of them spoke only broken English) have separated some space with hardboards and there they consults patients and even sell airtime (vouchers for mobile service). Jutaina’s domain is at the back where people queued up for her. Each customer receives medications, delivered in a tiny metal cage, and approaches a woman who sat right near the entrance for payment. Customers disappeared into the busy street of Yeoville, equipped with cheap food outlets, fruit vendors, fish mongers, a Cambridge supermarket, and a public clinic among many other shops, at once they got medications.

On the days I stood inside the Montpillo pharmacy, most of the people came in for buying medicines for themselves; while some accompanied the patient, some others bought medicines for their relatives or friends and some

came to consult doctors. Some of the customers had a medical aid and they came with prescriptions. Jutaina also had various French-speaking ‘patients’.

When ‘patients’ come to get medicines they show desperation due to the symptoms. Since Jutaina was a woman, some patients readily escalated their illness. For instance, a woman came in with a baby tied to her back in a cloth and a boy holding her hand. I overheard the conversation when she told Jutaina that she suspects being pregnant:

> P: I do not have periods…
>
> J: Do you think that you are pregnant?
>
> P: Yes, [but] I don’t want to have [a] baby...can you give me some medicine…
>
> J: You have to see a doctor for this problem.
>
> P (turning skilfully balancing the infant tied to her, cared to ask again before she set off): Can you give me some pill…

Jutaina put an end to the conversation saying a firm ‘no’ and gave her the details of a doctor she can consult. Another woman approached her and told softly: ‘morning after pills’. She paid R. 100 for the medicines and left.

Jutaina told me how she requires a lot of confidence to suggest medicines for patient’s illness quickly. She ‘prescribes’ medicines and pronounces the price quickly and professionally to have the patients’ trust in her. Usually, she attempts (as does Sunil too) to give two or more sets of over—the—counter items or S2 medicines to each patient in order sell more, even though she did not admit of receiving any incentives for selling more. Mangalmurthi (2006, p. 11) notes how pharmacists have an incentive to sell expensive drugs priced above R.100. A sale of medicines above the Single Exit Price (SEP or the uniform price) of R. 100 brings a flat dispensing fee of R. 26, whereas cheaper ones

contributed 26% of the SEP according to the latest Department of Health legislation.

Sometimes, patients also ask for cheaper drugs. 'Give me something for R. 20. I have only R. 20', said a young man asking medicines for flu and throat pain. Jutaina judged the paying capacity of the patients from their appearance.

In my ethnography in Montpillo pharmacy in Yeoville in April 2015 only two of the customers asked for a branded prescription drug. Once, a young man came with a prescription wanting a branded pain killer (diclofenac sodium). Jutaina gave him the original branded Voltaren. Soon, he said that this was not the one he was looking for. Jutaina showed the available generics also. But, he left the place without buying medicine as he was unsatisfied. She became angry as he did this; she expressed this by throwing medications onto her desk. She complained to me about the ignorance of people.

In another case, a man appeared like a middle-class person (he wore a blue jeans and an expensive shirt and kept swinging the keys of his car on his finger) came with his son. He asked for the 'original' of the medicine. When Jutaina explained that the original is expensive costing around R. 120, he asked for a cheaper one, but with a concern, 'It is a baby...if it does the same job…' Jutaina informed him that the cheaper generics cost R. 60. At last, he settled for the generic brand.

In the pharmacies where I did fieldwork, pharmacists always inform the patient about the price before dispensing. This is a norm. Once, Jutaina confided in me with a righteousness that she gives the cheapest drugs without the customer asking for, if she found them to be poor. When there are no patients,

she prepares for an examination to legally qualify as a pharmacist. She told me how her training as a pharmacist in the Democratic Republic of Congo (DRC) did not find recognition here. She came to South Africa as an asylum seeker due to the ethnic conflict rampant in DRC. However, she has already passed an examination that qualified her as an assistant pharmacist. I observe that many patients visit the pharmacy because Jutaina listens to their narratives, understands their desperation in terms of their low-purchasing capacity, and feels their symptoms; buying medicines there involved mutual respect, despite being exploitative in nature.[17]

I mostly spent time with Jutaina. Janet, a middle-aged woman, replaces or joins her in the afternoon. Jutaina told me how Janet and she could help the pharmacy to cater to the racially diverse customers. I could spot mostly Asians and Africans here. In Francia pharmacy, the one nearby, the customers are racially more diverse. Janet with an indifference, complained of 'patients' directly asking for medicines without saying 'hello, ma'am, how are you?' In that way, Janet sets strict rules for her service. When she insisted customers, especially youngsters, to use customary greetings, some of them were annoyed. However, most of the customers obey her professional authority and respect her age. She, by and large, busies herself in ordering new medications and taking note of stock once she warms herself with a cup of tea. Jutaina controls dispensing.

I interviewed Janet to maintain courtesy. She retained the same callous attitude to me. She did not shake hands with me due to 'religious reasons'. She returned my questions with short answers in a low voice. When I could not help

asking her to repeat, she was curious if I had a hearing problem. Usually, customers preferred to line up for Jutaina. Some directly go to Janet when in dire need and avail medicines without complaining too much about their symptoms.

Francia

When I send a letter from the university, Pat, the owner of the pharmacy let me stay in the pharmacy. Francia competes with Montpillo pharmacy. It is a busy pharmacy, alongside several restaurants that sold Congolese and Nigerian food, as well as fast food (Hornberger, 2008). Pharmacists and their assistants, along with the other staff, stay relatively close in the air conditioned interior of the shop. Two Congolese women receive the attention of customers when they enter, and then wanting medications they move along the left. Joseph, a young man who speaks Congolese and English, always took position behind a counter separated for customers with medical aids. On every such purchase, he synchronizes customers with their accounts using software. Joseph, a migrant from DRC, has settled in Yeoville with this wife.

Pat, who owned the pharmacy, is usually visible in the afternoon at the edge of counter, near the back door in the afternoon, while two pharmacists always work between Joseph and him, swiftly dispensing medicines. He multitasks between meeting medical representatives, giving instructions, and occasionally dispensing. Pat introduced himself as a South African. I suspect him to be of Congolese roots: he usually dresses up in a tri-coloured suit, invoking *le sapeur* style. He likes gospel music, so he plays it loud on a TV, arranged at a corner up. ‘Isiah 53:5 God bless you’ was written above the threshold of

pharmacy, leaving ambience inside pretty much predictable for anyone before even entering.

The pharmacy dispensing area always consists of around 10 staff. One person entirely manages the accounts. The pharmacy conducts various tests for detecting diseases and runs a baby care unit (a middle-aged nurse occupied a small room behind the pharmacy for this). Like Sunil's, Francia pharmacy sells a variety of things along with medications: alternative medicines and cosmetics such as Nivea creams. Francia opens at 9 am and closes at 11 pm.

On the first day of my visit, Joseph allowed me to stand near him, so that I could listen to people talking to him. On the second day, Pat did not let me stand near the pharmacist because he wanted patients to 'escalate' their conversations. Soon my fieldwork here found a boring routine. I stared at the old model TV that played gospel for the entire day and bought drinking water from the same pharmacy and watched transactions till the sunset. When new supplies from Pharmed, the wholesaler, do not arrive, Albert, a Congolese pharmacy assistant, occasionally joined me to chat.

Joseph told me that he never gives the cheapest generic when he dispenses a medicine in his professional capacity. He judges the capacity of the customer in order to sell. Usually, he settles for the middle-ranged prices. In one case he lent medicines to a customer—a young man. He apologized for not having money. He wanted to buy on credit, and with a slight inhibition he requested: 'my life, I can't gamble with it'. He was a cash patient (or one without medical aid). He bought a few Tribus tablets (one generic FDC brand for HIV/AIDS) in plastic pouch and left. Rest of the time, as did a man who lives in a flat nearby, he turned the screen of the computer towards him to see the price and left

immediately, promising Stacy, a pharmacist, to come back with money; people bought with ready cash. This kind of lending is selective based on the friendship Joseph has with the customers. He never let the lent amount exceed R. 50.

The pharmacy sells generics as well as original drugs. Over—the--counter medicines and S2 drugs, especially cough syrups, sell the most. Jutaina had told me how people abuse codeine-containing cough syrups in Yeoville. There are various other instances in which people have appropriated pharmaceutical knowledge into popular knowledge and quotidian material culture. Once, a middle-aged woman purchased a set of Sigma-Actin tablets from Francia pharmacy. According to Joseph this drug have a side effect of enhancing 'appetite' even though it is used for treating allergy. Joseph told me how consumers buy this for gaining weight.

Sunil told me that the original brand of this drug made by Merc was marketed along with a vitamin component. They came into market in yellow colour and were called Peri-Actin Vita. Later, the company removed the yellow colour and made it white in a tablet called Periactin without the vitamin component. People remember the original component's use and asked for the generics.[18]

Cossa (2013) has observed how counterfeit drugs smuggled from other African countries are marketed from the pharmacies in Yeoville. She set up a continuum between the life of the pharmaceuticals and that of the pharmacist vis-à-vis law. Strict laws in South Africa force migrated pharmacist to be become informal vendors; but, trade in counterfeit pharmaceuticals set up trust and authority among them and their customers. At Francia and Montpillo pharmacy,

I did not observe any sale in counterfeits; instead both entirely catered to the need of the people of Yeoville, where migrants from African countries dominated in numbers.

Arthur Kleinman (1980) gives a typology of healing practices. He divides healing systems into the professional sector, folk sector, and popular sector, relying upon the transmission and organization of knowledge rather than their substantive characteristics (Kleinman, 1984 cited by Sharma, 1993, p. 16). I have found his classification useful to look at the generic pharmaceutical circulation in relation to the organization of dispensing rather than their substance, since studies have already settled the debate on the ontology of branded generics (proper copy) and unbranded generics (*copia*) vis-à-vis brand name drugs (see Hyden, 2010). I found a complex schema of the organization of *Materia Medica* in Johannesburg in a way similar to Kleinman's (1980,pp. 60–70) description of healing in Taiwan, where he found that some of the healing practices such as that of bone setters and herbalists exist in between or in the borderland between the typologies. However, the circulation of generic pharmaceuticals at pharmacies does not neatly fit into Kleinman's (1980; 1984) typologies—the central of them are porous in Johannesburg.

Johannesburg CBD has a history of illicit trade in magic medicines. Various healers from distant African countries claiming Islamic and traditional affiliations of therapy treated an insecure set of people in the transient healing spaces here (Kadenge & Ndlovu, 2015, p. 469). Most of them treated socially derived insecurities and related anxieties in people's sex lives. Sometimes the list of services included the treatment for diseases identified in biomedical terms. Kadenge and Ndlovu (2015, p. 470) points out that healers used honorifics such

as 'Prof.', 'Dr.', 'Prince', 'Prophet', and 'mama' or a combination of a couple of them in advertisements. Many of the advertisements contained testimonials of people of various social standings.

The testimonial flyers, like in the case of the Demelan advertisement, endorsed the efficacy of products or services. The authors' identification of clientele is inconsistent. They attribute cosmology of traditional treatment methods to the comparatively demarcated world of migrants from the rest of African countries who dwelled in the city. In passing, without analysis, they wonder how metonymical references to panaceas of distant lands attracted a consumer base among Black South Africans. They add that the cultural expectation that a healer from 'other' culture tends to be objective also enhanced local people's beliefs (p. 480).

The pharmacists in question may use a combination of generics and herbal medicines when they treat their patients. Inflow of counterfeits to South Africa has been rarely reported except in the case of various skin screams sold by hawkers and small shops in Jepeestreet.[19] Traditional herbal products have an

[19] Once a young woman came to the pharmacy and asked for 'Apetito' at the Francia pharmacy. Joseph told her that they did not keep it. According to my informants at Mayfair Mall =, Apetito, a pill that shows in the poorly printed package that it is made in Mumbai, India, enhances weight gain or 'increased appetite'. Traders set up stalls on pavements and in small shops to sell these medicines along with creams, Grandpa Headache powders, Dispirin tablets, and perfumes. Most of the creams were prescription drugs prescribed by dermatologists for diseases such as eczema. All the shops sold these cream based solutions; they piled them up on the stall or displayed them behind the glass. A majority of them were marketed by Shalina Pharmaceuticals, a Mumbai-based company that markets dermatology creams to Ivory Coast, and Botswana. Stephen, a young man of Nigerian origin, sold these creams in Bree Mall in a stall set up in front of Sunil's pharmacy along with pirated inspiration books, other cosmetics, and earrings. These products contain *steroids* and *corticosteroids* as active ingredients. Doctors prescribe them for eczema and other severe skin diseases. Whitening of skin is a side effects. The traders and a cab driver told me that a woman supplies these items from Mozambique on a regular basis. She smuggles them in a taxi and drops off the packages at the shops. These creams are S 4 medicines in South Africa. Those who are knowledgeable about the usage bought these at a cheap price.

ambiguous relation to the law. Many of these products are not registered as alternative medicines with MCC. However, local cosmology treats these products as similar to other medicines.

Webster

The Jeppe Town (or Jeppestown) region in CBD hosts Sunil and Webster pharmacy. A poverty and livelihood study conducted by the University of Johannesburg demarcates the ward of Jeppe Town as one of the poorest areas in the administrative areas in the city along with various other townships (De Wet et al., 2008). Webster pharmacy, located in the Union street, runs very busy. Everyone, including Johnson who dropped me in his taxicab, knew the building very well. Many doctors set up their 'private practice' in the building. A man who worked as a security guard for the entire building told me that the space was named after a famous British doctor.

Historically, this building hosted what Beavon (2004) called medical suits to cater to posh clients, though set in an English-speaking working class neighbourhood, in the 1950s and 1960s. When shopping in CBD went out of fashion people refrained from visiting the specialists and the GPs at this building. Soon, doctors abandoned the building to set up their practices in the northern suburbs. The neighbourhood became an abode of crime by 1990s when homeless people occupied office buildings in this area (Beavon, 2004, p. 208). However, the building still has Webster pharmacy at the ground floor, various dispensing doctors, and specialists upstairs. The less affluent crowd of Jeppestown, CBD, and elsewhere consult doctors here.

At the first glance the pharmacy looked like a cheap fast-food shop. A close look renders advertisements of cough mixtures and various vitamin tablets of the 'Webster' brand along with prices visible on the wall. Almost always, 10 customers sit on the benches waiting for consulting the pharmacists. Wood, a pharmacist in charge in his fifties, worked in front of the customers, in a separated space. John, a pharmacist in his late forties, counts pills, places orders, and moves very often through a narrow makeshift door to collect baskets in which two women in their forties assorted new stock for shelving. Anna, Solomon, and John form a row in front of the customers. Other than this, there was a security guard.

I visited the pharmacy a week in advance, and I had met John before to get permission to observe the processes in the pharmacy. However, the pharmacists and their assistants were incredibly busy. When I attempted to talk to Anna, a young pharmacist, Wood, an old pharmacist-in-charge, interrupted me. He told me that I will not able to speak to them since the patients were waiting. I could only exchange a few words with John who was sympathetic to my questions.

