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Sexual Knowledge in Late-Colonial Bombay: Contested Authority, Politicized Sciences

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Contested Authority, Politicized Sciences

An Honors Paper for the Department of History

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This project and the personal and intellectual growth that it represents would not have been possible without the inspiration, mentorship and community around me.

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Introduction

India's struggle for independence reached its peak in the 1920s through the 1940s as various domestic social and political organizations and movements such as civil disobedience, grassroots military revolt and self-rule garnered increasing popular support. Ideological and political imaginations of the post-colonial state were abundant in popular discourse, and both national and regional leaders were responding to questions surrounding the nature of this path to independent statehood. These negotiations were dominated at the national level by key 'freedom fighters' such as Mahatma Gandhi and Jawaharlal Nehru and later by members of the constituent assembly who would materialize these negotiations in the form of India's constitution. At the local level, discourse on the nature and potential of post-colonial society was highly varied – both in terms of the issues that were of central importance, and in terms of the individuals and groups that would emerge as leaders within these movements. What remained constant throughout these contexts, however, was an evident narrative of underdevelopment, poverty and social and economic backwardness that had the potential to be rescued through development. This developmentalist tone created the space for modernity to become a vague yet all-encompassing means for progress, one that would reverberate throughout the course of India's transition to independence.

Sex, both implicitly and explicitly, was at the fulcrum of some of the major tasks of development that took center stage in this period. The regulation of sex, guised as the restriction of reproduction, had economic potential. It offered an opportunity to douse concerns of overpopulation that were rooted in the Malthusian anxieties brought about by colonial surveys of population and famine.[1] Sex, to this era's western feminist observers such as Katherine Mayo

[1]Mytheli Sreenivas, *Reproductive Politics and the Making of Modern India* (Seattle: University of Washington Press, 2021), 34, 61

and Margaret Sanger, was also the site at which India's alleged moral backwardness was most visible, particularly in the form of child mothers. Anxious nationalist movements such as the Hindu reform organization, the Arya Samaj, responded to these external evaluations through cultural and legislative interventions that situated the issue of marriage firmly in projects of a reformed *Hindu* society.[2] Emasculation at the hands of the colonial state, both 'perceived' through the rendering of Indian men as subjects and 'real' in the form of British frameworks of the effeminate colonial 'other', created a crisis of masculine weakness.[3] The enactment of heterosexuality offered a means to reinvigorate masculinity. Sex, within marriage, also had direct implications for the societal health of postcolonial India. With regard to sex as a means of reproduction, reformers imagined marriage as the means of producing an economically and socially productive population. Marriage became a paradoxical site of sexual restraint and expression and the health and happiness in marriage determined the health of society as a whole. Deeper in the personal sphere, the realization and proper moderation of one's sexual self, most famously proposed in Gandhi's model of celibacy, had spiritual value with economic and nation-building potential. The emergence of sex within this wide range of issues is concordant with Foucault's identification of sex as not part of a singular discourse but instead multiplied across an 'explosion of distinct discursivities'.[4]

Sex had the potential, therefore, to address a plethora of issues that faced the late colonial nation. The question of modernity – asking what a modern Indian nation-state would look like –

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[2]See more about the profound aftermath of Katherine Mayo's Mother India as well as the nationalist responses to these western feminist concerns in Mrinalini Sinha, *Specters of Mother India: The Global Restructuring of an Empire* (Durham: Duke University Press Books, 2006); Ishita Pande, *Sex, Law, and the Politics of Age: Child Marriage in India, 1891–1937* (Cambridge: Cambridge University Press, 2020), 26. The centrality of Hinduism in these reform movements was powerful given pre-partition anxieties surrounding the retention of Hindu culture in the face of the threat of dominance by India's muslim population.

[3]Mrinalini Sinha, *Colonial Masculinity: The "Manly Englishman" and the "Effeminate Bengali" in the Late Nineteenth Century*, First Printing edition (Manchester ; New York : New York: Manchester Univ Pr, 1995).

[4]Michel Foucault, *The History of Sexuality, Vol. 1: An Introduction*, Reissue edition (New York: Vintage, 1990), 33.

could therefore become a question of sexual modernity. Sexual modernity, as much as modernity itself, was a discursive site. Imaginations of sexuality in the modern Indian nation state were as varied as imaginations of modern India itself. While some versions of sexual modernity were institutionalized and explicitly discussed such as Gandhian models of sexual restraint, conservatives saw sex as a Western threat that needed to be sequestered to the marital-reproductive realm and addressed only under the vague but suggestive guise of marital happiness. While those anxious about the loss of tradition viewed the opening up of sexuality as a legitimate site of discourse as an artifact of Western influence, others saw the restraint and weakening of the Indian sexual self as an emasculating product of colonial domination. Just as there was not a singular vision of the modern Indian nation, there was no singular sense of what mode of sexuality was most productive.

This paper is an exploration of these varied and distinct projects of sexual modernity and the larger movements they were linked to through the works of two individuals, Alyappin Padmanabha (A.P.) Pillay (1889-1956) and Narayan Sitaram (N.S.) Phadke (1894-1978). Pillay, a physician, sexologist and editor of India-based sexological journals, and Phadke, a nationalist inspired by eugenic social reform projects, together offer distinctive insights into the making of Indian sexual science between 1925 and 1955. Pillay was in close contact with the development of Western sexological science and aspired to grow the practice of physician-produced sexual knowledge within India. He edited an internationally distributed journal out of India, titled *Marriage Hygiene* from 1934 to 1937 and renamed to the *International Journal of Sexology* from 1947 to 1952. He published a wide array of books from 1940 to 1955 on topics relating to conjugal, adolescent and disordered sexuality. Phadke, a professor of humanities, only had one notable intervention in the field of sexual reform through his book *Sex Problem in India: Being a*

Plea for a Eugenic Movement in India (1927). The book sought to demonstrate agreement between western eugenic thought and ancient Indian marital treatises from across a millennium to pave the way for a sexual reform movement that still bolstered nationalist pride and conserved traditional culture. As this paper will show, Pillay's and Phadke's works were distinguishable by their connections to the larger movements, discussed earlier, that they were uniquely linked to. Whereas Pillay hoped to transform the doctor-patient relationship by persuading doctors to become authorities on and disseminators of sexual knowledge, Phadke envisioned that the equally nationalistic and scientific knowledge within his plea for eugenics would inspire his elite peers in the direction of sexual reform to subsequently act as role models to broader Indian society.

Pillay's and Phadke's voices give us access to the discursive site of sexual modernity that seemingly existed in the shadows of the larger modernity project, that is sex does not often appear in mainstream narratives of India's modernization. This is felt profoundly in the absence of much reference to sexuality in the colonial archive. Shaped by the specific politics and morality of the colonial state itself, the colonial archive – as critiqued by Anjali Arondekar – must be understood less as a representation of the historical events that are archived, than of the politics and priorities of the institutions archiving them.[5] Looking outside of the colonial archive's narrative of obscenity and pornography, allows us to respond productively to Mary John and Janaki Nair's call for a revelation of the sites at which sexuality has long been discussed, produced and controlled.[6] At the same time, noticing the occlusions and erasures within the colonial archive – treating the archive as an object of inquiry rather than a source of

[5]Anjali Arondekar, "Without a Trace: Sexuality and the Colonial Archive," *Journal of the History of Sexuality* 14, no. 1/2 (2005): 10–27.
[6]Janaki Nair and Mary E. John, eds., *A Question of Silence: The Sexual Economies of Modern India* (London: Zed Books, 2000), 2

information – gives insight into the overarching structures of censorship and respectability within which this discourse took place.[7] While this paper is not a study of the archive or a study based in the colonial archive, it is a study that – by being located outside of the colonial archives – shows that discourse such as Pillay's and Phadke's on sexual modernity, while in the shadows, was far from silent.