My visit coincided with the beginning of the month. Hence, the new stock also came in from Pharmed. Against the larger portion of the wall, two assistant pharmacists dressed in white 'Webster' uniform unpacked delivery boxes, alternating between this and dealing in cash. Most of the Indian companies had their generics sold here. Even though I could do more observation at the location I came to understand how generics are important in the daily life of people.

The Flucap: The Story of an Indian generic brand

My ethnography at the pharmacies helped me reflect on the real practices around consuming generics in general rather than helping to document the pharmacy-oriented practices of Indian companies *per se*. Of course, most of the Indian generic companies attempted to give special discounts and attractive prices for pharmacies since chance for substitution of an original prescription are usually high at the pharmacy. However, I attempted to follow up on a story (Cf., Read, 2000) of a single Indian generic product to see how it was dispensed.

Flucap (paracetamol, caffeine, chlorpheniramine maleate, phenylephrine hc, and vitamin c) is one of the medications used ordinarily by the pharmacists because of the fact that they were cost effective. Jutaina distributes Flucap syrup whenever a customer came complaining of flu, cough, and fever. The syrup, manufactured and marketed by Carrim's, Roodepoort, owned by Shitala, has ingredients for all these illnesses. She told me how Flucap costs less to the patient than buying a cough syrup and tablets for flu separately. She sold around half a dozen Flucap syrups on the first day I did my ethnography. When a customer asked for Flucap tablet instead of syrup she had to send him back.

All the four pharmacies order Flucap tablets in bulk. They came in a small green bucket consisting of 1000 tablets. One package of Flucap ready for dispensing in a plastic pouch costs only around R. 10. Smith who works at Webster pharmacy told me how he has been dispensing the product for many years. Now, Carrim's over—the—counter products have gathered a reputation of what pharmacist call as 'cost effective' medicines. Four years before, when Shitala faced sanctions from the USFDA for violating Good Manufacturing

Practices in some of its Indian plants (van Zyl et al., 2007 for more on GMP), the locally made brand Carrim's was helpful in establishing trust. Shitala bought over and upgraded Carrim's in 2005 (Jogee, 2009).

Pharmacies (other than various dispensing doctors) in areas such as Braamfontein, a part of CBD where the staff of the university, students, and office-going people count more as potential consumers, do not keep the same set of generic brands of Shitala as that of the pharmacies located in Yeoville and Jeppestown locations, where predominantly lower-income people lived.

The pharmacies that sell Indian generics form a territory in which the lower class and lower-middle class buy medicines. This shows how location is important in the way people consume pharmaceuticals to realize the use value; and the complicated processes of dispensing by which pharmacists mobilize pharmaceuticals as commodities.

Surely, generic pharmaceuticals are found to be important in proletarian markets. The low price of generics and their trade as mere commodities are relevant in the circuits of creating mercantile surplus. However, broader moral claims of generic companies do not have any value here. This is the contradiction. This empirical reality gives impetus to the critic of humanitarian pretext that ruled the public debates as a theme.

Conclusion

The ethnography of dispensing shows that the residents from the neglected parts of Johannesburg approached pharmacists for wanting the services provided by the specialists and GPs. Pharmacists in turn generate profit through technologies of selling cheap. These entrepreneurs manipulate kinship among the staff, and integrate their services to the inner logic of a specific locality. The survey of the social history of spaces of fieldwork qualified me to arrive with this observation.

According to Lakoff (2005)'s observation in Argentina, audit data divides the city into bricks. The industry knows the brands of medications that trickle down to people. Furthermore, sales representatives are allocated a 'territory'—a set of neighbourhoods. How does 'pharmaceutical territory', if I may emphasis this term, inform social history and its people in Johannesburg? There are ethnic markets for pharmaceuticals. In these markets a high degree of syncretism is found. Equally, inequalities perpetuated by Apartheid have a residual presence.

'Emerging markets' as a usage flags the expansion of Indian generics into hitherto neglected Black townships. This concept does not mean that poor are suddenly qualified to be termed middle class. Thus, this chapter is of the view that the flow of generic pharmaceuticals disrupts the notion of 'emerging market' as espoused by the marketing literature in South Africa. Yet, the circulation initializes more and more people into the biomedical matrix. This results in the development of an array of practices at the heart of the 'emerging markets' by different people who exchange generics. The ethnographic observations

conducted at four pharmacies in the CBD of Johannesburg show how dispensing of pharmaceuticals in the market is so different from the way an advertising manager could fancy, leaving her strategy of packaging, pricing and advertising aside. The dispensing situations move back and forth between licit and illicit trade. The ethnography of dispensing also splits open the methodological flaws of LSM as a way of measuring wellbeing: people spent a considerable amount of their income on health, despite their dynamic efforts to negotiate with different sectors of care which are so intertwined with urban informality. Broadly, by juxtaposing the history of commodities in Johannesburg with ethnography, I note how urban geography encapsulates itself in the circuits of pharmaceuticals, before people appropriate their use value. In that way, space and commodity are dialectically connected. In relation to the notion of value I observe that pharmacists and marketers in low—income territories carry out a sorting process by making use of an intricate set of local knowledge and practices.

In the next chapter, I will dwell on how medical representatives interfere in the generic pharmaceutical market places located in a different spatial setting, namely, the northern suburbs in Johannesburg.

Chapter 4

Of sales representatives and tenderpreneurs

Traffic in generic pharmaceuticals

Introduction

The last chapter dealt with the circulation of generics among the poor in areas of Johannesburg. This chapter is centred on the following questions: What are the ways in which cultural brokers such as sales representatives and middling mangers translate generics into the healthcare industry when Indian companies have broadly increased their relevance in Johannesburg? What are the manifestations of pharmaceutical relations and brokerage in the context of a transitional period of public health scenario in which Indian pharmaceuticals companies dominates?

Emergent themes from my ethnography of 'pharmaceutical relations' based on fieldwork conducted among sales representatives and middling managers in the year 2014 contribute to the discussions below.[1]

[1] I found that one of the facts in the exchange of drugs is the layered fashion in which the medicines and 'incentives' flow. Incentives are gifts; they are usually stationary, food, and even friendly conversation. These technologies of corruption mediate the transactions between sales reps, receptionists, and health practitioners. There are also monetary transactions between the wholesaler and the company. I also found that the exchanges between doctors and a detailing rep are mediated by age, gender, and race. So, is the relationship between the pharmacists and the pharmacy rep. This

Charlie is a medical representative who meets mainly general practitioners (GPs). She let me follow her for three days in 2014 and two days in 2015. Travelling with Charlie was a different ethnographic experience; and that is what has gone into the core of this subsection. After a whole day of shadowing her, Sihle, a young 'pharmacy representative' of Shitala, introduced me to Charlie.[2] Besides, I interacted with 20 medical representatives, mainly young women, during three years of fieldwork. My stint with Ann, a specialist rep of Shitala, lasted for two days. Moses, who I call 'an ARV rep', let me follow him to HIV clinicians and provided me a lot of information when I met him for about four times. Barring a few exceptions, I met the rest of the sales persons in the boardrooms of Gemini and Sphynx—two Indian companies—during their quarterly business assessment meetings.

In an ethnographic account on pharmaceutical sales practices in the USA, Oldani (2004) analyses the practices of building relations and selling medicines with reference to gifts. He observes that there is an involution or internal complication in the gift economy in the age of technologies of tracking prescription through auditing.

Lakoff (2004, p. 138) describes techniques of auditing as central to forging 'pharmaceutical relations' for exchanging antidepressants in Argentina. Domestic

helped me to formulate this entire section on 'pharmaceutical relations' (Lakoff, 2012) that goes into the sale of generics in Johannesburg.

[2] A simple description of the sales process is an important aspect of this chapter. I found Charlie's portrait easier to draw.. I have sidelined my observations and interviews with a few other medical representatives I met at different places. Charlie is comparatively older among the sales reps that I met on the field in Johannesburg. Being a divorcee, she lives alone in Sandton; she spends her weekends at a club that is for women who live alone. Charlie is of Afrikaans ethnicity; however, she was brought up in the city in an English-speaking environment. After working as a specialist rep, she demoted herself to be a 'detail rep' who 'calls on' GPs.

generic companies become market leaders in the antidepressant market, whereas innovator companies lag behind. This phenomena is due to the success of the former in penetrating the market through 'gifting'. The 'gift transactions' promote unethical circulation. As a norm, doctors prescribed antidepressants for socially induced stress (p. 138). The 'pharmaceutical relations' are analysed under the broader theme of 'pharmaceutical reason'. Pharmaceutical reason consists of shaping the politics of pharmaceutical circulation in calculated ways.

Ecks and Basu (2009)'s study on the circulation of antidepressants in India describes how the prescriptions of generic antidepressant brands float in the market when psychiatrists entirely relay on 'kickbacks' from the pharmaceutical companies to earn extra income, given that legal regulations around gifting are 'murky'.

Seeberg (2012) observes the 'nexus' between pharmaceutical companies and various kinds of private practitioners[3] based on three varieties of gifts in Odisha, India: symbolic gifts based on 'goodwill'; a share in the profit of the companies based on 'business deals'; and holiday trips given as 'bonuses'.

Harper et al. (2011) has pointed out that in Nepal, Indian generic companies enjoy reputation as makers of 'multinational drugs'. Domestic pharmaceutical companies rely more on distributing more gifts and bonus to lubricate profit extraction. His case study of the distribution of vitamin A tablets for addressing malnutrition (2011, p. 144) also underscores how globalized envisioning of pharmaceutical reason has resonance in the countryside in Nepal.

Ecks (2014) considers pharmaceuticalization as a subtle forms of hegemony. He observes how psychiatrists and the industry have found easy ways to overcome

[3] Seeburg (2012) observes how there are registered and unregistered private practitioners in Odisha, Western India.

resistance to the drugs by referring to them as ‘mind food’ in Kolkata where people loved to discuss about food and stomach.

With the anthropological literature on pharmaceutical circulation being very intricate, I observe how Indian generics’ trade reach to those who even mistrust generics. The generics have been present in South Africa for a long time; a majority of them being reserved for the public sector (Jones, 2011).[4]

Greene’s (2004) article, ‘Attention to details’ describes the way sales representatives build individuality and professionalism by attending to the importance of ‘etiquettes’ in post-War America. Representatives became performers of a complex chamber room drama for gaining the patronage of doctors.

Let me provide some excerpts from my experience of shadowing sales reps in the following section.

Wrinkles around Charlie's eyes: Biography of sales

In this section, I focus on pharmaceutical relations through documenting gift exchange and other strategies. This is a paradigm of entanglement, affect, and calculations. Despite being called ‘incentives’, gifts, such as items of stationary and cooked food, are crucial in forming relations with doctors and pharmacists.[5]

[4] I also thank Joel Quirk for pointing this out in the reader’s report of the proposal.

[5] As Ann, a specialist rep, made new appointments in her new territory, she did ‘drop offs’, that is, she left boxes of tissue paper for the doctors with the receptionists. On the four sides of the cube box, the names of antidepressants and CNS drugs were printed. ‘Drop offs’ are good. Before you see the doctors they are familiar with your presence’, Ann told me. Sihle, the pharmacy rep I mentioned at the beginning, gives food articles, pens, and scissors to retail pharmacists as gifts.

Charlie used the word 'spoiling' to refer to more expensive gift transactions such as cakes and lunches. As sales persons 'spoil' their pharmacists and doctors with gifts they 'spare' their products! (Katz et. Al, 2012; Oldani, 2004). Spoiling also denotes the deployment of *affect* by representatives. When Charlie found out that a pharmacist at the Pharmchain, Sandton, had placed new orders for her medicines, she told him:

> I will ask Jonathan (the manager of sales team) to bring you some tea and a chocolate cake.[6]
>
> 'We will have to spoil him', she told me softly. Later, while we were driving back she told me that she will ask Jonathan to sponsor the breakfast for the annual stocktaking day of Pharmchain. She said:
>
> One hand always washes the other. This is to spoil them a little bit. It is important.
>
> She observed that if she had not gone and asked about the product the pharmacist would not have placed the new order:
>
> You get a R. 1000 here and another R. 1000 there. That adds up to a good amount.

Chain pharmacies also give her information on new doctors who move in to the area and provide data on the sale of their products and that of the competitors.[7]

Charlie takes doctors 'out for dinner' on some days. As we sat for the lunch she sends email based dinner invitation letter to four specialists for lunch meetings. This is how sales representatives cultivate relations with doctors to make them

[6] Jonathan is a young man in his forties. He monitors sales reps in Shitala. I always had to get permission from him for following reps. Hence, I had e-mail and telephonic conversations with him on a daily basis—rather tedious ones during the period of my fieldwork. Jonathan usually shadows the sales reps. 'He also takes notes and gives us suggestions on our work', Charlie told me.

[7] Yet, smaller generic companies accuse chain pharmacies, based on the sales data, of ignoring their brands. Pursuit for maintaining the 'integrity' of brand only motivated very small companies to enter into the 'agreements' with them for shelving unscheduled medicines and listing brands of prescription medicines in the annually forged formularies of the chain pharmacies.

'opinion leaders' of their brands. Opinion leaders influence other doctors through their speeches at educational events. The marketing manager also joins the duo in these 'lunch meetings'. The company representatives usually detail on the products at ease in these meetings.

When I met Sihle, the pharmacy representative of Shitala, she was preparing for 'training' at a pharmacy chain. She bought three packets of *samosas* (Indian snacks), a bunch of apples, three litres of juice, and a dozen chocolates. Later, to one of the pharmacists, Salman, she made sure that the samosas she gifted were *halal*. *Halal* food means 'edible food' for Muslims (http://www.sanha.co.za).[8]

Another way to influence doctors is to invite them to Continuing Professional Development (CPD) meetings. Britten (2008) observes that these meetings, sponsored by companies, provide avenues for sales representatives to socialize with GPs. When I shadowed Charlie in February 2015, before she winded up her presentation with Dr. Carol, she apologized to her for not conducting a CPD.

One of the ethical companies has bought over the CPD. We will be able to do that in October,

She clarified. Dr. Carol had been attending all the CPD events of Shitala. Charlie had the former being listed in the 'A list'. It orders top doctors according to the amount of medicine they prescribe. The sales representatives rank them in an A–F scale. The main targets are 'A doctors' and 'B doctors'. Usually, an A-category doctor has a lot of 'potential' to prescribe. According Margaret who runs a training

[8] Similarly, I followed Sihle on a Friday. She remembered how one of her customers has to go to mosque as she reminded me while we were driving towards the pharmacy. Sihle has been a sales representative for eight years. A pharmacy rep goes from pharmacy to pharmacy and checks the stock of products, places new orders, and talks to the pharmacists. When I followed her, Sihle wanted to sell a new generic cardiovascular medicine. In the morning she gave a 'training' session to nearly two groups of pharmacists at Dischem, Auckland Park. Training implies a short presentation. In this she ritualistically talked about her three cardiovascular medicines. She explained how they have to dispense each drug to the patients.

institute for sales reps, only for some reps, A-grade doctors are those who *really* prescribe the maximum.