Legitimate Sites: Eugenics, Birth Control and Sex

The fact that sex could be linked to projects of national relevance such as birth control and eugenics rendered it a subject of legitimate, even vital, discourse. Pillay and Phadke both came into contact with birth control ideologies circulating in the West in stages. As early as the final decade of the nineteenth century, South Indian elites had established the Madras Malthusian League setting the stage for exchanges between European neo-malthusians and Indians concerned with population growth and poverty.[8] The work of 'the great' Havelock Ellis – a British eugenicist, birth control advocate and sexologist – widely consumed by Pillay, Phadke and their circles, re-worked the Malthusian concern about *quantity* as a more viably controllable concern about *quality*. To Ellis and those he inspired, Eugenics presented a task of 'passionate self-regulation' whereby individuals would use their own 'registers of heredity and ancestry' to *effect* social health and hygiene.[9]

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[7]M. E. Martínez, "Sex and the Colonial Archive: The Case of 'Mariano' Aguilera," 2016.
[8]Anandhi S, 'Reproductive Bodies and Regulated Sexuality: Birth Control Debates in Early Twentieth Century Tamilnadu', in John and Nair (eds), *A Question of Silence?*
[9]Havelock Ellis, *The Task of Social Hygiene* (London: Constable & Company Ltd., [1912], 1927), 227. Havelock Ellis had a reverberating effect across various contexts in the global south. See, for example, Rachel Hui-Chi Hsu, 'The "Ellis Effect": Translating Sexual Science in Republican China, 1911-1949', in Veronika Fuechtner, Douglas E. Haynes, and Ryan M. Jones (eds), *A Global History of Sexual Science, 1880–1960*, First edition (Oakland, California: University of California Press, 2017).

The second stage of Western influence came through the work of Margaret Sanger and Marie Stopes who saw Indian rural poverty as a fertile ground for their civilizing projects of contraception and birth control. Projects in India were constantly in conversation with these figures creating space for a symbiotic relationship whereby Western endorsement legitimized their work, and Indian work provided Western endorsers with material from the field.[10] Finally, the stance of the colonial state in expressing its anxieties surrounding overpopulation, producing anxiety-inspiring demographic reports of population growth yet not firmly pursuing any intervention created a vacuum for local cultural politics to dominate.[11] That said, specific colonial and global anxieties in combination with censorship laws and respectability politics amongst India's urban middle class, left birth control as *the* legitimate space for the discussion of sexuality.[12]

As director of the Sholapur Eugenic Society from 1929-1934 as well as the author of various articles and a book on birth control, contraceptives and eugenics, Pillay had some similar concerns as Phadke.[13] A significant portion of both of their work always included the dissemination of birth control technologies which would serve as the material objects that could imbibe Indian marriages with the nationally useful task of birth control. Phadke's work, especially, was heavily influenced and inspired by Havelock Ellis' treatise on social hygiene as

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[10]This symbiotic relationship is explored by Sanjam Ahluwalia in *Reproductive Restraints: Birth Control in India, 1877-1947* (Urbana: University of Illinois Press, 2007), 76

[11]David Arnold "Official Attitudes to Population, Birth Control and Reproductive Health in Colonial India, 1921-1946", 17 in Sarah Hodges (ed.), *Reproductive Health in India: History, Politics, Controversies* (New Delhi: Orient BlackSwan, 2006); Ahluwalia, *Reproductive Restraints,* Chapter 4: Fractured Discourses and Sarah Hodges, *Contraception, Colonialism and Commerce: Birth Control in South India, 1920-1940* (Farnham: Ashgate Publishing, Ltd., 2008), 27.

[12]Arnav Bhattacharya, "Purging the Pornographic, Disciplining the Sexual, and Edifying the Public: Pornography, Sex Education and Class in Early to Mid-Twentieth Century Colonial Bengal," *Porn Studies* (November 2, 2021): 5, Charu Gupta, *Sexuality, Obscenity, Community: Women, Muslims, and the Hindu Public in Colonial India* (New Delhi: Permanent Black, 2001), 32

[13] Phadke was also a member of the Sholapur Eugenic Society

well as broader work on birth control and family reform within his direct environs of Marathi social and literary reform.[14]

Pillay's initial work was also shaped heavily by the issue of funding, especially with regard to his efforts of keeping his first journal, *Marriage Hygiene*, afloat. During this time, Pillay needed to remain dually positioned as a doctor as well as a birth control advocate, the latter legitimizing and strengthening him as one of the most prominent voices on sexuality in this era. Transnational and local networks of birth control advocates and philanthropists including Havelock Ellis, Margaret Sanger, Julien Cahn and Cowasjee Jehangir were vital to keeping his journal afloat.[15] The journal was purposefully positioned as an instrument of birth control advocacy. Pillay employed this, in combination with his 'eugenics' society's letterhead, to actively reach out to various birth control advocates in the West to contribute articles to his journal.[16]

This heavily influenced the journal with contributions coming primarily from members of family hygiene and birth control societies in Europe, as well as their counterparts in India. Described as dealing with a 'medico-sociological' field, topics of study in the journal ranged from the absorption of eugenic principles in family planning programmes, population control and fertility to marital counseling, women's rights and inter-communal marriages.[17] The work that Pillay produced, then, was directed to a complex audience including not only his intended local

[14]Shrikant Botre, "The Body Language of Caste : Marathi Sexual Modernity (1920-1950)" (phd, University of Warwick, 2017), 117
[15]Notes and Comments, *Marriage Hygiene*, 3, no. 3 (February 1937).
[16]A.P Pillay to Dr. Blacker, 1st June 1934, Sholapur Eugenics Education Society SA/EUG/E.10, Wellcome Collection, London, UK.
[17]Norman Himes, "Notes: Marriage Hygiene: A Scientific Quarterly." *E. Human Biology*; Baltimore, 7, no. 1, (Feb 1, 1935): 119

audience but the larger circles of sexologists and birth control advocates whose validation was necessary for Pillay to retain his position.

To some extent, then, both Pillay and Phadke's work needed to be restricted – at least at surface level – to the legitimate spaces of birth control and family hygiene that were the site of global and national investment, both ideologically and financially. While this concern was more central to Phadke's project, both Pillay and Phadke framed their work within a need for eugenic thinking as a means to social reform. However, whereas Phadke's contribution was a direct translation of ancient and modern science in support of eugenics, Pillay's work was that of extending the need for eugenic thinking to a need for medical knowledge on sex itself. Highlighting the distinctness of their projects offers an example of how Phadke and Pillay uniquely utilized the power of science – as a voice and an approach. It highlights how modernists of Bombay were not fully doing the same things as much as they were using a shared rhetoric.

Legitimate Languages: The Making of Sexual *Science*

To legitimize any dialogue on sexuality, especially while still under colonial conditions, it often needed to be spoken of in relation to the various projects, discussed earlier, that it was linked to. As we will see in the chapters that follow, birth control, eugenics and marital happiness were some of the topics shaped by the discourse on sex. Sexual reform projects also deliberately utilized a language of science to postition their claims as truth. Within a Foucaldian framwork, the making and utilization of science marked an effort to codify the sex 'confession' with medical language so as to speak of sex as truth.[18] Science was used as a legitmizing

[18]Michel Foucault, *The History of Sexuality,* 66.

language for the discussion of sex – a language that was relevant to India's quest for modernity as a whole. Basing ideas of sexuality in science would ensure that the project of sexual modernity was equally one of scientific modernity. Therefore, to sexual reformers of this era, attaining what they saw as scientific modernity necessitated that scientific principles were also applied to the intimate realm of sex.

Two key questions arise. What was 'modern science' in the India of the 1920s to 1940s? And, why was science a useful modality to the leaders of sexual reform movements for the dissemination of sexual knowledge? On one hand, colonial investment in educational and medical institutions was not only dedicated to positioning western science as universal truth, but had also created a generation of educated Indians that subscribed to this belief. On the other, proponents of indigenous and western science made claims to scientific authority, both having political stakes specific to the late colonial world. Indigenous medical sciences, including Ayurveda and Unani Tibb took up a prominent space in people's understanding of self and was carried out by the dispersed authority of local practitioners.

These practices themselves were undergoing modernization. Projit Mukharji's work, for example, has shown how both western medical technology and theorizations of the body trickled into the practices of traditional Ayurvedic practitioners in Bengal.[19] At the same time, the purification and institutionalization of Ayurveda through the prioritization of Sanskritic texts by a minority of elite educated doctors demonstrated an effort to parallelize traditional science with western science.[20] While these shifts were part of a larger Hindu nationalist valorization and institutionalization of Ayurveda as a national medical science, these changes were also visible in

[19]Projit Bihari Mukharji, *Doctoring Traditions: Ayurveda, Small Technologies, and Braided Sciences*, Illustrated edition (Chicago ; London: University of Chicago Press, 2016).
[20]Ibid., 44

non-Ayurvedic traditional medical sciences.[21] Unani Tibb, the medical system common in Muslim South Asian cultures, as Guy Attewell has shown, was also undergoing significant changes in the name of modernization as seen in its teaching institutions, print culture and journal writing.[22]

As such, while sex reform projects utilized a rhetoric of science to validate their discourse on sexuality, the definition of science itself was varied, being actively contested. In fact, referring to both Ayurveda and Unani Tibb as 'medical systems', as done above, blurs the fact that defining these practices in this way was a product of gradual negotiations towards modernization. These negotiations grappled with India's scientific past, present and future to imagine a path towards scientific modernity while evading the discomfort surrounding the colonial origin of so-called modern scientific thinking in India. Equally, sexual reformers needed to construct their projects in a way that was scientific yet still traditional, modern but not western, global but not colonial. Participants in sexual reform, therefore, were both shaped by and appealed to a colonially-influenced scientific sphere that was plural. By accessing, utilizing and hybridizing competing sources of scientific authority, they were not only navigating the plurality of science but also shaping it. Phadke, by pointing his readers to a textual scientific past was especially grappling with this issue. It is notable, however, that his idea of indigenous science was not linked in any way to the domestic knowledge systems of Ayurveda and Unani Tibb, each of which had sexual health components to them. Instead, Phadke turned to specific sex manuals and moral-ethical codes produced by upper-caste thinkers in ancient India to re-

[21]Joseph S Alter, "Nature Cure and Ayurveda: Nationalism, Viscerality and Bio-Ecology in India," *Body & Society* 21, no. 1 (March 1, 2015): 3; David Hardiman, "Indian Medical Indigeneity: From Nationalist Assertion to the Global Market," *Social History* 34, no. 3 (2009): 265

[22]Guy Attewell, *Refiguring Unani Plural Healing in Late Colonial India*, (New Delhi: Orient Longman, 2005), 37.

brand them as scientifically informed. As such, he did not attempt to directly uplift the indigenous sciences around him or bring them to the fore. He simply hoped to present western science as being congruent with an upper caste textual past.

Individuals participating in sexual reform located authority, therefore, in distinctive realms and made sense of scientific authority using distinct logics, sometimes to conflicting ends. For Phadke, both tradition and modern science were located in written knowledge – the textual past of India and the material published in eugenics doctrines from the West. To Pillay, science was a dynamic site of knowledge production through observation and writing by doctors, meaning that his project of sexual science was also based upon reimagining the clinic as a laboratory in which knowledge was created and disseminated. These differences reflected their distinct political ambitions – Phadke's desire to define his upper caste peers and the historical texts they revered as the model to be followed, and Pillay's hopes of positioning the doctor as the ultimate scientific authority on sex. As the concluding chapter of this paper will show, however, the distinct sites at which Phadke and Pillay set out to establish authority may also be attributed to a fundamental difference in where they saw the crisis of society (and sexuality) to most profoundly exist. Whereas to Phadke society could be most effectively reformed via a class of moral leaders, to Pillay the process of reform, through knowledge, was highly personal, between doctor and patient. As the concluding chapter will also show, both Phadke and Pillay used scientific theories to support their claims on how sexual knowledge operated within society.

At another level, the language of science was useful in separating the sexual knowledge being produced from pornography. The separation of pornography has been tracked as a widely held concern amongst sex reform writers in 1930s India, as shown by Arnav Bhattacharya's work on Bengali sexologists. Within Bengal, Bhattacharya poses this as an issue of ensuring the

print of their material, but also as integral to their concerns surrounding class anxiety.[23] The anxiety around the risk of being deemed pornographic deeply impacted the tone and vocabulary of their texts, producing a code of respectability within these circles. In lacking the tantalizing content to compete with pornography, such syntax made their work inaccessible to the common Indian audience, bringing into question the effectiveness of their projects.

This issue of respectability and censorship specific to sexual knowledge unfolded as science was also being utilized by the larger modernity project in India. Gyan Prakash, in his comprehensive study of the position of science in India's modernity projects, has described the usefulness of science as having a definite colonial lineage. For him, science was the major weapon in the British civilizing mission and was a fundamental category for casting Indian identity along the scientific-primitive axis. This, according to him, engendered a sense of equivalence between science and progress, an ideology that was inherited by India's modernizing class – described by Prakash as a sign of the 'colonization of the mind'.[24] Prakash adds that as India emerged as a post-colonial state, the scientific language of 'universal truth' – an inherited colonial construct – needed to be applied to indigenous forms of scientific knowledge so as to revive and uplift them to equal status with western science.[25]

While Prakash offers a compelling account of the ways that science, in trend with other modern national contexts, had become imagined as a framework for progress, he oversimplifies the meaning that science held in the colonial Indian context. First, 'western' science was not only ever-changing and actively developing during this period, Indian scientific thinkers were able to access western science that was not necessarily linked to colonial power. Prakash's reduction of

[23]Arnav Bhattacharya, "Purging the Pornographic", 3.
[24]Gyan Prakash, *Another Reason: Science and the Imagination of Modern India* (Princeton, N.J: Princeton University Press, 1999), 64
[25]Ibid., 231

western science and its value to a product of colonial hegemony ignores the fact that – far from symptomatic of a colonial hangover – the educated Indian middle class was able to access, contribute to, and utilize scientific knowledge from a dynamic global sphere beyond the British such as the United States, Germany and the Netherlands. Sarah Hodges, in her commentary on late colonial biopolitics, has eloquently pointed out that sex reform debates in her context of South India at once 'assert[ed] an engagement with a global scientific modernity' while also 'contesting the social and political conditions produced by colonial rule'.[26] Her work has highlighted how, even in colonial conditions where the state was either unconcerned or ignorant, Indians had to look to institutions outside of the colonial state such as eugenics and birth control societies and global sex education movements to legitimize and construct their projects.[27] One extra-state, extra-colonial institution was the global community of scientific modernizers that was being actively imagined, formed, and accessed by Indian social reformers.