The gift relations between sales representatives, doctors, pharmacists 'make the relations visible' (Strathern, 1991). Food items—things consumed for immediate gratification by a doctor—revitalize relations, whereas gifts such as a pen and other more durable things help a doctor to remember the names of the products. Using Marcel Mauss (1967), Oldani (2004) describes how sales persons create *hau* in gifts by individualizing them with the brands of the products. Mostly, of all the gifts I saw, including edible gifts such as fruits and drinking water, they had a sticker of the brand name of a product.

All these descriptions described above are material transactions. Interestingly, there are similar affective transactions. Sales representatives give a lot of emphasis on making doctors and pharmacists 'feel comfortable'. For instance, Charlie wanted to invite Dr. Syed, a cardiac specialist, for a lunch meeting. Shitala's sales manager for the chronic products will accompany Charlie to Dr. Syed. For arranging the event she planned to order a chicken platter from Nandoos, a South African food chain. However, she insisted that she pay a visit to the doctor's cabin to find out on his preferences of *halal* food.

He stayed in UK for a long time. So, I don't think that he strictly eats *halal,*

Charlie observed. Here, religion, in its banal form, enters the heart of the pharmaceutical gift transactions, as a sales person taken-for-granted factors are approached with more caution.[9]

[9] When I met Sihle, she was preparing for 'training' at a pharmacy chain. She bought three packets of *samosas*, a bunch of apples, three litres of juice, and a dozen chocolates. Later on, to one of the pharmacists, Salman, she made sure that the *samosas* she gifted are *halal. Halal* food means

The ‘comfortable talk’ or ‘comfort talk’ becomes a gift in itself, whereas other items such as food and pens may follow. I observe that by and large ‘marketing materials’ are additions to the ‘comfort talk’ sales representatives perform for the doctor.

Charlie remembers the relationship status of the doctors. She asked them about their kids, the holidays they had, or were going to have. In one case, she got to know from the young receptionist that the young aesthetician is having some issues with his foreign girlfriend.

She also told me about more concrete efforts to build *relationships* such as arranging ‘two meetings with the doctors in a month’. For the event held on November 15 she invited six doctors as speakers. Sometimes she goes to the golf court and offers drinks to the doctors, mainly on a random Wednesday, as some doctors play golf on that day.

She briefed me about the importance of the relationships acquired in this way:

After years of contact and taking them out for dinner, I know them.

She was referring to her career that lasted for 30 years.

In all these encounters sales representatives deal with the clients as they employ affect. The pharmaceutical relations include nurtured forms of charming the doctors, gifting, and pleasing the receptionists. This division of labour in circulation is also highly gendered. Charlie told me that most of the sales representatives are female, even though, according to her there are ‘good numbers’ of men.

Doctors are human beings. They prescribe if they like you.

‘edible food’ for Muslims (http://www.sanha.co.za). Similarly, I followed Sihle on a Friday. She remembered how one of her customers had to go to mosque as she reminded me while we were driving towards the pharmacy.

Beyond this, broader idioms of love were abundant in her vocabulary. Charlie, like Sihle did in the pharmacy 'training' once, introduced one of her cardiovascular drugs, atorvastatin, as 'my baby' to the GP, even though I do not want to overemphasize the gendered nature of this performative act.

'Pharmaceutical relations' consist of gendered emotional labour as well as more nuanced ways of acting as the lynchpin of gift exchange. Oldani (2004) documents the shift towards recruiting women for pharmaceutical marketing in the USA. He observes that the normative perception of a sales representative is to be 'female and attractive' (Kirkpatric, 2000 cited in Oldani, 2004, p. 346, footnote 4).

The job of a sales representative is also highly bureaucratic. She follows the directions of her mangers. Private Secretaries at a doctor's office help them out. Meetings with doctors and exchange of marketing material are arranged in an instrumentally rational way (Weber, 1978). The sales staff have instructions on what to talk to doctors. There are no formal institutions involved, and hence, their spaces of interaction are mainly non-institutional (Thornton, 2008), or 'entangled', 'unofficial' or 'unregulated' in nature (Peterson, 2014 cited in Cloatre, 2014). This makes giving a pen as a gift to the doctor or even doctors asking for a pen in the corridor of a hospital, before they move on to the next task. This also helps to have affect and 'value rational actions' such as 'respect' to be part of the pharmaceutical relations.

All the staff of Shitala formed fictive relations among them. They referred to themselves as a family and helped one another in their jobs by making regular phone calls. As one of their colleagues left the job they came together for a lunch and gave a farewell party at a restaurant. Professional relations have contributed to the grooming of urban friendship.

This is slightly different from what Horwitz (2013) in her narration of nursing in Baragwanath hospital, Johannesburg, has documented. There was imposition of mandatory sociality among nurses. Matrons commanded authority from the 'sisters' even though the latter were related and dedicated to their work in 'altruistic' ways during those days.

The relevance of pharmaceutical relations for Indian generic pharmaceutical companies such as Shitala and Sigma is immense in the context a transition in the characteristics of their operations. The first and second chapters might have already narrated the backdrop of pharmaceutical circulation characterized by altruism as well as commercial interests. Indian pharmaceutical companies responded to changing political formation around pharmaceuticals and interfered in the market place in apparently 'political' ways.

However, the strategic shift that has occurred towards public sector market does not totally reflect in the sales tactics of Shitala in places such as northern suburbs.[10] Most of the patients here are supported by medical schemes, while a few are 'cash patients'. Cash patients are those who pay ready cash for consultation and medications. Jogee (2009) also notes that at the beginning Shitala's operation in 1995 was mainly focused on conducting sales to high-income groups in Johannesburg.

The lower prices are important in forging pharmaceutical relations in this private market (Cloatre, 2013).

[10] Mostly wealthy and white people moved to northern suburbs gentrifying from CBD in the 1970s. This area has been identified as places where the process of the formation of gated communities and blocking access to broader public takes place (Dirsuweit & Wafer, 2006). However, Mabin (2014, p. 410) notes that many people from various townships travelled there for work. Black middle-class people have also found the urban amenities gratifying. There also are 'new sites' of tastes and subsequently forms of 'new suburbanism' (p. 407).

When Charlie visited an aesthetician in Fourways, she introduced her products with remarks on the price, even though she knew, as she joked to him, that 'the ladies' who consult him 'have a lot of money'. As she finished talking about rosuvastatin, a cardiovascular drug, she placed a bottle of water on the doctor's table and said, 'hydration, doctor'. The bottle had a sticker of atorvastatin on it. She came to the aspects of the price:

> C: Atorvastatin (she turned the bottle to show the sticker on the bottle), it's a cash drug for your medical aid and cash patients. But I know, it is not as popular as the original,
>
> She added and then continued talking about a cheaper version of the hypertension drug:
>
> This is valsartan. Give this if you are looking for (a drug for) cash patients.

In this discussion, reference to price was to facilitate the conversation. Charlie knew the doctor since childhood and due to this she could articulate the intricacies of price confidently.

Once, Charlie spoke to me about the economic recession in South Africa, and added that she herself consumes generic medicines. Similarly, in the conversation with doctors she introduced 'cheap' generic medicine as a solution when the economy showed a decline and when inflation was on a rise:

Sometimes people in the northern suburbs also consume generics.

This is to refer to the consumption of generics in the suburbs around Sandton city. Martin Murray (2011) observes Sandton, an edge city that connects people of different interests, as a centre of capital flows in Johannesburg. This is a place where global flows of capital, people, and knowledge intersect. This makes Sandton a 'glocal space' in Johannesburg. The city is full of examples of the segregated spaces, such as gated residential communities (Nuttall and Mbembe, 2008). Hart (2013) uses

the concept of 'passive revolution' to look at what she calls as 'deeply spatio-historical' characteristics of social transition in the city of Johannesburg. However, Beavon and Larsen (2014) have identified the Sandton Centre as the new CBD of Johannesburg. Similarly, Mabin (2014) argues that the northern extension of the city has been growing towards a more inclusive hybrid territory since changes happened in the residential spaces to the formation of office spaces and interracial housing complexes.

I will give a few instances in which Charlie plays around with price in her job. When a GP complained that the medical aid did not support her cardiovascular medicine, rosuvastatin, Charlie said:

> Thank you for that information… This may be because there is a price change. We dropped it.
>
> Here, she used the concern of the doctor to create a spin about the lower cost of medicine.
>
> Then she talks about atorvastatin, another cardiovascular medicine: "It is R. 103". She said in the beginning.
>
> If they (the patients) can't afford rosuvastatin, you have atorvastatin. And we have valsartan also…
>
> She introduced all the cheapest medicines in her list. "I am sure that you are impressed." Charlie keenly looked at the young doctor for a response after saying this. "Yes, I am..." said the doctor, easing the conversation.

Oldani (2004) calls these kinds of conversations as 'language game of pharmaceuticals'. He also says that spinning is an act of deception. Selling activity taps on the doctors' ignorance.

Charlie has a price list with her. ‘Focus products’ are marked in red in the chart. On the first day of my fieldwork with her she met a doctor who is her acquaintance. The conversation between them went smooth. The doctor as well as Charlie clearly spoke about the price.

> C: ‘Rosuvastatin’ she placed a flyer and began her conversation: A lot of other generics do not have 5 mg starters. We have that.
>
> She explained about the dosage and continued:
>
> Our colour coding is also same as ‘x’ (the innovator brand). So that patients can switch easily....
>
> D: Price...? The doctor asked promptly.
>
> C: There is an 11 to 12 % price difference... they are for all plans (medical aid holders and cash patients).
>
> After a while Charlie places a bottle of water on the doctor’s desk and continues:
>
> C: Atorvastatin has dropped its price. And we have packed it in 30s. So that it is easy for patients to have it for a month (and to claim with the insurance company). After a slight diversion, she campaigned for the third drug, valsartan:
>
> This is the same as C.C. (candesartan cilexetil)
>
> She took a multicolour flyer from her file and moved towards her.
>
> D: Price?
>
> C: R. 30.
>
> D: Are you kidding me? The doctor expressed her surprise.

Charlie was impressed with her efforts to convince the doctor about the price margin. So, she added a few words about her drugs for epilepsy (topiramate and sertraline) as well.

In most of the 'pharmaceutical encounters' I observed there was discussion on price. Doctors show their moral concerns towards patients when they ask about the price. Charlie talks about the way her medicines enable a patient to consume her lifestyle-related drugs at a low cost.

'I am on the chronic side of things,' she told one doctor to start the conversation. The company targets chronic medications as 'focus products'. This is because chronic medications always have a stable market. Joseph Dumit (2012) refers to the politics of circulation of lifestyle-related drugs as 'drugs for life' politics.

The sales team struggle to ensure their stability against the precariousness of the drug market and the volatility in the economy. However, they also argue for leaving the highly priced originator drugs and for keeping the avenues of accessing drugs wide open. Pharmaceutical prices also seem to be affecting doctors, even though doctors seem to have no direct benefit for prescribing generics. The generic prescriptions make patients happy. Moreover, doctors see CPD meetings sponsored by the generic companies as a major educational event. Overall, Shitala seems to have built a considerable reputation in Johannesburg.

Even though companies want to sell high volumes, sales ideology advocate a lifestyle in which consumers can chose an effective drug. 'That is also at a price!' Charlie added when she explained about her cardiovascular medicines to a doctor who set up her private practice in a shopping mall in Sandton. This is the emerging political economy of generic pharmaceutical circulation.

Depending on the 'customer' or plans the sales persons offered discounts. Once, Sihle offered an 80% discount on rosuvastatin to an independent pharmacist.

We were standing at the counter of a pharmacy. After introducing her and me, she told him directly that how rosuvastatin 'is not moving'. And she continued:

> I will give you an 80% discount. If you want to juggle with it please let me know.

The economic rationality here is to create a demand by 'moving the drug'. This is also to avoid excess stock getting perished in the warehouse of the company.

> I am giving it at very low price. It is literally throwing the medicine away. These pharmacies are competing with the chains. So this deal will give them some money,

Sihle told me as we left the pharmacy. However, giving temporary offers to pharmacists, to enhance sales, is a common practice. The offers are more attractive for S 2 drugs and cough syrups. When Gemini's sales reps sell cosmetics, they offer 'samples' to various pharmacy assistants in chain pharmacies such as Clicks without the knowledge of the managers and pharmacists.[11]

Starrett (1995), in his study of religious commodities in Egypt, observes how things such as decorated Quranic verses and prayers were circulated. Magical substances exist as real commodities only in the shops and till they are sold. Ascribed hierarchy of Arabic verses in Islam is disrupted in the shop floor as they are displayed in the shelf or heaped on the floor. Yet, shopkeepers ritualistically recited the holy Quran once to acknowledge the holy character of the same.

[11] I also had a conversation with JM, the country manager of Sphynx about this. He explained to me how the sale of generics translates into at the level of selling any commodity: generics do not have any brand value, except for the case when it is first generic brand in the market. Usually, generic brands' sale depends on the agreements between the pharmacists and companies. All companies give temporary discounts ranging between 65 % and 80%. They also offer a select number of packets free for the sale of each 1000 or 5000 packets depending on the product. Some of the pharmacists get soccer tickets and Pick & Pay (a supermarket chain) gift vouchers. Sunil who appears in Chapter 3 told me that the differences between generics range from R. 3 to R. 4. He added that his choice of generic will depend on many things. Companies will give bigger offers if a community pharmacy sells a lot. Sometimes, the companies will forgo the intermediary of the wholesaler and will market the medicines directly to big pharmacies by appointing a separate representative for the pharmacy who maintains the record of the purchase orders. Sunil told me that sometimes this will attract a pharmacy a discount of between 15 % and 20% on the products of the company (Sunil, personal communication, dated 06 March 2015, Park Station, Johannesburg).

Similarly, medicines are alienable commodities as the marketing executives sell the medicines. Once they are dispensed for consumption medicines acquire fetish value of being biomedicines. The medicines are also kept apart from the rest of commodities due to regulations of the State.

The post market regulations are relatively low. The topic is a taboo in the discussions. Sales team always have the pressure to finish their appointments and to increase the volume of trade. As mentioned above in brief, they have a reliable set of doctors in the list. However, the success on their part depends on the way contacts and the lists of doctors are kept up-to-date by meeting new doctors. Varshen, a medical representative of Sphynx told me how he attempts to meet new doctors to sell his cefepime—an antibiotic injection powder—in winter.

A couple of times Charlie met new doctors. In both instances she called up Ann over the phone and instructed her to visit the new specialist doctors she visited. In the second instance, Charlie informed Ann that the spouse of Dr. Vivek, who she visited, was a neurologist. This is how colleagues help one another to face pressure.

The industry markets the products in a very systematic way. Similarly, there is also a lot of surveillance. Charlie literally ran from one doctor's practice to another to finish her target each day. She reports the number of 'calls' she made to the company each day using a software called 'Repwise'. Charlie told me that she bought her iPad in 2013. She uses iPad to synchronize her work with the computer in her office and feeds the number of meetings she had to her account in the computer a couple of times in a day. She told me how she will lose her job if she misreported a visit in the office computer. This is because the sales manager who 'encourages' her to sell often makes 'ghost calls.' In 'ghost calling', the managers call the doctors and ask if a sales representative had visited her or not on that day.