The second key fact overlooked by Prakash is that the authority of indigenous science was not simply a sudden invention or revival by India's modernizing middle class as part of a calculated effort to implement a project of scientific modernity. Indigenous medical science, even under colonial conditions, had prospered at the local level and held a prominent space in the Indian household and within the Indian self as a framework for making sense of the body and the world. In part, Prakash's narrative stems from his assumption that the deployment of science was necessarily linked to authority in the form of high-level government – a top-down transmission of knowledge first by the colonial and later by the post-colonial states. As we shall see in this paper, the mobilization and valorization of science(s) was much more dispersed.

[26]Sarah Hodges, *Contraception, Colonialism and Commerce*, 1
[27]Ibid., 11

Science in its various forms – indigenous, western and hybridized – had long and actively been used by writers and practitioners to use an authoritative language to regulate the Indian body. As such, the language of science offered a means to not only to speak of sexuality legitimately and authoritatively, but in a way that could closely and enduringly regulate and shape the lives of Indians. Science also provided a language for a discourse on sexuality to be produced, which is at the core of Foucault's suggestion of how power itself operated.[28] This discourse and the access it provided to those participating in it, allowed the Indian body to at once become an object of study – therefore, a source of knowledge – as well as a site of regulation.[29]

Bombay: At the Epicenter of Nationalism and the Forefront of Modernism

The projects discussed in this paper were set in Bombay, a city on the western coast of India that was a cultural, economic and political epicenter during the late- and post-colonial period. As a trade port and an industrial capital, it had become home to a diverse range of stakeholders from British officials, Parsi industrialists and philanthropists, migrant workers from across the subcontinent and a local Marathi-speaking middle class who held low to mid-level bureaucratic positions. As a cosmopolitan port city with direct access to western technology and knowledge, Bombay was at the forefront of the materialization of modern India. At the same time, the city was closely in contact with regionalist and nationalist movements that were energetic at the time. As a result, the material culture produced during this time found itself somewhere along what could be observed as a spectrum from being deeply oriented towards the West and being closely tied into a project of nationalist revivalism and anti-colonialism. As such, 1920s to 1940s

[28]Michel Foucault, *The History of Sexuality,* 94.
[29]Michel Foucault, *The History of Sexuality,* 139.

Bombay and the material emerging therefrom stands as a particularly important site of contestations surrounding India's modernity question, capturing the complexity of the stakes at play in answering this question.

Bombay was a melting pot for some major Hindu nationalist social reform movements, led by members of the upper caste. Vinayak Damodar Savarkar, one notable figure in these movements, had envisioned and led a movement of Hindutva (Hindu-ness) in Bombay, that posited 'Hindu' as a unifying cultural identity for all Indians belonging to Hindu, Buddhist, Jain and Sikh faiths. Savarkar's treatise, published by his supporters while he was imprisoned, envisioned Hindu identity as one that needed to override all other affiliations. Using an interpretation of history that he claimed was based in the Brahminical Vedas, he claimed that realizing the existence of 'common blood' would position the nation as a force dictating terms to the whole world.[30] The propping up of the Rashtriya Swayamsevak Sangh (RSS) in 1925, a political movement that mobilized this Hindutva ideology, in Bombay which itself reinstated the vivid symbol of King Shivaji, a Hindu savior against the perceived cultural and political aggression of Muslim invaders, made Bombay a fertile ground for Hindu nationalist movements.[31] Importantly, this was a nationalist movement that looked to both ancient Hindu texts as well as regionally-specific Marathi symbols of nationalist, anti-colonial heritage. Therefore, as Shrikant Botre has shown, reform movements in Bombay represented a claim to governmentality at the nexus of Marathi and upper caste dominance, supported by regional projects of Marathi literary reform and national projects of upper-caste dominated social reform.[32]

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[30]Vinayak Damodar Savarkar, *Hindutva: Who is a Hindu?*, (Bombay: Savarkar Sadan), 1923, 157.
[31]Malavika Vartak, "Shivaji Maharaj: Growth of a Symbol," *Economic and Political Weekly* 34, no. 19 (1999): 1127
[32]Shrikant Botre, "The Body Language of Caste ", 3

How did sexuality find itself within the domain of these Hindu nationalist projects? Partha Chatterjee offers some explanation by characterizing a dichotomous modernity project in which the 'inner-outer' or 'spiritual-material' were actively disentangled by nationalist modernizers. For Chatterjee, whereas western technologies, built forms and public spaces were either accepted or adapted to by Indians, their spiritual selves, values, true identities were anxiously maintained.[33] Chatterjee tracked these concerns in the obsession of nationalist movements with protecting the 'colonialized woman' and more broadly with the maintenance of traditional gender and sexual morality.[34] The argument in this paper however slightly departs from Chatterjee's categorization of this dichotomy. It is true that sexual reformers, especially those closely linked to Hindu nationalist movements, sought to implement a sexual modernity based in Vedic textuality and Brahminical tradition. However, western science not only trickled into these projects, but often became the guiding principle upon which these projects were based. The doctors, professors, eugenicists, welfare workers and writers that produced sexual reform literature in this context, were actively shuttling between scientific literature and ancient Brahminical doctrines, between the promise of western sexual morality and a determination to retain Indian tradition.

Sexuality, as a domain, gave the various forces contesting power in Bombay – nationalists, Marathi literary reformers, western-oriented medical practitioners – a two-pronged opportunity. First, establishing authority over the universally experienced issue of sex allowed these projects to transmit their ideologies to the intimate sphere. Second, imbibing the private

[33]Partha Chatterjee, "Colonialism, Nationalism, and Colonialized Women: The Contest in India," *American Ethnologist* 16, no. 4 (1989): 625

[34]As Chatterjee comments, the internal sphere of gender and sexuality also metamorphosized during the course of colonialism and modernity. However, the internal sphere was where tradition was most anxiously retained and could most feasibly be conserved.

realm with their ideologies allowed them to directly implement their respective visions of modernity.[35] For sexuality to become a legitimate domain, however, it needed to be brought into the public realm. Urban spaces such as Bombay offered avenues for men to address their sexual curiosities, apprehensions and perceived problems in ways that were not possible in rural contexts. A custom of letter-writing by the concerned reader to the knowledgeable writer swept across Indian urban centers, especially Bombay, during this time period. This tradition was not only regionally or linguistically plural, but also plural in terms of the types of authority that letter-writers accessed. Guy Attewell, for example, broke new ground uncovering Unani journals published between 1911 and 1935, displaying how urban contexts presented new opportunities for patients to address their medical concerns.[36] Just as in the case of traditional medicine, this phenomenon also re-shaped the doctor-patient relationship as a whole, giving it an opportunity in the public realm of print culture.