Charlie told me that she usually got the audit data from the company. This helps her to view her performance, to know about the movement of drugs from the pharmacies, and to identify pharmacists who substitute her generic brand overriding the prescription of doctors. However, she pays little attention to the data due to the complexity of the numbers.

In Green's (2004, p. 273) account of the rise of professionalism among medical representatives in the post-War USA, he notes how medical representatives paid attention to minute details. Managers could not influence doctors in any profound way due to differences in 'age, education, class, and prestige'. The industry responded to this uncertainty by instilling representatives with soft skills. In my fieldwork I have observed that medical representatives appeal to a different conviviality. In these interactions overt hierarchies are ignored.

For instance, the everyday performance informs the morality of 'calling on'. The visits, especially 'spec calls' (speculative visits, without a prior appointment) resonates with home visit. Charlie's ability to form fictive kinship helps her, in a way giving her a negotiating power with doctors over the time of waiting. Human (2011), in his ethnography of HIV clinicians' practice at the margins of Cape Town, observes how in professional rituals a doctor ignores certain 'protocols' for the sake of patients. Like this, Charlie also circumvents many of the protocols in her career.

Charlie used the idiom of 'love' and 'family' to refer to her relationship with the doctors. Many of whom were women. Charlie's narratives about Indian generics associate the medicines as things suitable for the consumption of an urban middle class of which she is a member. Charlie talked about her family connections and her own exposure to biomedicine to doctors as she described her products.

Once she stated that she consumes a generic cardiovascular drug of her company herself.

> When I had pneumonia I took levofloxacin, doctor! I could go home in five days.

She told the doctor as she described the antibiotic drug of her company. In fact, this medicine is an innovator drug. Shitala got this product as Nippon pharmaceuticals, an innovator company, bought major shares in Shitala.

If she did not use a product herself she describes how one of her relatives took generic medicines. For instance, her father's girlfriend consumed her medicines for Alzheimer's disease. She gave an intimate description about the drugs. Kleinman (1980) views how illness is culturally perceived. Despite the biological nature of the diseases, an 'illness' is constructed through the narratives of patients and the broader society. Similarly, the brokerage constructs medicines as social objects, consumable and reliable, through the narratives of efficacy.

An ability to talk in scientific language is what Charlie calls 'the language of pharmaceuticals'. This is a commercial language. In their performance as intermediaries, sales representatives mediate the sacred nature of biomedicine and the mundane discussion on illness and wellbeing. The sales representatives get an initiation when new medicines come out. They require a 90% passing score in the exam, according to Charlie.

Ann, the specialist's sale representative, told me about her habit of reading journal articles about clinical trials. If a doctor asks a question she reads more on the product to come up with an answer on her next appointment. As they gain knowledge about the products, they commercialize the knowledge as 'middle range narratives'. However, Ann avoids discussing clinical trials to the specialists: 'You rather ask for

their opinion than talking about medicines. You see them as mentors'. She explained to me how she is more articulate about a product if she meets a GP. She does this for products that are usually prescribed by specialists and thus creating curiosity in GPs .

> You can use the prescription of specialists. I will say that I spoke to the specialist there and another one here...and then will talk about the products. GPs listen to you well.

She told me that she does this for selling psychiatry and neurology drugs.

Oldani (2004) uses the term 'speaking medically' to refer to this. However, based on his own experience, he also discusses how the industry dislikes those who talk 'too much science' than focusing on sales. Lakoff (2005) brilliantly connects the widespread use of Prozac, an old-generation psychiatry drug and the dominance of psychoanalytic paradigm advocated by *salud mental* school in Argentina, to describe how ongoing conversations between the companies and the medical experts have an effect. Generic pharmaceutical companies take advantage of the *salud mental*'s old style. Prozac trickled down to the patients as GPs imitated the prescriptions of the specialists.

The ethics of urban friendship and gift exchange as visible between sales representatives, doctors, and pharmacists is informed by shared patterns of consumption. Biomedical drugs, technologies such as iPads and emails, and access to larger social spaces such as malls, hospitals, and restaurants are consumed by both the groups.

Charlie's work fits into the notion of cultural brokerage as she bridges socio-cultural relations and mediates the flows of information between patrons (pharma companies) and the clients (doctors and the pharmacists), by way of their specific class and cultural locations (Steiner, 1994, p. 154).

Digby and Sweet (2002) have documented the performance of cultural brokerage by black female nurses in missionary hospitals in South Africa in the twentieth century. Most importantly, the nurses translated local idioms of diseases by patients into an intelligible narration for the doctors. Those who could culturally assimilate into the broader host society served as lynchpins of care giving.

In this case study, the cultural brokerage is about the translation of Indian generics into the private healthcare sector. Representation of 'quality and efficacy' is an important aspect of the ideology of circulation. When we came across Karisma, a new doctor who had set up a new private practice, Charlie realised that she was the first sales representative who 'called on' her. Charlie introduced her company as Indian, but one that 'gravitated towards the West later'. When I asked Charlie how she joined Shitala, she told me that she consulted her brother on this. Her brother is a doctor settled in the UK. 'He told me that it's a very good company, the largest in the UK. So, I joined'. This is a metonymical reference. In her narrative she qualified 'Indianness', linking it with the West. In all these cases, the drugs are presented as 'European', and this metonymical reference paid benefits in the settings where Charlie worked. There were also discussions on the technical equivalence of generic pharmaceuticals as products that are *mups* like innovator ones.[12]

Whyte et al. (2002, p. 40) attempts to refer to the connection between metonymical reference to Swedish technology and the popularity of an innovator paracetamol tablet in the Philippines. Super cultural capacities and superior efficacy is attributed to medicines from other cultures.

[12] Charlie told me how *mups* (multiple unit pellet system) are made for slow assimilation in the blood by slow release of active ingredients in the body. *Mups* helps a patient to have prolonged efficacy (Gothoskar and Phale, 2011, July 2).

Glenn (2008) has observed how upwardly mobile South African women have found the consumption of comparatively expensive skin creams imported from India and Europe as an act that connotes prestige. Some of them wanted quick whitening effect. This resulted in the increasing consumption of creams having corticosteroids. This behaviour even risked the long-term safety of the users.

I collected the advertisements of Indian generic brands mainly from two print magazines—*South African Pharmaceutical Journal (SAPJ)* and the *Journal of HIV Clinician's Society*. To my surprise, there was no reference to the Indian ownership of the companies in any of the advertisements.[13]

> The advertisements of Indian companies appeal to the South African market. This is to target a different market and a different country. The companies market the product in such a way that people will become familiar it.

This is what Jane, a marketing manager at *Medical Chronicle*, a magazine circulated among doctors for free, told me. [14]

Like Levi-Strauss observed about myths (Leach, 1974), the advertisements explain and intellectually resolve the contradictions of the selling and consuming. They communicate the fantasy of biomedical consumption (Chapman, 1979). In that

[13] Only one ad opted to connote Indianness. The ad showed a picture of women in yoga outfit. There are four women. The focus of the photograph is on the model in the front. The picture shows that she had slept off while conducting yoga, while the rest were still in heads-down position. As she lies asleep, she eases her legs over her head, whereas her hand lies stretched in a relaxed way. This is an advertisement for an allergy drug. The focus is on the property of the drug that it will not create a sedative effect: 'no sneeze and no snooze' says the advertisement of Sigma. This image builds on the global consumption of yoga, an Indian form of meditation. According to Barthes (1977), images, especially photographs, are objects endowed with 'a structural autonomy' as we can keep it apart from the 'social totality' to which it belongs. Similar to the way he reads the ad of Panzani, we could read the photographs, title, text, and captions. In captions the denoted language is English, the connoted language is global Indianness.

[14] Many advertisements do not have the names of the advertising agency written on it. 'The client totally buys the advertisements. So, you cannot have the name of the agency on it'. Jane, a marketing manager of Medical Chronicle, told me.

way, building local characteristics of an advertisement is important in appealing to people.

Sales managers find out about the patterns of consumption by shadowing representatives or by hearing their opinions in internal meetings. Sales representatives know about local dynamics in the market, the way doctors and patients respond to advertisements, and patterns of sales in different income areas.

Mazzarella, in his study of advertising practices in Mumbai, India, has marked how a new *swadeshi* (new self-making) underscored the marketing of commodities and 'consumeristic globalization' in India from 1997–1998 onwards, after BJP, a right-wing nationalist party, ascended to power (2003, p. 6).

In the next section I will give an account of the sales practices around Sigma's FDCs marketed for HIV/AIDS patients. The political nature of ARVS has a bearing on the prices and circulation. Figuring on the essential medicines list of FDCs has a humanitarian value as well.

Moses: The ARV's representative

I followed Moses, the 'sales representatives of Sigma to Lancet hospital to meet a physician at Park Town. The clinician bargained with Moses over the price of Odimune—a fixed-dose combination for HIV/AIDS.[15] At the end of the conversation, Moses agreed on a discounted price which was R. 100 less than what he had proposed.

D: This is what you get this at Pharmchain. I am not a supermarket,

[15] FDCs replaced the previous generation of single pills for treating HIV/AIDS. Please refer to Chapter 2 for a detailed description of FDCs.

said the doctor as he began bargaining.

M: No, it is not doctor,

said Moses. But he immediately did some calculations on his iPad and came with a reduced price. Eventually, the doctor agreed to stock his medicine in the pharmacy of the hospital 'for his cash patients'.

However, this did not happen smoothly. After asking the door to be shut, the doctor started the conversation by talking about the new medicine:

D: You are dead. This is one pill a day. Very small pill, no side effects

He showed one of the latest generic ARVs, rilpivirine.

Moses diverted the discussion. He reminded the doctor about a conference. It turned out that he is inviting the doctor as one among the panellists. The offer was made to be a keynote speaker and his topic has to be on 'post-Glasgow'. Glasgow is the place where the international conference of HIV/AIDS was held in 2014.

The conversation meandered to discussing the price. The doctor agreed to keep his medicines in the pharmacy of the hospital for R. 100 per package. On Moses' request of selling them to 'cash patients'—in this case, they are patients from the rest of Africa who arrive in South Africa for treatment. After initial reluctance, the doctor calls the door-attending woman to crosscheck the number of patients and agreed to take orders.

Before Moses could leave, doctor came to the issue of quality, and he suddenly started talking about Odimune:

D: It's a shit drug... tenofovir is a shit drug... Most of the guys from the overseas don't buy that.

M: No doctor, it is a very good drug. It is similar to your X, replies Moses, softly to refer another generic brand. But the doctor did not stop the conversation there. He continued:

> D: Why do you send this, I don't do (prescribe) that, some GPs do that. I check protein excretion.[16] It is not the medicine you give like sweets … like in the public sector.
>
> Then he added: I chose FDC very carefully on patients.

However, this was the last sentence about the product, and eventually the doctor agreed. For finalizing the order the doctor advised him to meet the pharmacist in the hospital.

Overall, the conversation had a friendly air. The doctor laughed a lot, cracked jokes, and sometimes banged his fist on the table to supplement his words. Oldani (2004) refers to this kind of discussion about medicines as 'language game of pharmaceutical sale'. Here, the doctor tests the knowledge of the sales representatives. Yet, unlike Oldani (2004) observes Moses did not use a 'spin'.

Moses has eight years of experience with Sigma. He has a diploma in marketing. 'Doctors already know about the product', he explained to me while we were waiting outside the doctor's room. He concentrates on organizing conferences or sponsoring them and ensuring the delivery of the products. Success of Odimune has made him a star sales representative. He shifted his attention from private hospitals towards maintaining relations with Anglo-American, a big mining company, in 2015. Sigma, ever since its introduction to South Africa, provides ARVs to the infected miners.[17]

Whyte et al. (2002) notes how sales executives are not only given partial information about the products they sell, and how they also provide partial information to others.

[16] Clinical trials collect data regarding the absorption, distribution, metabolism, and excretion of the drug (Carpenter, 2010, p.217).

[17] Mining companies such as the Anglo-American started providing ARVs through hospitals due to international pressure after the Apartheid ended. However, companies diverted the risk by creating 'complex financial derivatives'. This involves payment of a predetermined amount by insurance companies to the mining company if HIV hampers productivity beyond a stipulated rate (Stuckler et al., 2010, p. 6).

They see the way information is delineated from the practitioners, sales persons, and consumers as key to the commodification of drugs.

However, Moses receives the knowledge about the side effects from the doctors. His words tell us how he relies on the fact that doctors 'know about the product', than keeping the information away. This can be crucial to the generics and very important for FDCs that have acquired the status of a magic bullet in the government ART programmes. Hence, proper communication rather than communication barriers create value for the generics here.

Moses also has the increased responsibility to avoid stocks running out following lack of availability of lamivudine in India, the South African supply was also affected in 2014. However, the ARVs are by and large smoothly available. The conversation I quoted above, and the career of Moses, is a microcosm of the 'system' in which generic ARVs circulate and their value is created in South Africa (Cf. Briton, 2008).[18]

What is also at stake in the system is broader structural barriers to healthcare facilities and access to necessities such as food. The distribution of ARVs do not always bring in solidarity and resolve immediate problems of patients. Kalofonos (2010) argues how hunger ruins the solidarity of the patients. Often food is distributed along with medicines because patients cannot take medications without

[18] Briton (2008, p. 120) quotes Soumerai et al. (1989) to note how communication regarding prescriptions improves the use of generics. However, he adds how 'entanglements' created through gift transactions create 'system imperatives'. I observe that there is contradiction when generic companies use incentives and information together. The opportunism and arbitrary pricing by sales reps can happen due to this.

food. The ARVs also aggravate hunger. Consequently, patients compete for food and medicines in Burkina Faso.[19]

In the Chapter 2, I have noted how ARVs such as FDCs have acquired a new significance when the government started to sponsor the roll out of the medicine totally. Hence, the politics of nationalism has overshadowed the ART programme. In this fashion ARVs metamorphosed from being a humanitarian good to a public good.

Indian companies have responded to these new dynamics by intensifying their efforts in supplying to the public sector through tenders. Moses told me how Sigma's 14% of the global sale of ARVs are sourced from South Africa. This helped Sigma to manage the current political issues such as 'stock—outs' very carefully without affecting treatment in the public sector. Recently, in 2015, I met a colleague of Moses who had experience of sales in the UK. This shows how selling ARVs in Johannesburg is important for a company such as Sigma. This note adds to my observation in Chapter 1 that FDC marketing flags a humanitarian turn, a false one, of Indian generic pharma capital.

Traffic in generics expects a salesperson's ability to manoeuvre into spaces of cultivated intimacy and to forge what Lakoff (2004) calls 'pharmaceutical relations' by way of giving gifts, and the use of 'language game of pharmaceuticals'

[19] I acknowledge Jeol Quirk's early suggestion in the reader's report of my research proposal. Some of clinicians such as Francois Venter have a highly nationalist approach towards the ART programme and efficient rationing of FDCs in South Africa. In one of the public functions of HIV Clinicians Society held at Sandton on October 2015, Dr. Venter openly discussed barriers such as biases towards sex workers and class-based barriers. The lack of food, according to him, inhibited the success of ART programmes. He also unleashed open criticism against government bodies such as MCC and the failure of the NDH. The generics industry without the help of regulators fail to forecast the demand for future medications. Asituation in which clinics run out of ARVs can have catastrophic effects on the ART programme (personal communication, dated 13 June 2014, Wits RHI, Johannesburg).