A large number of these concerns were in relation to sex, particularly reflecting men's anxieties around masturbation, excessive homosexual indulgence and overall promiscuity, which were often self-identified as resulting in overall symptoms of physical weakness. Unani practitioners responded to these concerns with everything between prescriptions from an extensive pharmacopeia of botanical extracts to calling upon the patient to seek religious and spiritual repentance. Closer to home, R.D. Karve – a Marathi-speaking social reformer and birth control advocate – launched the Marathi-language magazine *Samaj Swasthya* which, for over twenty years, featured a correspondence column addressing letters that were sent to the journal

[35]This refers back to Foucault's point on the biopolitics of sexual science. Sexual science was a site through which the body could be regulated according to the ambitions of various contesting claims to power. Michel Foucault, *The History of Sexuality*, 139.
[36]Guy Attewell, *Refiguring Unani Tibb*, 27.

with no apparent initiation or persuasion on Karve's behalf.[37] The anonymity promised by such letter-writing practices ensured that controversial and intimate concerns could now be aired, and scientific knowledge on the intimate world could be formally circulated. Urban anonymity, therefore, allowed for a dissolution of the line between private and public, creating room for knowledge-production on topics previously unspoken of such as sex. A dazzling array of print material, from social reform magazines, pulp literature, street-side pornography and sexological treatises were simply a response to these concerns – both imagined and, as shown here, explicitly expressed.

Bombay, therefore, emerged as a site where sexuality and power were both being heavily contested. On one hand, urban anonymity, print culture and demographic masculinization via migration created a space for sexuality to be discussed. On the other hand, fierce contention for moral, social and political authority coupled with concerns on the far-reaching consequences of leaving sexuality unaddressed inspired various actors to incorporate sexuality into their projects. The sexual knowledge produced in this context, therefore, offers insight into the plurality of scientific authority that India's modernity project had to navigate. Both the producers and the audiences of this knowledge were shaped by a world in which scientific authority – depending on where it was sourced – held a deeply political meaning. Therefore, for one's social reform movement to be successful, science itself needed to be carefully defined and utilized. The producers of this knowledge, owing to their unique orientations to Bombay's movements and ideologies, therefore adapted unique models of using science to support their projects.

[37]Shrikant Botre and Douglas E. Haynes, "Sexual Knowledge, Sexual Anxieties: Middle-Class Males in Western India and the Correspondence in Samaj Swasthya, 1927–53" *Modern Asian Studies*, 2017, 11.

Structure of the Paper

The place of sexuality within nationalist projects, as a site that could be regulated to the end of nation-building, has been extensively studied in Indian, post-colonial, Asian, and global contexts.[38] In the Indian context, Mrinalini Sinha has uncovered the logics by which Indian masculinity was effeminized and emasculated under colonial conditions.[39] Joseph Alter and Douglas Haynes have analyzed the formation of a Gandhian model of nationalist sexuality which, as Haynes has further depicted, was appropriated and reproduced by projects in Bombay such as that of R.D. Karve.[40] This Gandhian framework, in combination with pre-existing formulations of semen-loss as having weakening effects on masculinity resulted in a phenomenon of 'semen anxiety', discussed in Chapter 2.

Projit Mukharji has shown that these anxieties were seen by traditional medical practitioners as an opportunity for intervention, through the production and implementation of medical knowledge and products rescuing the emasculating effects of semen loss.[41] Haynes has further shown how these frameworks of restraining sexual desire so as to re-channel energy into politically and socially productive efforts were both echoed and resisted by Bombay's print culture, discussed more closely in Chapter 2.[42] These ideas stirred anxiety among Bombay's

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[38]Joseph S. Alter, "Celibacy, Sexuality, and the Transformation of Gender into Nationalism in North India," *The Journal of Asian Studies* 53, no. 1 (February 1994): 45–66; George L. Mosse, *Nationalism and Sexuality: Respectability and Abnormal Sexuality in Modern Europe* (New York: Howard Fertig, 1997).
[39]Mrinalini Sinha, *Colonial Masculinity*.
[40]Joseph S. Alter, *Gandhi's Body: Sex, Diet, and the Politics of Nationalism*, 1st edition (Philadelphia: University of Pennsylvania Press, 2000); Douglas E. Haynes, "Gandhi, Brahmacharya and Global Sexual Science, 1919–38," *South Asia: Journal of South Asian Studies* 43, no. 6 (November 1, 2020): 1163–78; Shrikant Botre and Douglas E. Haynes, 'Understanding R.D. Karve: Brahmacharya, Modernity and the Appropriation of Global Sexual Science in Western India, 1927-1953' in Veronika Fuechtner, Douglas E. Haynes, and Ryan M. Jones (eds), *A Global History of Sexual Science*
[41]Projit Bihari Mukharji, *Nationalizing the Body: The Medical Market, Print and Daktari Medicine*, (London: Anthem Press, 2011).
[42]Douglas Haynes, "Selling Masculinity: Advertisements for Sex Tonics and the Making of Modern Conjugality in Western India, 1900–1945," *South Asia-Journal of South Asian Studies* 35 (April 5, 2012): 1–45.

male populace and Shrikant Botre and Douglas Haynes have demonstrated how males actively engaged with these constructs, giving a space for social reformers to step in and produce sexual knowledge via print culture.[43] Botre has further located these responses by social reformers, as discussed earlier, within caste-strengthening Marathi literary and social reform movements.[44] There has also been significant work on the various larger projects, discussed earlier, within which the regulation of sexuality was at play. The trickling in of western ideologies of population control and contraceptive technology have been tracked in South India by Sarah Hodges and more broadly in the subcontinent by Sanjam Ahluwalia.[45] Ishita Pande and Mrinalini Sinha have shown how debates on Child Marriage were responding to concerns from the west and anxieties from within, and were actively incorporated into nationalist and upper caste reform movements across India.[46]

The analysis that follows is organized into two chapters that, by turning to Phadke's and Pillay's work, closely interprets the meaning of science within projects of sexual reform in India. Chapter 1 investigates Phadke's invocation of India's ancient 'eugenic sense' through his book *Sex Problem in India*. I argue that in order to give ancient texts an authoritative voice parallel to that of western eugenic science, Phadke relied upon an inconsistent contextualization and decontextualization of these texts so as to create the myth of a eugenic past. Phadke selectively decided upon which ancient sources could be bestowed with this authoritative voice, while denigrating other forms of ancient knowledge systems such as astrology due to their lack of eugenic value. His project demonstrated a careful reorientation of eugenics from a purely western idea to one that could be located within the history of India. Chapter 2 shifts to Pillay's

[43]Shrikant Botre and Douglas E. Haynes, "Sexual Knowledge, Sexual Anxieties".
[44]Shrikant Botre, "The Body Language of Caste ".
[45]Sanjam Ahluwalia, *Reproductive Restraints*; Sarah Hodges, *Contraception, Colonialism and Commerce.*
[46]Ishita Pande, *Sex, Law, and the Politics of Age*; Mrinalini Sinha, *Specters of Mother India.*

world, part of which was post-colonial, allowing him to more freely implement a project of sexological knowledge production outside of the confines of eugenics and birth control. I locate his work as a contestation of mainstream narratives of masculinity, requiring the normalization and naturalization of sex as a human need. Normalizing sex, especially as a central component of marriage, allowed Pillay to position doctors – sex experts as they were – as authorities within the institution of marriage. Pillay's project operated on his paradigm that knowledge, disseminated by doctors, could reverse the psychologically debilitating effect of otherwise unscientific information on sex; scientific knowledge was Pillay's cure.

In both these chapters, the emergence of ideas surrounding social and national development – through the regulation of sexuality – decisively carried an aura of science. In tandem, the paper revisits how sexuality became an object that could be *known* by specific individuals and groups who could then produce this knowledge. Both projects imagined a specific class of individuals that would become the interpreters and transmitters of sexual science – intermediaries, so to speak. The contribution of my work lies at the intersection of these two strands: a form of sexual knowledge production that relied heavily, as I will argue, on a vocabulary and tonality of science. As opposed to a process of west-to-east transmission or even hybridization, I argue that in early and mid-twentieth century Bombay, sexual science entailed unique efforts to *arrange* various sources of scientific authority in a manner that would most effectively validate their claims to continued social dominance. The concluding chapter shows how this reliance on science was differentiated by each participant's specific understanding of science itself.

Phadke's and Pillay's projects were uniquely oriented to the movements of nationalist cultural revivalism, contact with western science, developmentalist drive, and concerns

surrounding the marriage institution. Therefore, they provide a sense of the convergences between and distinctiveness of the plethora of sexual reform projects that emerged during their era as well as the reasons behind these differences and commonalities. This paper, by closely engaging with the language and tone of their works, provides a vivid and textured picture of the mechanics of their use of science. These distinctive mechanics offer insight into the different agendas of their projects. As such, this paper utilizes these mechanics of the use of science as an analytical tool to make sense of the worlds that Phadke and Pillay were operating in. While previous work on the two figures has attempted to make sense of them *through* the larger projects of eugenics, birth control and sexology that they were linked to, this recentering of the figures and their specific languages, allows a more complex picture of how these movements were drawn from and navigated. This paper explores the impact of these larger movements *through* the participants themselves.

Chapter 1

N.S Phadke: Invoking India's Eugenic Sense

In 1865, at the height of the industrial revolution, Francis Galton coined the term 'eugenics' as he sought to scientifically prove that reputation – a flawed proxy for ability – had hereditary basis, therefore suggesting that procreating partners could be judiciously selected so as to ensure the production of a fit race.[47] His contributions set the stage for a wave of studies using the novel tools of statistical science to deploy theories of genetics and inheritance towards calculatedly shaping the composition and efficiency of society.[48] At the turn of the twentieth century, the persistent organizational efforts of proponents and advocates of eugenics in Europe and the United States led to the spread of the eugenics 'gospel' through eugenics education societies.[49] In India, as in its geographical and political peers, local eugenics social reform movements promised to mitigate concerns about how to manage population to ensure social and economic development. In colonial contexts of southeast Asia, eugenic thought was both colonially inherited but also developed with emergent nationalist concerns of racial purity, national identity and immigration.[50] In the Indian context, local social reformers actively corresponded with global eugenics societies, assisted with the distribution of their print materials across the country and also set up eugenics education societies at home.[51]

Reformers in India viewed the project of eugenics as a means of addressing national concerns around resource management and overpopulation while also allowing the middle class

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[47]Daniel J. Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity* (Harvard University Press, 1995), 8
[48]Ibid., 13
[49]Ibid., 59
[50]Sunil S. Amrith, 'Eugenics in Postcolonial Southeast Asia' in *The Oxford Handbook of the History of Eugenics*, *The Oxford Handbook of the History of Eugenics* (Oxford University Press, 2010), 305, 309
[51]Sarah Hodges, 'South Asia's Eugenic Past' in *The Oxford Handbook of the History of Eugenics,* 242

man to reclaim his position in Indian society that was seen to be lost to the emasculation that accompanied British rule. Eugenics fit neatly into state policy concerns at the time, especially towards the end of colonial rule and into the post-colonial state when overpopulation was thought to cause significant hindrance to economic growth. These concerns had inspired the consolidation of various sources of local and national funding, expertise and knowledge at the level of the government's Directorate General of Health Services.[52] Eugenic thinkers and social reformists organized local conferences, committees and seminars on family planning within which eugenic science and scientists took up a prominent space. Participants including doctors, family planning ministers and social workers recommended a scientific approach to issues of family planning, and significant work went into organizing such efforts.[53] There was a space, then, for eugenic thinkers to produce material that could serve a nationalist purpose while positioning themselves as scientific and moral authorities.

Narayan Sitaram (N.S.) Phadke was a Marathi thinker and writer who was closely involved in Bombay's birth control advocacy movement and the writer of *Sex Problem in India: A Plea for a Eugenic Movement.*[54] He was a an Indian-educated professor of the arts, a philosopher and the writer of many Marathi novels. He was closely linked to a larger group of prominent upper-caste Marathi individuals who in urban Bombay now formed the upper-middle class. His work on eugenics was produced by a prominent publication agency at the time, and seemingly well-respected by prominent figures in the field given the foreword by Margaret Sanger who saw his plea as that of a 'far-sighted patriot whose desire is that the country of his

[52]CK Lakshmanan, "Proceedings of the Fourth Meeting of the Family Planning and Programmes Committee 14th, 15th and 16th April", 1955.
[53]The Family Planning Association of India, "Scientific Seminar on Family Planning (Bombay): Report of The Proceedings", 1956.
[54]N.S. Phadke, *Sex Problem in India: Being a Plea for a Eugenic Movement in India and a Study of all Theoretical and Practical Questions Pertaining to Eugenics* (Bombay: D. B Taraporevala Sons and Co., 1927)

allegiance shall grow strong on sound biological principles.'[55] Phadke was fascinated by the eugenic movement that had swept over the world and saw himself as a relative amateur in the field who was driven by his 'propagandist' nature. That is, he saw himself as being driven by a strong desire to spread knowledge and ideas that served a larger purpose within society and the nation. For him, writing about Eugenics in light of Indian traditions was simply a means to participate in 'a life of speculative thought and fearless action.'[56] While Phadke was clearly concerned with the issues of population, eugenics and birth control however, as discussed earlier, these issues also offered a legitimate space within which sexuality could either explicitly or implicitly be discussed.