(Oldani, 2004) in the liberated market spaces of Johannesburg. Johannesburg is a liberal market because even while Jones (2012) refers to the Apartheid regime as that of heteropatriarchy (Maconachie, 1996, pp. 23–24cited by Hyslop,2000) Hyslop notes how urban Afrikaner women liberated spaces by taking up white-collared jobs between 1965 and 1980. Goyns (1995, p. 61) has noted that sales ladies started arriving in the industry during the Second World War. A certain Verrinder Limited—a pharmaceutical sundries supply company—initiated this change in the male-dominated profession due to labour shortage in Johannesburg.

These days, a successful sales representative earns on an average R. 60,000 to R. 80,000 a month as commission. For Charlie her (undisclosed) salary enables her to live an independent life and to save for her retirement (Charlie has been eager to meet her targets quickly for the second reason).

Medical representatives cultivate respectability in the circuit of doctors by adapting conventions of persuasion. One of the interesting aspects of the performance of sales representatives is that they receive huge allocations of money from generic companies. This is justified since the private health sector in places such as northern suburbs do not necessarily correspond to the logic of sales that are visible at ‘cross roads’ in the city, such as Yeoville and Noord Street. The elites emphasis on orthodoxy.

Sihle, the young pharmacy representative of Shitala, has formal education as a pharmacist from the University of Kwazulu--Natal, Durban. She started her career as a medical representative. She told me that she struggled to get appointments:

> There is a lot of pressure. You have to take prior appointment before you meet the doctors. It is very difficult to fulfil your requirement. The company wants to meet them

> once in a month. But, I only get to meet them once in 6 weeks. So, I shifted to a pharmacy which is easier. But we (the reps) work together as a team...

She told me that she is doing well with pharmacies being her marketing domain. When I asked about the factors that influence her in her work she emphasized on cultural capital such as schooling:

> There are many things that influence you that you do not know. Sometimes you get an order because you went to the same school with your customer and that you know her for a long time.

She also complained about the practices of gifting in the marketing. She partakes in the gift exchange by giving away marketing materials. However, she was referring to higher degrees of corruption:

> It is illegal. Only some say directly that we got some good gifts from the competitor.[20]

On the contrary, Ann, the 'specialist rep' of Shitala does not have a degree. She attended some courses in marketing. She used to be a graphic designer before she took up the job. She also photographs family events to earn extra income. She seemed uncomfortable when I asked about her education. Charlie dropped out of her nursing education after a year of enrolment to become a marketing executive based on her graduate degree in chemistry: 'I was not enjoying the dirty clothes' she told me justifying her calling.

At the smart group-training centre in Midrand, almost 14 of total 20 people who underwent a training to become sales representatives were white, married females. Hachimi and Hunter's (2012) ethnography of call centre jobs in Durban argues that

[20] At an Africa Health Conference Expo at Glenhove in 2015, I met George, a middle-aged former sales representative, who told me that he quit sales due to difficulties in getting appointments in a manner similar to Sihle. The fact that the old-fashioned 'weekend away' method in which a sales rep could 'detail a doctor who turned for a trip with his family at leisure' ended also added momentum to his shift.

white South Africans define respectable English accent, and this enhances their chances of success in the lucrative labour geography. The blacks who speak white's accent also became successful in the same job.[21]

In the profession of medical representatives, mostly, Afrikaner managers recruit Afrikaner people. The pharmaceutical industry is full of 'direct discrimination' camouflaged as a preference for bilingual sales persons. Despite being Black Economic Empowerment companies (BEEs), a lion's share of high managerial-level jobs in Indian pharmaceutical companies such as Shitala, Gemini, Sphynx, and Carim's, except that of Eureka where the number of Indian expatriates employed is almost half of the staff, is held by whites. However, I could hear stories about medical representatives who are 'exceptions' in the circle.[22]

Dolan and Scot (2009) in their study of lower-class women in Soweto, Johannesburg and elsewhere, observe that getting involved in the direct marketing of Avon beauty products in close networks in urban neighbourhoods marks a phase of economic independence and presents a 'professional' garb to the life of Black women.

Unlike the structure of dispensing in pharmacies as described in Chapter 3, the case above, the sale of generics to doctors still remains conservative. Even direct

[21] 'Coconut' is a derogatory term for those blacks who have appropriated white's accent. They are black skinned but held whiteness inside.

[22] Nadine, an employee of Impact Rx audit firm that recruits sales persons for different pharmaceutical companies, narrated to me a story about a very careerist black lady. From an office assistant's position she rose to be a successful sales persons. Her usual witty way was an advantageous trait for sales reps. Veronica's foreign education (from Scotland) helped her to build her career detailing Afrikaans-speaking doctors. Currently, at Gemini she designs and monitors the sales of skin creams, shampoos, and scalp sprays. According to John, her employer, Veronica had a career as an 'exceptional rep'. Being pretty (as in the case of an Adcock rep who appeared in the advertisement of Demelan cream of Gemini) or being able to speak English and African languages (as in the case of David, a sales rep of Sphynx who sold prescription drugs in the townships) also helps black reps to build a successful career.

sale of skin creams of Gemini, a small Indian company, depends on the services of young sales girls, who come from largely privileged sections. These sales representatives present their products as 'clinically-based' dermatology products rather than cosmetics, and thus avert competition from big cosmetics brands such as Ponds.

In a study done in Western Australia, Bulsara et al. (2010, p. 242) note how seniors viewed the intervention of medical representatives with high suspicion. They tend to believe that sales representatives set up unholy deals with doctors and pharmacists to get them to prescribe substandard generics.[23]

Beyond doubt, sales representatives translate generics as valuable commodities. They translate the value of generics from factory to the doctor. How do they do this?: 'Charlie' with her pseudo manipulation and use of terms such as 'love', and discussing her own family manages this in an idiosyncratic way. Gifts are involved in this process.

Certain middling managers have also emerged as high paid employees who determine the availability of the drugs. The scale of operation of middling managers who manage logistics—processes of mobilizing generic pharmaceuticals ready for consumption by mediating demand and supply dynamics—is huge in comparison to that of medical representatives.

[23] This study further alludes to the importance of communication in the value of generics.

Politics of circulation of generic pharmaceuticals in the public sector

My central analytical concern in this subsection is to place the circulation of Indian generic pharmaceuticals in the political economy of South Africa, characterized by the significance of popular economy, as well as formal economy (Hull & James, 2012). Pharmaceutical market operates according to the rules of broader market; but, there are a lot of elite and erstwhile 'notorious' popular economic practices. For describing these dynamics, I focus on a 'middling manager' who embodies 'logistics' of life-saving medicines in South Africa.

The government has split open the tender process allowing competitive parties to quote for supplying medicines. There is a commercialization, or mercantile logic, implicit in the pharmaceutical tender (James, 2011, on land reforms in Mpumalanga). That way, this subsection asks the following question: Why does the institution of 'tenderpreneur' acquire a new significance in post-ARV mass rollout era? The extended puzzle is to know the way individuals attach meanings to their services and fortunes.

Tenderpreneur is a South African term that refers to politically connected individuals. In various industries, who gather tenders from government departments and adopt a 'hands on' approach by providing their own services or outsource the contracts to other companies (McNeil, 2012, p. 105).

Logistics connects places, people, and things. Logistics in contemporary times is a part of production. Territories where war, violence, and disease existed become the production centres of containerization (Cowen, 2014; Birtchnell et al., 2015). There are various workers and staff in the terrain of the global movement of goods. Why is the approach to view actors such as 'middling mangers' as active agents

rather than mute subjects in the broader structure of logistics important? Following Julia Hornberger, I argue that these middling managers add value to the circulation. In the context of the management of logistics, companies usually respond to the requirement of the State.

The following account is of the production of value through mobilizing drugs as public goods. For doing this I resort to ethnography, characterized by an interview with Rajiv, the CEO of Ujamaa—the ARV wing of Shitala. I have also interviewed tender managers in two other Indian companies and a few people called 'distributors'/agents, staff in the NGOs, and pharmacists in public sector pharmacies. The individuals who embody logistics knit pharmaceutical networks in the generic industry. There also pharmacists in the public sector who play key role in the policy implementation. In the introduction I have already noted how the circulation of generic ARVs in the private sector ensures a monetary return in South Africa to the Indian generic companies.

In logistics the geographical distance between place of purchase and place sale is very large. Thus it becomes a part of production. I understand logistics as the embodied technologies of making drugs available. This includes passion for helping patients, travelling to distant lands in India's metropolitan cities to gather supplies, and building friendship between the people in the generic pharma industry, hospitals, and depots.

I was fascinated by the way Rajiv, a middle-aged man, then a tender manager for Shitala, spoke Hindi fluently; in fact as well as I did as I spent five years in New Delhi, when I interviewed him in 2014. He told me that his father did not know anything about India even though their forefathers were indentured labourers. I found him reading about the elections in India in the online version of *The Times of*

India, an Indian newspaper. He told me that this was necessary since he travelled to India very often, and 'when somebody asks' he cannot be ignorant about Indian politics.

Diasporic Indians, mainly found in Durban, only retained a 'transcendental' notion of India (Lindy et al., 2004); and many, having no connection to real India for generations, seek 'spirituality' aligning with Western notions when they visit India for tourist purposes. The economic trade with India has been very minimal, though not entirely inexistent (Lindy et al. 2004, p. 11).

As I mentioned above, Rajiv, stepped up his career from a tender manager to the current CEO of Ujamaa, the ARV wing of Shitala in 2015. The preference for people of Indian origin as local managers in Shitala might have helped him climb up the ladder (Bhandari, 2005). During the conversation, a middle-aged man came from another company to meet him. These business relations implicate what he calls as 'friendship' in the industry, and the pilgrimages for pills from India form the phenomenology of 'tenderpreneurship'. Rajiv re-enacts his Indian identity by reconnecting to India. Many believe that tenderpreneurs do not contribute towards value in the supply chain unlike the real businesspersons. Rajiv, beyond doubt, earns his income by mediating between the State and Shitala. His role is rather sacrosanct for the State.

In the post-Apartheid period, businessmen among 'Indians' aggressively appropriated opportunities of affirmative action such as Broad Based Black Economic Empowerment (BB-BEE) and rose through the ranks of corporate hierarchy faster than Africans (Hart & Padayachee, 2013, p. 78). Rajiv's father's generation had a comparative advantage of being urban and being employed in semi-

skilled supervisory jobs (Lindy et al., 2004); and many, especially, Gujarati traders gained heavily from the 'fronting practices'—that cited a nominal black ownership—in the Apartheid and post-Apartheid period to have ownership of shops (Hyslop, 2005; Krige, 2012).[24]

McNeil (2012) gives an account of tenderpreneurs mediating state patronage of reggae music in Venda. In response to this, performers change the intrinsically political nature of the music to 'sanitize' them for the public events, as this publicity enables them to 'cross merchandise' by selling the pirated copies of their own albums for survival and for countering competition from globally reputed distributors.

Deborah James (2011) provides two case studies of brokers who mediated government-initiated land reform efforts in Mpumalanga. In this case, government allotted land to tillers who found themselves evicted from white-owned farms during

[24]The history of Indian business in South Africa is studded with success and failure. Erstwhile Gujarati-speaking merchants owned various shops and businesses from 1872 onwards. Indians of indentured origin also owned smaller shops in Durban, hence, the term *Dukawallas* (perhaps this is derived from the word *dukan wala* (Hindi)). During 1920s this kind of trade was epitomized. There was a stereotype of the Indian trader that depicted them as 'exploitative and unscrupulous' (Hart & Padayachee, 2000, p. 693). After the consolidation of Apartheid policies, 75% of traders shifted their shops from Durban to Indian townships in 1978. Indian businesses re-emerged in Durban and Kwazulu Natal after the 1990s. Many of the Indians ran family business ventures; many of the most successful big companies such as Harish Mehta's Universal Web Printers quickly modernized (p. 703). Indians still run various curry shops, fish markets, and spice shops in Victoria Market, Durban. Recently, many South Asians from Pakistan and Bangladesh have joined as apprentices in various shops owned by South African Indians in enclaves such as Oriental Plaza at Fordsburg in Johannesburg (Grant & Thompson, 2015). Islam was also one of the uniting factors. There emerged stereotypes about these migrants too. One of the enduring xenophobic myths is that of a Pakistani youth who married a South African woman in order to get permanent residence and abandoned her later in the course of his stay (Hoag, 2010, p. 10). These mythologies signify the increasing 'stranger intimacies' (Shaw, 2011) and the broadly stable interaction between local South Africans and new migrants. The reaction of the State towards new trends of immigration was to create 'illegitimacy'. The staff of Home Affairs determined who 'deserved' the paperwork and who 'abused the system' (Hoag, 2010). In places such as Jeppestown, Asians, including Chinese, became 'visible and vulnerable' to robbery and abuse by local South Africans (Park, 2008). Specifically, a majority of new Indian migrants are in the IT sector. However, many of the Indian migrants constituted people with low education. Most of them ran shops and restaurants and hailed from Gujarat.

Apartheid. Desire among potential beneficiaries for mobilizing land for commercial transactions gave opportunities for brokers to emerge from the same set of people. When many of the tillers believed in the customary theories of property, the brokers filled the gap between the law and bureaucratic practices created by market/state nexus by their access to the idioms of constitutional rights and skills in using property laws (James, 2011, p. 334).

Rajiv gathers various tenders from NDH, provincial depots, and other companies. In this survival strategy, Carim's transforms to an outsourcing unit for Sphynx pharma, another Indian company. Similarly, when Shitala faces stock--out, Rajiv will outsource production to Winthrop, subsidiary of Sanofi Aventis, a French company. Shitala's capability as a big company enables Rajiv to import ARVs from India in the case of shortage. The ARVs enter first priority in the local production when the company officially wins the tender as happened in 2011 and 2015.

For those hospitals who purchase 'buy out', the rate settles at a higher price though they are not as expensive as the retail price in the private market. In turn, the supplier should be prepared to handle extra pressure to improve logistics. Giving up on supply is a desperate move by a company that won the tender when no options are left and rather than pay back the government to cover the difference between the price quoted in the tender and the price of the buy-out as a penalty.

I talked to him over the phone a year later in 2015. By then Ujamaa, under his leadership, had won the ARV's tender worth R. 3 million. He apparently lived a busy life which included visiting various places in the country as well as travelling to India.

By coincidence, I also heard about him from William, a young man who worked

as a logistics manager at Sphynx. The friendship that developed between JM, the country manager of Sphynx, and Rajiv, who previously worked for Sphynx as a tender manager before he left to join Shitala, continued ever after. Since Ujamaa won the tender Rajiv allots JM a share of the pie buying supplies of ARVs from Sphynx to meet the requirements of the tender.