Phadke's eugenics program was particularly invested in using eugenic knowledge – sourced from various spheres – to re-fashion the marital customs and, in that, the sexual conduct of the primary subjects of his reform project – the upper-caste Marathi middle class. The scientific value of a eugenics program, Phadke intended, could be understood and adopted by this class, whose reformed values would then serve as a blueprint for the rest of society. As such, the Marathi middle class, in his work and that of his peers, was being actively imagined as the new scientific class. This was simply one of the many ways in which this Marathi middle class could be branded as *'New Brahmans'*, who once held valuable positions in the pre-British context and now – in urban Bombay – could re-emerge as leaders in various 'modern' spheres such as science, academia, art and social reform.[57]

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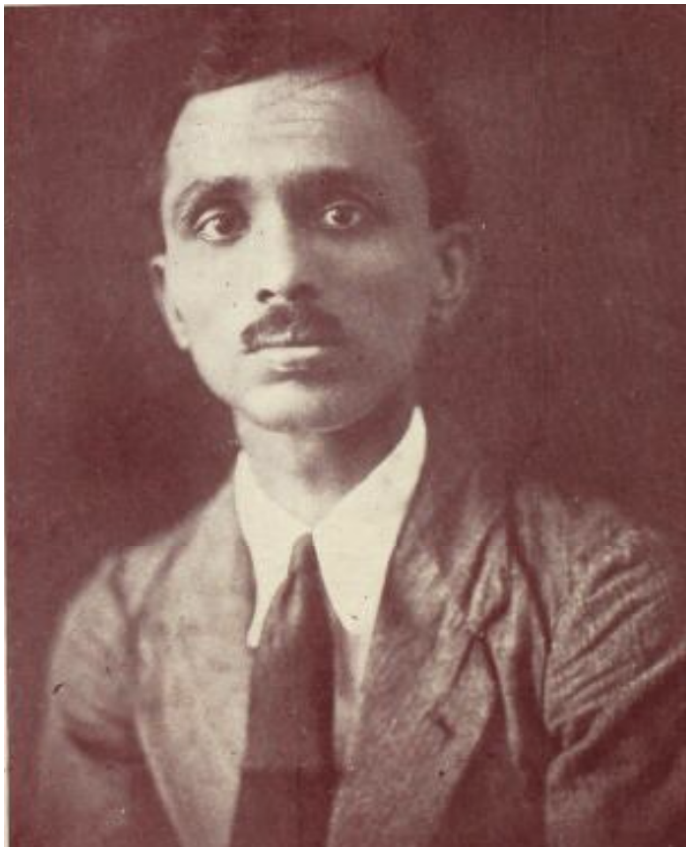
[55]Ibid., ii.
[56]Ibid., Preface.
[57]The son of Dhondo Karve, and brother of R.D. Karve – the subject of Botre and Haynes' research – wrote a book tracing the lineage of five Marathi Brahmin families who, as social reformers, had reclaimed their societal position as 'New Brahmins' in Urban Bombay. See more in Dinakar Dhondo Karve, *The New Brahmans Five Maharashtrian Families* (University of California Press, 1963).

As per Phadke's project, a significant cultural shift could be brought about through this 'literate middle class taking a very determined lead in the matter.' Members of this literate middle class envisioned themselves as moral leaders who could save Indians from the depraved social customs that they were seen to be trapped in. Phadke strongly viewed the law and the state as a futile means for change, but specifically pushed forward the role-modeling he envisioned that he and his peers would lead.[58]



Portrait of N.S. Phadke taken from N.S. Phadke, Sex Problem in India[59]

[58]Phadke, *Sex Problem*,107.
[59]Phadke, *Sex Problem*, i.

India's 'Eugenic Sense' and Championing its Eugenic Future

N.S. Phadke's book *Sex Problem in India: A Plea for a Eugenic Movement* at once entailed an emotive appeal for a systematic implementation of eugenics, and offered a detailed, deliberate and wide-ranging evaluation of all that he identified as 'theoretical and practical questions' pertaining to a eugenic program. His intervention stemmed from a markedly middle class concern with the strain on resources that would occur if the population of India were to grow exponentially and uncontrollably. He argued that the result of such growth was a gravely reduced capacity for individuals to gain material wealth, bringing about a 'degenerated condition of our people'[60]. The embodied manifestation of this was a weakening of the Indian at the individual level – at the level of the collective, a loss of physical strength. In the context of the Indian freedom movement wherein *Swarajya* (self-rule) had become the moral-political goal to be attained in response to Indians' apparent emasculation, Phadke was concerned that the depleting 'physique' of the Indian foreshadowed an unsustainable nation-state.

As a recurring concept in Phadke's book, physique acted dually as an embodiment of the economic and physical resources of the nation, that linked health and strength of the individual and of the population. These resources were seen to be strained by India's population growth - a balancing game between death rates and birth rates. The country, to Phadke, was gradually weakening via the overpopulation of individuals who were not eugenically fit – a population that was 'quantitatively large and qualitatively weak'[61]. In this way, the roots of Phadke's concerns did not differ significantly from a larger network of colonial and indigenous thinkers that were influenced by Malthusian economic theory – the strain of an exponentially growing population on an arithmetically growing resources. It is reasonable to assume that much of the engagement

[60]Ibid., 6.
[61]Ibid., 11.

with Malthusian theory had to do with its centrality in the administration of famine policy under the British Raj.[62] At the same time, at par with various nationalist projects at a global level, the physical nature of the individual male body itself became a crucial target of national strengthening. In India, one form that this took was the refashioning of yoga as an indigenous form of 'physical culture' through which men could attain physical perfection so as to compensate for various forms of weakness. This physical perfection could be transmitted and therefore have effects not only at the individual level but also at the level of society, nation and mankind.[63]

Phadke imagined that every social reform movement should be inspired by a eugenic ambition, therefore reframing prominent issues of the day, including widow remarriage, lower class uplift and female education as means to a stronger populace rather than means to equality. Phadke not only saw this macroscopically in terms of a fundamental cultural shift, but also as a highly individualized project through moral decision-making on one's sexual engagement. These decisions would be made in a way that could closely link the institution of marriage with nationalist pride. Sanjay Srivastava's work has described Phadke's engagement with nationalism as 'an uncompromising voice in favor of a eugenic attitude that would saturate the national community and become an instrument for social change.'[64]

This nationalist pride came both from the fact that eugenics was inherent to the ancient Hindu writing that Phadke outlined as well as from the strengthened Indian population it would enable. Phadke's counterparts in the eugenics sphere turned to the previously mentioned classical

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[62]S. Ambirajan, "Malthusian Population Theory and Indian Famine Policy in the Nineteenth Century," *Population Studies* 30, no. 1 (March 1, 1976): 5–14.
[63]Mark Singleton, *Yoga Body: The Origins of Modern Posture Practice* (New York: Oxford University Press, 2010), Chapter 6.
[64]Sanjay Srivastava, *Passionate Modernity: Sexuality, Class, and Consumption in India* (London: Routledge India, 2020), 67.

works of Dalton and others apart from developing and streamlining eugenic theories based in new knowledge of race, genetics and society. Phadke's move to turning to the ancient textual past was distinct and highly effective in the colonial Indian context where ancient textual knowledge could serve as a counterpoint to British hierarchies of knowledge and trajectories of progress. Written, according to Phadke, at the peak of the Aryans' rise, these texts were concerned with producing a large populace of healthy sons with strong military and economic capabilities. Due to this centrality of producing a fit population, Phadke considered the texts and the people producing them to have possessed a strong eugenic sense. Reviving the textual knowledge of this vague ancient Indian history, which as we shall see spanned a period of several centuries, was Phadke's way of preserving tradition. As such, it was a preservation of tradition that first necessitated the imagination, myth-making, and creation of tradition from the textual culture of a distant past. That is, the Aryan past that Phadke imagined should be re-accessed was not one based upon a lived history but an imagined, idealist past wherein people lived the life of the texts. This particular method of culture-making held tremendous value in the upper-caste circles he was writing within, who increasingly saw their cultural and political status threatened under urban and colonial conditions respectively. For them, and for Phadke, glorifying a past based in *Brahminical* textuality offered a means to create a pre-colonial past in which the position of the upper-caste – presented by the upper-caste as *Hindu* morality as a whole – was less threatened.