In the public sector, there are various socialities making medicines available. Most of the members, who actively participate in the efforts, manage stock from running out had previous experience as nurses or pharmacists in the public sector. A few are people living with HIV (PLHIV). So, they express overt passion about availing medicines, especially adherence-based medicines such as ARVs. Any chances of patients developing drug resistance due to shortage are considered as moral degeneration in the gift economy of public goods.

In the following section, I provide a broad outline of practices that fall under the ambit of logistics.

Of crooks, tenderpreneurs, and Indian generics

The National Department of Health (NDH) conducts biennial tenders for pharmaceuticals. On account of NDH's interest in the steady supply of pharmaceuticals from various private companies, Rajiv attends the meeting of NDH. The government HIV/AIDS treatment guideline and essential medicine's list (EML) determine the ideal type of the circulation of the pharmaceuticals in the public sector. Medical schemes usually follow up the list in their 'formulary', and hence, the representatives of the medical schemes are members of the EML's committee. Let me elaborate the main issues in logistical availability below.

Logistics usually includes storing, transporting, inventory, customer services, order processing, packaging, and information or data cost associated with 'foregoing' (Allen, 1997). The regulatory apparatus watch over the importing, transporting, and distributing of medicines. Existing literature on logistics in South Africa focuses on transport. Cilliers and Nagel (1994, p. 6) note how State-regulated companies such as Transnet managed more than half of the transportation of goods in South Africa. The contribution of Transnet was 62.5% in 1988 and 60.7% in 1991. In South Africa the networks of roads have been found to connect ports and cities rather well; but the field of logistics is expanding (Cilliers & Nagel, 1994).

One of the problems in process of transportation of antiretrovirals has been safe delivery. Efavirenz tablets, one among the three first-line regimen and given their 'strong' effects similar to lysergic acid diethylamide (LSD), have found use among drug abusers in Johannesburg. They steal efavirenz from the depots and clinics, smoke along with cannabis (dagga), as a cocktail recreational drug called *Nyaope* or *Whoonga* (Kotlolo, 2014, June 13).[25] Many a times the vehicles carrying prescription medicines are hijacked in different parts of Johannesburg.[26] A driver at Pharmed, a

[25] The *Whoonga* smoking was spotted to be widespread in the Kwamashu township, in Durban, from 2010 onwards (Kooper-Knock, 2014, p. 6). It created an extreme form of addiction along with the immediate effect of hallucination. The *Whoonga boys* smoked up and committed crimes and theft together. The mob badly manhandled some of these ruffians as the mob's deliver public justice system triggered even flogging till death. Many of the school children used the efavirenz when baked into muffins. Local community understands the ARVs as 'strong' medicines. Clinically, they can penetrate to cerebrospinal fluid (CSF) (Davis et al., 2014). Many of the patients even sold their efavirenz ration to earn money. The abuse posed the threat of 'cross class resistance' among the addicts and others (Larkan et al., 2010, p. 71; Grelotti et al., 2014, p. 516). Another way of abuse of effavirenz is to make a crystal methamphetamine mix known as 'tick' (p. 62).

[26] The regional depot of Hillbrow set up CCTV cameras at every corner of the depot after the frequency and volume of stealing increased. The tablets were apparently stolen by the health personnel. So it is present in the street during transportation:

> Those who know about ARVs rob it. They also hijack the public transport. It happened once when we were issuing ARV regimen to the clinics. They hijacked the transport and took the whole regimen. Then, they will take efavirenz and throw all others. The effects

private wholesaler firm in Fordsburg, makes a living by driving a multipurpose vehicle in which he delivers medicines to the pharmacies in CBD. He told me how his job involves high risk while payments are low.

The case of ARV circulation shows that South African Police (SAP) is a stakeholder. The logistics manager of Shitala wrote the following on her 'linked in' page about her experiences in dealing with ARVs:

1. Making a purchase order for ARVs and further invoicing the same at Shitala.
2. Informing SAP about the movement of the shipment.
3. Corresponding with Shitala India with Shitala South Africa and SAP about the arrival of stock. (There is a sorting out process of medications for distribution. She prepares the inventory and omits damaged and perished goods).
4. Carrying out circulation with the distributor and clearing payments through banks involved in the transaction.

The scope of logistics is beyond these firm-bound duties.

Recent anthropological literature maps the circulation of commodities as part of production rather than distribution (Birtchnell et al., 2015). Mobilizing goods for consumption without delay across the globe is an important addition in the value production (Cowen, 2014). Cowen (2014) chose to understand logistics in the broader structures of nation, state-bound, yet, vulnerable spaces. Using the metaphor of war, she analyses the movement of goods as a manifestation of value-making *via* deploying structural violence in the globe and denying agency to gendered and racialized workforce.

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of efavirenz are known. We tell the patients about the side effects (when we dispense the medicines). The drug addicts just hear all these things from the street,

says Robert, who works as an assistant pharmacist at the Hillbrow clinic (personal communication, dated 19 March 2014, Hillbrow, Johannesburg).

The literature on the movement of pharmaceuticals has responded to the earlier notion of the debates in logistics. Logistics itself was called as the dark continent of value chain. In addition to this, generic pharmaceuticals that flow into Africa from the rest of the world have always been referred to as pirated goods. In the narratives of logistics on generics—in contrast to my broader focus on them as gifts—there is an overemphasis on the notion of theft (see Cowen, 2013).[27]

I happened to see a big and detailed political map of India in the soundproof conference room of NDH, when I accidently spoke with the deputy registrar of regulatory affairs at Medicine Control Council (MCC), a body of NDH to register medicines. The employees of NDH regularly visit India. In these visits employees make sure that Indian pharma companies keep 'Good Manufacturing Practices' (GMP) (Van Zyl et al., 2007).

These days, generic pharmaceuticals, high-tech medical equipment, gloves, catheters, cotton fabrics, and steel surgical instruments fly from India to South African hospitals. In one different instance, in the case of Shitala, Akbarallys, an Indian company, shipped glass jars for packaging medicines from Mumbai to Carim's warehouse in Roodepoort.

Aspiring Indian entrepreneurs grab the opportunities of selling in the 'African continent', by arranging elaborate stalls at various 'expo festivals' often linked to health conferences held in cities such as Lagos, Nigeria, and Johannesburg, South Africa (Doron, 2005). In a stall at the Africa Health Conference held in Johannesburg in April 2015, the wholesale rates of antibiotics and catheters were

[27] Indeed, this contrast is difficult to deal with in theory but rather easy in political practice. Theft informs a moral economy if people damage or steal things randomly as referred to by the notion of 'the weapons of the weak'.

fixed at a mutually satisfactory price for local ‘distributors’/agents who manage logistics and the owners of ‘small-scale industries’ based in various parts of India.

A representative of India’s National Small Industries Corporation Ltd. (NSIC) in Johannesburg provided allowances for many of these entrepreneurs to travel and set up stalls. A business hermitage for various multinationals—both generic and innovator companies—also exists in Baddi, near Chandigarh, in Himachal Pradesh, India (Srivastava, 2015, February 15). This is called Omaxe Parkwood. Nicholas Piramal, Shitala, Eureka, Torrent Pharmaceuticals, Colgate Palmolive, Dabur India, Sigma, Cadbury’s, Wipro, Wockhardt, Procter & Gamble, Marc Enterprises etc. have factories there.

However, Indian traders I met at the Africa Health Expo in Johannesburg were very anxious about the fluctuating rates of the rand, tales of violence in Johannesburg, and news of xenophobic incidences, even as they blessed visitors with ‘brochures’ and ‘samples’.

The value of rand plummeted from more than Rs. 7 to less than Rs. 5 against R. 1 from 1999 to 2015 in the foreign exchange market (Landy et al. 2004, p. 211). Given the apprehension on being cheated in the trade, one of Gaurav’s employees made recurrent enquiries to me on the wholesales rates of the products their competitors offer. Gaurav was a Delhi-based businessman who co-owns a company that makes surgical instruments and catheters with his brothers. Claude, the tender/procurement manager of Carrim’s—Shitala’s manufacturing facility—told me that the fluctuating rand led him to incur loss. Local firms have found that paying higher rates for importing Active Pharmaceutical Ingredients (APIs) and ‘formulations’ (usually they are tablets and injection powders) in this scenario as

more profitable.

Many of the agents and tenderpreneurs who manage logistics in generic pharmaceuticals have a fair general knowledge of India. Thunde, young man who supplies cotton fabrics to various public hospitals, called people from 'South India *aka* the businessmen of Mumbai' as 'crooks'. The couriers of shipments cheat him when clothes inside are of substandard quality. Monique, a logistics manager at Gemini, an Indian company, told me that logistics people have a 'dreadful' life, as communication on shipments goes missing in the convoluted spaces of India, and in the cultural lag between Indians and South Africans. John, the manager of Gemini, a small company that sells various ointments, makes routine trips to Mumbai once in three months. Kahiso, a chief pharmacist at Carrim's, and JM, the country manager of Sphynx, another big multinational generic company, visit Hyderabad, India, on a regular basis.[28]

Indian companies, having hegemony over the API production, perhaps engage in an industrial form of triage (Nguyen, 2010). The USA being a lucrative market receives stocks on priority basis, to the neglect of countries such as South Africa. This makes the 'tenderpreneurs' of the Johannesburg generic pharma industry far from being notorious.

Rajiv, the CEO of Ujamaa, who I mentioned above, works closely with various staff and the NDH and provincial depots. During 2013–2014, Ujamaa did not commit any tender for ARVs. Hence, he gathered various contracts as 'buy outs' by

[28] There is existing literature on patients' pilgrimage to India. Being called 'offshore health management', Kenyans, and Tanzanians fly to Indian hospitals to treat critical diseases.Doctors in the cities of these countries receive reciprocal offerings of 'high cuts' from hospitals in Mumbai, India, for 'referrals', and gain an extra profit by running agencies that facilitate these rites of passages (Modi, 2011, p. 137).

the provincial depots, NDH, and the orders of subcontracting from the companies that won the tender as they try to avoid buying outside of the contract. Buy out involves longer supply chain processes for the provincial depot as well.

However, a brief on the case of a failure is helpful to locate Rajiv's story in the broader structure of the distribution of fortunes in the industry.

Steven, a middle-aged sales manager at Ujamaa, quit his job because he could not succeed. Lack of new products 'in the pipeline', and drugs saturated of 'life cycle' prompted him to migrate to a company that sold paraphernalia for physiotherapy. He told me how he was tired of 'pushing' the separate pills of lamivudine, tenofovir, efavirenz, and even older drugs such as didanosine, even though they are still in vogue in Johannesburg. 'Indians attract Indians', he added about the inner politics of 'human resource management' in Shitala. Khoele and Daya (2014) observe that black sales managers choose to quit their jobs in pharma companies in a way different from 'job hopping', as they find few solutions for resolving their personal concerns, let alone actualizing improvements in job.

Stephen's biography exemplifies the way relationships of mistrust could pose a threat to brokerage. Unlike James (2011) argument, brokerage mobilizes not only idioms of State welfare, existing connections of kinships, and other primordial sentiments, but also the whims of market forces. Pollock (2014) in her study of iThemba Pharmaceuticals in Johannesburg has documented how black scientists' initiative to arrive at research-based new chemical entities of HIV/AIDS has failed. This case of experiment is interesting because the conflict between 'hope' that iThemba as a word literally means and signifies and the broader mistrust of market produced such a result.

Regarding the politics of logistics, the processes draw upon the specificities of the pharmaceutical industry as well as the broader political economy of South Africa. Corruption became an epiphenomenon as a mass public sector rollout of ARVs on a huge scale 'kick started' (Bussi, 2014, April 01). Ever since the press exposed many National Party members admittedly taking 'kickbacks' from companies for giving away tenders in the 1980s, the public tenders for pharmaceuticals have been always very controversial (Jones, 2012). When the availability of ARVs became a big problem in 2014 due to 'stock--out' of ARVs, many have observed that pharmaceutical companies as well as government pharmaceutical depots delayed the supply (Rispel et al., 2015).

There is an established literature on the logistics of antiretrovirals in Africa. Camara et al. (2008, p. 243) illustrate the case of ARV procurement in Senegal as visible in 2004. Senegal has her healthcare system dominated by innovator medicines. GlaxoSmithKline and Merck sold the majority of medicinal supply. The authors observe that formulations of a limited variety were supplied by these companies because of their hegemony over the local industry. The State's National AIDS Control Committee (NAAC) relies on 'domestic logistical support' for procurement and distribution. This also affects the coverage rates of ART. The coverage rate lies between 34 % and 37% (p. 228).

In the introduction I illustrated the flow of pharmaceuticals in South Africa's now generic-centred ART programme. In an ideal type, tender follows the direction of Essential Medicines List (EML). The NDH makes the decisions regarding the award of the tender. Since the Provincial Department of Health quotes the tender, the award takes place in consultations with the provinces.

Logistics seems to work bottom up. Hospitals forecast the consumption of medicines and order supplies through provincial depots. The latter aggregate and sign off the demand form of individual hospitals and process the demand to the supplying pharmaceutical companies (Knoetze, 2014, December 9). Each district gets the supplies from the concerned provincial depot. As evident, the final part of the supply chain is public hospitals, doctors, and nurses for an ordinary pharmaceutical product.

Global Fund and US President's Emergency Plan for AIDS Relief (PEPFAR) have shifted their strategies from direct participation to providing care through the government. PEPFAR attempted to collaborate with recipient governments to make relief programmes more sustainable. Against this background, the growth in global health funding declined to 4% in 2012 (Reynolds, 2014, p. 138). Reynolds (2014) observes that the fall in the prospects of PEPFAR-funded charities led to the degeneration of the morale of volunteers and strained the local programmes. She makes the case for orphan-care special programmes.

Many local bodies received help from volunteers. Whereas, volunteers increasingly resort to interpersonal networks to draw donations for functioning and, in turn, exchange services through them (p. 136). However, PEPFAR, Centre for Disease Control (CDS), Global Fund, and Wits Reproductive Health Institute are important funders of the state-run ART programme even now (Simelala et al., 2015). Another stakeholder in public health is South African National Aids Council (SANAC) (Kravtsov, 2011). However, this body has been fairly inactive.

The State spends US $ 1 billion every year (Simelela, 2014, p. 260). The ART programme was historically forced upon the State and is one among many others. The State now is a 'transfer welfare state by default' (Burger, 2014, p. 176). In such

a State, there are social security payments similar to that of a social investment state. However, most of the payments are 'passive social transfers' from Burger's point of view. In other words, expenses do not improve 'productivity and international competitiveness'. Anyway, the State is at the helm of affairs by availing medicines and cajoling generic companies that are manufacturing capitalists. Almost 80% of bulk drugs or finished formulations are imported from India.[29]

One of the major problems in the public health sector has been the recurrent depletion of stock in hospitals due to erratic supply.

In the private sector, the brand name of a medicine and confidence in a company is shaken when stock runs out. To counter this, Shitala advises representatives likeCharlie, and Sihle to continue to detail doctors on 'rare' products such as valsartan—a drug for hypertension, when they are not found on the shelves. In the public sector, there are various socialities making medicines available.

Tsing (2013) in her study of Matsutake, the wild mushrooms, observes how the hunters collect mushrooms from the mountains of Oregon, USA, thanks to their 'freedom' to collect and sell at a bargained price. However, before reaching the market, mushrooms are packed according to their quality and size. She observes how 'sorting' is a rite of passage by which mushrooms are initiated as a commodity: The sorting usurps and takes away non-capitalist relations.

Similarly, in the case of generics their delivery ensures that they are 'public goods'. When mushrooms are eventually given as 'gifts', generic ARVs are *akin* to

[29] Public talk by Francois Venter titled 'Biomedical Prevention, Contrasting Implementation Challenges' held at SA HIV Clinicians Society, CME (27 August 2015), Rosebank, Johannesburg.

gifts. This micro--activism exalts the ARVs from mere commodities to ethnographically 'thick commodities'.

Decentralization of logistics

Makuyana, the head pharmacist at regional depot at Marlboro, borrowed ARVs from other pharmacies. She followed a simple 'procedure' for doing this. Bussi, a pharmacist who works at Anova—an NGO that works as an intermediary between clinics, told me that they have 'a pharmacy front' to ensure the delivery. Anova supports nearly 50 clinics in different provinces for managing the availability of stock. Hospitals/clinics also exchange ARVs to counter stock from running out.[30]

Whenever there is a shortage of medicines Makuyana 'phones around', contacting the factory, depots, or other hospitals. The order from a regional pharmacy or hospital in time of emergency is known as 'calling order'. Sales representatives of the company also communicate with the regional depots to ensure the delivery of the ARVs in due time.

These staff members are also authorized to complain on 'a simple non-delivery for whatever reason' in their annual meetings with the NDH. Makuyana added that generally 'no company is perfect'. Niloofar, a pharmacist at the same depot, responded to the reason behind Ujamaa losing out in the tender in 2013:

They are one of the smallest suppliers. Their delivery performance is also very bad. Carrim's factory almost always fails to meet the demand. Look, I don't want

[30] Anova is a non-governmental organization that works as an intermediary in the management of stockouts. ANOVA's main concern is around tuberculosis, HIV/AIDS, and the male circumcision. The NGO receives funding from the US government for operations.

to say bad things about the company, but it is one of the smallest companies. When they took over (the tender for supplying) lamivudine they battled to meet the demand. But, sometimes government goes for cheaper ones.

Another practice, in the case of companies failing to deliver, is to buy out or buying outside the tender—as I have mentioned before. Buyouts on ARVs are rare; however, provincial depots buy out medicines of other therapeutic classes.

I did not have enough avenues to observe these practices as they happen. However, it is beyond doubt that the dynamics at the grassroots level of distribution have a say on the processes of a company winning a tender: price, quality, and the previous performance of delivery, together scores points for a company.

This also shows how stock--out as a phenomenon exerts unfair pressure on clinics and pharmacies located at the bottom of hierarchy; decentralization takes away the responsibility of top-level bureaucrats and pharmaceutical companies. The activists of MSF and TAC hinted at this problem in interviews.

The activists of TAC stress on the adherence to antiretroviral therapy (ART). These days they also run a campaign and support an online mechanism to 'report stock outs' for ensuring availability with the help of many other NGOs and bodies such as HIV Clinicians' Society, Rural Doctors Association of South Africa (Rudasa), and MSF (Bekker et al. 2014, p. 109). They 'advocate' by giving classes or speeches. Kieso, a grassroots-level TAC activist and a 'cardholding' ANC member, explains to patients about the importance of adherence in Zulu language in Soweto.[31] When I followed him, he enquired of the patients in iZulu about the problems they face at the public clinic in Jabulani, Soweto. Everyone complained

[31] Watermeyer (2008) in her study suggests that printed instructions in the local language such as iZulu may assist in compliance of patients to ARVs.

that the ‘queue was very long’. He is also a reporter for *Health-E*, an online health magazine in which he could report stories if they are interesting. One of the stories to which he devoted half an hour to discuss with his editor was the unfortunate death of a premature baby due to dysfunctional incubators in the hospital.

Peterson looks at the circulation of pharmaceuticals in Nigeria as characterized by widespread speculation based on the lack of communication between different regions. ‘Derivative life’ of drugs—their travel though risky practices of circulation before being mobilized for consumption as ‘genuine’ commodities—helps traders to make profit by supplying them across markets with unique characteristics (2014, p. 108). She observes that the reality of circulation does not differentiate between illegal and legal domains or between genuine and counterfeit drugs.

Bester (2004) in his ethnography observes how ‘demand-and-supply dynamics’ shaped the trade in imported tunas from Tsukji market to the rest of the Japanese and non-Japanese market. Appropriation of wealth helped the Japanese to revive their cuisine. He observes how the people rediscovered specificity of space such as Tsukji in the wake of globalization, and made the market a key site of cultural, as well as value production.

Logistics is the focus of this section. Borrowing from Fassin (2012), I observe that there is a deployment of ‘the humanitarian reason’ when generic ARVs are made available to the indigent and the helpless. Rajiv’s performance of quoting for tenders, subcontracting the production of ARVs, and managing supplies of formulations or APIs from India is a significant site where cultural, political, and economic value is created. Rajiv embodies logistics in the networks of circulation.

Moral philosophy of the present South Africa is that of reparation. Compensation technologies imply means of paying back to the poor Africans who fought against and suffered from discrimination during the Apartheid. In the context of commemorating practices, ordinary things, such as a lunch box, a plastic shopping bag, a wedding dress that a woman could not wear, or a birth day card made by a female prisoner, acquire significance. These objects and forms connote a positive politics of citizenship. They inform layers of memory. For many, objects are also instrumental in ensuring the flow of State grants, backing a claim for affirmative action, and broadly to help gaining a recognition from the State. This is epitomized in the constitution of truth and reconciliation commission (TRC) in 1993 (Combes, 2011, p. 100).

In continuity with this argument Combes (2011) has observed how the incidence and prevalence of HIV/AIDS marked a new structural inequality in South Africa. There are also *relics* of protest against the State's denialism of AIDS in the early 2000s and efforts demanding therapeutic citizenship. The relics in discussion are crafts such as memory boxes, testimonials, and body maps. They have been mobilized to form symbolic representations of personhood for victims, especially women.

Increase in unemployment, multiple sexual partners who are bound through different idioms of 'love', patriarchal relations inbuilt in sex such as penetrative sex without the use of condoms, and preference for 'dry' sex have contributed to the high growth in the disease (for an ethnography of love in Kwa-Zulu Natal see Hunter, 2007). The therapeutic politics also shows gendered, racialized, and class-based dimensions, even though the State has responded to the collective needs of AIDS patients by providing treatment. This obliterated the surface-level differences

among people as patients from December 2009 onwards. Clearly, mass redistribution of health care, mainly through providing pharmaceuticals, has been one of the central modes of reparation for the suffering poor. [32]

However, pharmaceutical flow in the public sector has strong ties with the market. Market reflects new utopias as well as dystopias (West-Pavlov, 2015). Theoretically, the market views altruistic behaviour of gift givers not as virtue. This could be an abnormal behaviour (Godbout, 1998). How do Indian generic pharmaceutical companies reconcile the conflict between altruism and the profit motive while participating in the State-initiated schemes of limited reparation? Bluntly, business tactics define their generosity.

Let us be clear on the contemporary situation of accessing ARVs: the Government hands out biennial tenders to the bidder of the lowest price. According to media reports on the procurement rate of ARVs, one of the well-known categories in pharmaceuticals tendering, it is one of the lowest in the world (Price, 2010, June 25). In that sense, the Government liberates the circulation of public goods from the narrow motives of profit by the corporates. This prevents public goods from getting caught in the 'unequal relations among people' in the corrupt system of circulation; ironically speaking, as in the case of gifts in archaic societies, even though the circulation of generics as public goods makes them akin to gifts (Cf. Godbout, 1998).

[32] Gemini used the 'ordinary ' photograph of a young black model in the advertisement of their skin cream, Demelan. Veronica, a middle-aged woman who worked as the product manager, told me that they intended the photograph to look ordinary; John, the country manager, remarked that black young women were the immediate target population. Later, when I attended the internal marketing day of Gemini, I saw another advertisement in which a medical representative of Adcok Ingram appeared on the ad. I observe that these advertisements denote technologies of making the poor pay back in the political era of reparation in Johannesburg.

However, there is a risk or what can be called a sacrifice in the involvement of tenders for pharma companies. Chances are high that profits are marginal, even though some Indian companies such as Ujamaa, the ARV wing of Shitala, have mainly concentrated on supplying to the Government's health schemes for PLHIV.

During my conversation with Mohan, an expatriate Indian, amid the hustle bustle of India's Independence Day celebrations on the 15 August 2015 at the Zoo Lake, he told me that Eureka, where he is a finance manager, shies away from participating in the public tenders. Eureka concentrates on the lucrative brand-driven generic sale in the private sector. After substantial success in the over—the—counter drugs for allergy (levocetrizine) and the basket of Central Nervous System (CNS) drugs, Eureka now intends to expand the sales of various brands from Johannesburg to smaller cities.

Conclusion

The first section of this chapter is about medical representatives or sales representatives as cultural brokers forging pharmaceutical relations to create a space for Indian generic medicines. Moses' case, along with Charlie's, exemplifies how sales representatives act as intermediaries between the industry and healthcare professionals, presenting medicines foregrounding the use value or biomedical value, while rendering the exchange value insignificant, even when they discuss 'price'.

Charlie presents her generics as potential commodities that take care of health and are affordable. She justifies this by saying that the coverage of the cost of medicines offered by insurance companies is always set for the cheapest in the lot.

So, as Charlie sells the medicines, an Indian generic pharmaceutical product represents drugs that are ‘cheap’ but one that offers an equal standard of living for all.

Steiner in his ethnography of the circulation in art observes that producers and collectors of African art denounce gallery system and vulgar economic attribution of value in favour of art value (1994, p. 159).

The generics become fetishized too. In this instance, exchange bears symbolic significance and also establishes the brand name. As Sihle did at the retail pharmacy, the exchange of the drugs even at a ‘throw away price’ are justified because the circulation adds to future returns or for simply create an appearance of ‘movement’ or velocity.

Sales representatives also contribute to the value of the product by exchanging their knowledge gained from the field to sell more generics and conveying their use value to ‘consumers’. A broader cultural landscape allows sales representatives to successfully perform as links between the industry and doctors. However, racial undertones have been found in the transition of selling generics, since young, female (and male), and attractive black sales reps with equal or better qualifications enter the job market.

When sales representatives exchange the medicines they alienate the products from their history of production, biomedical properties, and probably from themselves. They circulate medicines with other ‘alienable’ commodities such as pens, tissue papers, scissors, and chocolates. They also add metonymical allusions to generics such as being Western.

Sales representatives emphasize building relationships (with doctors) and creating entanglements (by exchanging gifts) as they work.

The relevance of pharmaceutical relations is about selling generic pharmaceuticals in the age of the transition of the economy and pharmaceutical culture. As shown in the case of FDCs above, there is an undeniable acceptance of generic pharmaceuticals recently. The popularity of generics as something more than mere commodities or their importance as humanitarian and politically loaded objects also marked a transition in the way Indian companies have started forging marketing techniques in convoluted yet large-scale ways.

The sales reps of Shitala embody a difficult transition. Doctors tend to hardly differentiate between CPD meeting sponsored by generic firms and innovator firms. Comparatively cheaper generics are important for dispensing doctors to win clients. The literature also showed how Indian generic companies are preparing to dominate in the Third World market by coming up with various fixed-dose combination drugs (FDCs) and *mups*.

The devaluation of currency over time in South Africa also began to affect the flow of pharmaceuticals, including that of generic ARVs. Government tenders have become risky deals for generic companies. In 2015, Aspen for instance argued with the Government that the company could not recuperate the loss incurred from the higher prices paid for imported bulk drugs and formulations. A formally agreed increment per year in the contract was rejected as compensation. Aspen eventually demanded a 50% hike in the price quoted originally (Bateman, 2014).

At the same time, generic pharmaceutical companies—both local and Indian—have become market leaders in various therapeutic categories. In the introduction I

have illustrated how Sigma has won a considerable lead in the game by showing statistics of the ARV segment.

The subsection on logistics goes into the heart of public sector circulation of pharmaceuticals and explores the way many South African businesspersons have responded to the bourgeoning demand for generics. In these circuits, the techno politics of logistics has been found to be an important aspect when medicine supply from India has to be won through business negotiations.

Borrowing from Julia Hornberger, this chapter approaches logistics as the 'ethnographic double' or a separate field within the narration of broader circulation of 'copy-cat' drugs from the manufacturer or importer in the retail market. Hence, my framework of logistics relied on highlighting the strategies of tenderpreneurs as agents and producers of value in the generic market, characterized by serious cultural differences and unfamiliarity between buyers and sellers. It seems that the logistics of generics has gone beyond the control of the traditional roles of wholesalers and distributors (Gerber, 2006) as both are merely confined to the realm of legal and spatial boundaries, in the private and public sectors.

Global politics, the State's will to provide treatment for PLHIV and the historical absence of local pharmaceuticals have made logistics of generics in Johannesburg a specific site. It is a locus inseparable from the history of segregation during the Apartheid and contemporary gaps in public health. Against this backdrop, we have observed that, when businessmen such as Rajiv attempt to make the corrupt health system 'deliver' they become national heroes. His act aligns with the broader politics of reparation in contemporary Johannesburg.

Conclusion

This ethnographic study explores the mercantile activities of Shitala, and Sigma. Four pharmacists, a few middle level managers, and two salespersons who conduct transactions with the products of these companies have also been included within the ambit of ethnography. Are Indian generics different from innovator drugs in terms of the broader values that are eminently derived from social relations? On the day when I presented my research's outline everybody was curious to know about Indian entrepreneurs' technologies of selling medicines to the poor. In contrast to their expectations, I was preoccupied with the following queries: How do Indian capitalists establish their interests within the logic of therapeutic citizenship? What happens to pharmaceutical circulation as the nationalist frame looms large in the liberal economy of South Africa? Subsequently, I spent three years doing research. A lot of work has gone into this case—study of the commercial activities of Indian Pharma companies, and their medicines in South Africa. I am satisfied that I have answered both the above questions. The ethnography also narrates varieties of practices.

Generic pharmaceuticals trickle down to doctors, pharmacists, and the public. Medicos, former nurses turned activists, and NGOs mediate the healing. Extensification, and intensification process are at work (Mintz, 1985, p.122). Extensification means incorporation of the commodity into daily material culture. Intensification involves the way patients get medications which were once made available to the rich such as in the case of AZT for HIV/AIDS. Learned doctors substitute branded drugs with generics. There are thus vertical and horizontal aspects of imitation at work. State and regulatory mechanisms

define the power involved in consumption.

Nitty—gritty aspects of ethnography revolve around the observation of merchandise in generics in downtown Johannesburg. An honest description of generalized corruption carried out by sales representatives is another major highlight. I have considered the pro—poor, and pro—Black approaches too.

In Chapter 1, the reader learns that many of the generic pharmaceutical manufacturing firms bear a socialist history. Moreover, the notion of *swadeshi* or self-making influenced policy-makers in India. By and large, these ideological dispositions can be understood as nationalism. The State's overarching control over the industry benefited private pharmaceutical companies too.

Chapter 2 is framed as a case study. I endeavour to attempt a critique of the liberal ethics of Indian entrepreneurs of ARVs in Johannesburg who belong to the *marwari* (traders) community in India. Here, there is an attempt to draw on the theme of commerce in liberalized South Africa (Harvey, 2005). Do the stereotyped Indian or Chinese values (Cf. Weber, 1905) become important in the success of business? It is certain that the Indian model that relies on business castes and PIOs do not inhibit the production of mercantile surplus (Marx, 1867). This is significant especially in the context of the campaigns around the health of people with HIV/AIDS from the mainstream. The lens of Corporate Social Responsibility (CSR) does not explain the Indian business model.

What determined the participation of Indian corporate firms as new interested parties in the humanitarian activism that deals with the HIV/AIDS crisis? The South African State has taken over the ART programme from various NGOs and other international funders

since 2010. By 2015, the State became the biggest humanitarian entity. Meanwhile, economic performance of South Africa has been abysmal. Indian companies have had to deal with greater *risk* for the creation of business opportunities.

Since the political economy of public health programmes, especially ART programme has been shifting the goal—posts, this dissertation contributes towards an understanding of the commerce in medications such as FDC as 'humanitarian goods'. It also elaborates how the pretext of gift makes the medicines poisonous. Chapter 2 formulates many of these specificities of generic pharmaceuticals. In Chapters 3 and 4, I have tried to contrast the case of ARVs with the situation of sales in pharmaceuticals of other therapeutic categories.

Chapter 3 deals with the notion of 'pharmaceutical territory'. Based on ethnographic tradition, this chapter explains notions such as 'emerging market', and 'entanglement'. Similarly, the theme of cheapness of medicines and its effects on circulation are relevant to generics. There are technologies of selling. There are also broader syncretic aspects to practices within the pharmacies.

In the case of the companies such as Eureka, Sphynx, and Gemini, the scale of operation is small. At the top of these ventures, there are many intermediary-level managers who enjoy greater autonomy in experimenting with the local market. Perhaps, the sales processes involve a reverse transmission of knowledge from them to the headquarters of the companies located in Hyderabad or Mumbai, in India. This is the part of 'the techniques of generating profits from the poor' by selling generics (Roy, 2010).[1]

[1] Shitala also follows specific methods in selecting 'middling mangers' and training sales

There are many pharmacists who create value by manipulating the processes of dispensing by the deployment of narratives that combine commonsense, science, and 'faith/trust'. In the 'real pharmaceutical territories' of sales, the realms of licit and illicit become unclear. There are cleavages in the ideal type of dispensing situations. Everything is not altruistic in these settings. Thus, I use 'pharmaceutical territory' as a concept to locate superfluous yet exploitative techniques of the marketing executives and entrepreneurial pharmacists who extract money from the poor belonging to the relatively backward locations.[2]Drawing from Sharad Chari, I have foregrounded the way pharmacists, and intermediaries solicited buyers. People bought the medicines from specific locations that are related to their experience. The process involves no informed choice unlike in an online purchase. Drawing on Catherine Burns's observation I view that the act of approaching a pharmacist in desperation for a pill seems to be accepted by qualified practitioners and the authority at large. These aided self-medication practices are situated at society's 'cross roads'.

Pharmacists dispensed alternative medicines such as *muthi* preparations even while 'diagnosing' patients and giving them cheaper and effective generic pharmaceuticals. There are no legal regulations on the sale of various alternative medicines currently. A law forged by the MCC to account for these medicines is yet to be implemented. Given this scenario, the pharmacists combined these medicines to earn more income since there is no fee for dispensing over—the--counter medicines, and S2 medicines. Notably, the *muthi* medicines

representatives, and making use of locally viable ways of selling medicines. The services of Indian expatriate staff are important in their business in Johannesburg.

[2]I borrow this observation from an anonymous reviewer of JSAS.

are not always cheap.

Ironically, those articulations of companies which create hype about the moral value of generics contradict the reality of dispensing in the pharmacies. Yet, these pharmacies themselves present as an arena where generics are clearly sold as proletarian commodities.

The State legislations have revolutionized generic dispensing situations in an overarching way. However, existing surveys show that affluent groups in Northern suburbs mistrust generics, whereas the poor spend extravagantly on alternative medicines along with cheaper generics that they availed themselves of in tiny plastic bags for R. 10.

The pharmacists usually suggest dosage on the package. Eg.: Three each, three times a day. These bags avoid spoilage of the content. The *culture* of health constitutes various ways in which pills are raw food often consumed with cooked items. The use of plastic bags suggests that drugs are cheap and valuable.

Chapter 4 focuses on the practices of value-making by the use of knowledge by sales representatives and middle managers. These descriptions can qualify as a cultural biography (Kopytoff, 1986) of lifestyle disease-oriented generic pharmaceuticals. I use the theories on gift quiet arbitrarily. However, I have exhausted this category. A reader without much difficulty will recognize that there is corruption in the medicines' markets. Let me also observe here that the generics in question help doctors, mainly GPs to please their patients. Thus, 'pharmaceutical relations' involve performances of sales representatives who take the complex responsibility of the conversion of doctors and larger public who mistrust generics. Pharmaceutical relations involve ritual invocation of the ideology of pharmaceuticals by Indian companies in the country.

In other words, 'incentives' are laid out for pharmacies. The gift comprising food, pens, and recognition are organized for doctors. Thus, there are 'material' transactions between companies and people. My fieldwork with sales persons illuminates their manipulation of doctors' 'desire' to part with a prescription and to create value. A major share of the marketing budget of generics goes into their salaries. When sales representatives interact with the medical fraternity, they present Indian generics as 'clinical' commodities, and craftily de-couple their use value from the price.

My documentation of the 'pharmaceutical relations' also provides a thick description of the transitional nature of pharmaceutical circulation in Johannesburg. I found that ex-employees of innovator companies embody the risk of representing the trend towards consuming generics to cut down the cost of medications. The salespersons give 'attention to the details' (Greene, 2004) of price differences and quality assurance *mantras* while transacting mundane gifts and courtesies.

In Chapter 4, I am reluctant in the outright denial of the performance of sales representatives as work. In the case of ARVs, the sales representatives relied on the principles of open communication and offered choices over prices to consumers. The sales representatives invariably represented generics as 'Western'.

In the age of TRIPS and a probable 'industrial triage' back in India, those decisions over the flow of generics in the public sector made in the 'backyards' of 'market' are poignant in the supply chain. Tenderpreneurs are managers who embody the 'risk' of managing the availability of life-saving medicines that operate in this space. By 'industrial triage' I mean that Indian companies try to prioritize lucrative markets of the USA and

Europe.

The tenderpreneurs are the ones who build relations with power elites. They protect industrial and mercantile business interests of themselves and of the company. They also employ idioms of therapeutic citizenship (intentionally or unintentionally) in their dialogues to the public. This contributes to the politics of the similar (Hayden, 2007), which is very distinct from the approach of the Creative Commons or brand imitation.

There is a normative proletarianization of drugs (Mintz, 1985). This involves the exercise of regulation. I have observed that public attention is often focussed on the `mass-diseased' population, rather than being turned towards the greed of Indian companies. This is the cause of the illusion of a market that is saturated with humanitarian values.

Let me be clear about the following fact: the middle managers attempt to manage logistics by gaining knowledge about India and understanding the relevance of broader humanitarian politics and the sensitivity of ordinary 'patients', on whose coffers they thrive. In a way, tenderpreneurs who manage logistics are symptomatic of the problems. My documentation of the services of ambitious middle managers attempts to identify with them. They are not wasteful conductors in the circuits. After all, they add value in the circulation. The ordinary bureaucrats and middling managers internalize the moral faith. A kind of protestantization of compassion or the lack of the same thereof is the most interesting aspect of logistics.

Privileges of a select few, is the negative sacred (Durkheim, 1982; 2013) in my analysis around the availability of generics. A spatially visible form of structural violence frames the distribution of healthcare facilities. Historically, various legal sanctions

prevented trade in pharmaceuticals among Africans. Retief, a representative of the Apartheid government attempted to exhibit in his defence of generic substitution without doctors' suggestion, which in 1984, had a popular appeal. The introduction of generics sounded like an act of gifting. It ended up as an act of gifting a counterfeit coin. Yet, it is a valid moral *event*. Even then, I document that the new political economy of prescription and dispensing involves 'material transactions' of gifts and incentives. The tracing of *morality* helps to isolate the *moral value* of cheaper generics. This morality is positively sacred. Any society wants to preserve it. In a nutshell, the exchange in generics forged in the transnational spaces of circulation like in Mauss (1967)'s simple societies is a total social fact.

I reiterate that the discussion of price, as evident from the conversations between doctors and sales persons, always happens in the private sector because generic pharmaceutical companies set differential prices. Hence, price as a representation of value of a commodity in money form in the market (Marx, 1867) has relevance in the varieties of pharmaceutical transactions. This is a simple mercantile logic. There are also innovator companies who either receive royalties or sell their own generics called 'clones'. Indian generic producers negotiate with the prices of generics intended for consumption. This is the theology of marketing. The products are advertised as unique.

When Indian companies have learned to speak the language of new corporate philanthropy to suit the local demands, the morality contributes to the commodity value. This is a pseudo—morality. I have attempted to show that Shitala manipulates morality to seek reciprocity from the State to corner lucrative tenders. The State patronage flows into the specific *materiality* of the generics. Chapter 2 shows how parting with collective

morality can be a complex performance.

The prolonging issue in the public healthcare scenario is that of logistics. The 'stock-out' of medicines at health centres poses a huge threat to the ART programme. Given this, I doubt if logistics in generics would be possible without the *agency* of people involved in the supply chain management. Borrowing the idea from Julia Hornberger I argue that scarcity rather than any clear tussle between 'desire of the consumer and the sacrifice of the seller' opens up avenues of value. This can be called derivative life of pharmaceuticals (Peterson, 2014). The medicines do not have a symbolic value. In other words, the erstwhile symbolic value of ARVs, as I have described above, as commodities available only to well—off gay men, is no longer an issue. However, the patients surely feel relatively deprived due to drugs' shortage.

One of the themes that emerged in my research and requires further attention is the history of regulation of prescription medicines. I have described how Shitala's diazepam flowed to Lagos. Due to time shortage, my early attempts to trace the connections to the social history of Indian generics in Johannesburg have been lost in the translation of research plan into a reality. An otherwise promising attempts to explore the implications of caste for the dynamics of generic production, distribution, and consumption in India dwindled into a few paragraphs. Another possibility for a theorization of the rhetoric of photographic images in the advertisements in the context of ethnography has been unutilized. Portraits, texts, and their invitation to *desire* the pills, that are found in advertisements require elaboration. Anthropology of the engagement between Indian generic pharmaceuticals and the South African State through tenders is a fascinating topic. The documentation of opportunities explored by Indian companies within Indian diasporic

communities is also relevant. Indian companies use diasporic communities for leveraging capitalist expansion on ethnic lines.

Besides, the incentives available for an enlightened consumer to buy generics, including the questions of profitability, accessibility (in terms of proximity of a seller) and saving of money are to be broached upon. Medicines as commodities create varying degrees of capabilities for citizens. Does a shanty town fruits vendor girl at Hillbrow feel empowered with her ARV ration since she feels like not taking medicines without proper food? The economic implications of 'low-cost high-volume trading model' (sales maximization model) in Johannesburg are undertheorized in this study. This becomes important after the depreciation of the Rand in relation to the Indian rupee. No doubt, as IMS Health's data show, the volume of sales is high.

There is no sufficient step back from the narration for the sake of explanation. The thesis still does not clarify the specific symbolic and political economic positioning of generic drugs. The concepts such as the moral claims of generic drugs, simplified technologies, intersections between the politics of life and cheapness, townships as emerging markets, and pharmaceutical territory are half baked. At times scholars are placed as allies to the arguments without critical appraisal. The concepts used in the rubric of theoretical arguments lack framing.

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Selected Personal communications

Bussi, NGO staff, (2014, April 01), ANOVA, Parktown.
Charlie, sales representative, (2014, September 09; 2014, September 10; 2014, September 11; 2014, October 10; 2014, October 11; 2014, October 23; 2014, October 24; 2015, February 11), Sunning Hill.

Daniel, production site supervisor, (2014, April 29). Malboro.
David, sales representative, (2015, March 03), Melville.

Elisa, sales representative (2015, March 03), Melville.

Francois Venter, physician, (2014, June 13), Wits, Reproductive Health Institute, Hillbrow; (2015, August 27), Glenhove Conference Centre, Rosebank.

John, manager, (2015, February 2; 2015, June 26). Sandton.

Julia Hill, MSF activist (2014, April, 11). Braamfontein.

Jutaina, pharmacist, (2015, February 16; 2015, February 19; 2015, February 17; 2015, February 16). Yoeville.

Kenso, staff at provincial Medical Supplies Depot, (2013, April 26). Oackland Park.
Litti Rutter, activist (2014, November 11), TAC, Braamfontein.

Kumar Malhotra, regional manager, (2014, February 26). Malboro, (2015, January 10), University of Johannesburg, Park Town.

Luis Gordon (2014, October 06), Park Town.

Lara, editor, SAPJ (2014, October 17). Pretoria.

Madhav, pharmacist (2014, March 11). Malboro.

Madona, advertising agent (2014, October 17), Noorwood.

Makuyana, pharmacist, (2014, March 19), regional pharmacy, Hillbrow.

Maryclare, wholesale pharmacist, (2015, April 04).

Marionette, manager, IMS health, (2014, March 2). Sandton.

Murli, technician at Carrim's, (2014, October 03), Braamfontein.

Nadine, NGO staff, stop stock out (2014, June 17), Noorwood.

Niloofar, pharmacist, (2014, March 19), regional pharmacy, Hillbrow.

Nkosi, Medical student, (2014, July 03), Wits, Braamfontein.

Pamila, pharmacist, (2014, July 05), Braamfontein.

Pechi, factory worker, (2014, October 3), Malaboro.

Pravin, sales representative (2015, March 03), Melville.

Achal Prabhala, author (2014, May 23), Wits, Johannesburg.

Ray, curator, (2014, October 10), Carboy Museum, Sandton.

Robert, pharmacist, (2014, March 19). Hillbrow.

Sihle, sales representative, (2014, August 23), Rosebank.

Steven, sales manager, (2014, August 07). Randburg.

Sunil, ppharmacist, (2013, November 11; 2013, November 12; 2014, March 6; 2014, March 14; 2014, March 15, 2015, March 20; 2015, March 21; 2015, March 22). Jeppeestown.

Tatenda, factory worker, (2014, October 20; 2014, March, 24), Malboro.

Teressa, production site supervisor (2014, April, 23). Malboro.

Pat, (2015, February 20), Yoeville.

Thato, pharmacist, (2014, May 29), Caltron Centre, CBD.

Warren, production pharmacist, (2014 April 24). Malboro.