Phadke described his work of illuminating this lost textual past in light of western eugenic doctrines as an effort to 'overhaul [a] whole mass of conventions… about the act of procreation and… the superstitious attitude towards sex questions… [in favor of] a scientific and healthy one.' Phadke claimed that his ability to find value in the knowledge of both the ancient

Hindu past and the modern west, was the rational middle ground. He criticized his audience for belonging to one of two polarized categories, one that readily accepted western knowledge merely due to its being western – the archetypal colonial modernizer – and the other who rejected anything that came from the west due to anti-colonial sentiments. In constructing his eugenic program, Phadke saw an opportunity for a modern project that was not validated by its status as western, but as being integral to an imagined prehistory of the modern Indian. Phadke's book was therefore a work of arranging India's scientific pasts and presents into a stream of natural continuity in a way that deemphasized the colonial origin of so-called modern scientific thinking in India. Such persuasion was required in order for eugenics to reach Phadke's goal of being absorbed into Indian culture as the 'most perfect, beneficial and up-to-date form of social reform'.[65] While this social reform entailed changing the behaviors and customs of individuals, it was driven by and towards biological principles and ambitions. Throughout his plea for eugenics, Phadke engaged deeply with a past in which the Indian (understood as ancient Aryan) possessed this 'eugenic sense' – one that allowed the modern eugenics project to also become one of *Hindu* nationalist revivalism.

Phadke's book was structurally divided into three aspects of eugenics, that is, positive, preventive and negative eugenics. Phadke described positive and preventive eugenics as the work of enabling marriage and procreation between the eugenically fit, and negative eugenics as the elimination of the eugenically unfit. As for preventive eugenics, Phadke referred to birth control as an effective means to keep the population in check and ensure that only intellectually and physically fit progeny would be born. He used examples of Holland, Germany and England to suggest that such an approach could be effective in ensuring a steady population growth that

[65]Phadke, *Sex Problem*, 22.

did not coincide with the overwhelming death rates India experienced, which, according to Phadke, caused significant economic and physical weakening. Specific methods of birth control including abstinence and contraceptive use were discussed, with specific emphasis on the endorsement of these methods by science and by ancient texts. Phadke's consideration of negative eugenics, that is the elimination of the unfit, was brief, with only one chapter dedicated to it. Citing a 1914 report from the Eugenics Record Office in New York, Phadke described the unfit as 'the feeble minded, the inebriate, the criminals, the diseased and the insane.' Finding that a reliance on abstinence was impractical for such populations, Phadke recommended both short-term sterilization drives and long-term education projects that would compel an 'enlightened choice of these individuals.'[66]

Phadke placed much greater weight on the former 'positive' version of eugenics, and the building of a strong population seemed to be of more interest to him than the prevention of a weak one. Positive eugenics offered Phadke a space in which the effort of hereditary planning could be used as a motive to design a sexual-moral code for his upper-caste Marathi circles to adopt and then impart. He approached positive eugenics through a discussion of the theory of heredity, the determination of heredity through the heterosexuality circumscribed by marriage, and an appeal to modify Hindu marriage in order to best shape, via heredity, the population. The theory of heredity, as laid out by Galton, Spencer and Darwin, allowed Phadke to describe the mother and the father biologically as 'conserver [of heredity]' and 'conceiver' respectively.[67] As per his model, sex and marriage were no longer to be viewed simply from the perspective of the individuals engaging in it, but were to be seen for their underlying biological purpose. His audience of the literate Marathi middle-class needed to be aware of this biological fact and this

[66]Ibid., 289.
[67]Ibid., 48, 50.

scientific awareness needed to be applied to pre-existing values surrounding marriage. Through understanding the weight of the science underlying marriage and procreation, they could regain their eugenic sense as they entered marriage: 'The first and foremost requirement in a eugenic program is the introduction and sanction of a marriage system which is best suited to facilitate the rise of a faultless and perfectly fit generation.'[68]

In the chapters that followed, Phadke took the reader through a series of cultural customs including child marriage, astrology and dowry that he argued came in the way of a sound scientific approach to match-making. Referring to these allowed him to situate his concerns within issues that had significant relevance for the context he was writing within. Phadke used Hindu scriptures to demonstrate that much of these customs originated not from the texts but from certain 'historical circumstances.'[69] Both the ancient Aryans and western European scientists, Phadke showed, in fact agreed upon the 'real objective' of marriage, that was to provide society with healthy children. The institution of marriage needed to be cleansed in order to ensure that it would be utilized for eugenic interests, and to this end Phadke neatly categorized the science and non-science that respectively enabled and impeded the ability of marriage to attain its true objective. While western science remained unambiguously and incontestably categorized as authoritative, it was indigeous knowledge that, as we shall see, Phadke needed to carefully assess.

Sanjay Srivastava's work has suggested that the equation between Hindu customs and western science had a self-reinforcing effect on his proposal for eugenics, yet the mechanics of Phadke's writing have not been closely explored.[70] What follows in this chapter are two angles

[68]Ibid., 58.
[69]Ibid., 92.
[70]Srivastava, *Passionate Modernity,* 75.

of analysis on Phadke's engagement with science as a means to legitimize his eugenic program. First, this comes in the form of a specific voice constructed for ancient Hindu texts that allow for them to be lifted out of their historical contexts and onto the same level as modern scientific texts. That is, a specific rationality was to be applied to reading these texts that would bring out their voice that was as instructive as that of science. The second strategy Phadke used was that of categorization, which aided him with his exposé of the Indian marriage custom. Phadke delineated three aspects of marriage: the scientific value of marriage, the religious customs surrounding marriage, and astrology as a pseudoscience that interferes with the real aims of marriage. His text aimed to persuade his audience to distance marriage from customs based in astrology and allow a perfect religio-scientific marriage custom. This marriage custom was a perfect balance in which 'religion ennobled marriage, provided it was a religion in the truest sense of the word... [that is] one that acts as an effective cohesive influence of society.'[71] Constructing a marriage system in this way relied upon a deliberate differentiation of astrology and religion to decry the former and link the latter with science in its status as truth. By analyzing these two strategies Phadke used – that of parallelizing science and religious text and that of categorization – we gain a sense not only of the voice of developmentalist figures such as Phadke, but also of the historical audiences that they wrote for.

Ancient Texts and Modern Medicine: Giving Text a Voice

The material Phadke used as evidence for his argument fell into two pools. On one side, Phadke turned to western-produced scientific literature ranging from the work on eugenics by the likes of Herbert Spencer (British, 1820-1903), Francis Galton (British, 1822-1911) and Charles Darwin

[71]Phadke, *Sex Problem*., 70.

(British, 1809-1882) and birth control advocates such as Havelock Ellis (British, 1859-1939). On this side, Phadke consistently foregrounded their arguments as being not only coherent but always in consensus. That is, scientific knowledge was never presented in the book as discourse. Even in instances where there were nuances and differences in opinion, it was always qualified by a remark that the overarching facts were still unanimously unopposed. On the other side, Phadke utilized a wide range of ancient and medieval Hindu texts including the *Manusmriti* (2nd-3rd Century CE), *Yajnavalkya Smriti* (3rd-5th Century CE), the *Grihya Sutras* (~4th Century BCE) and ancient medical treatises such as the works of *Sushruta* (7th Century BCE) *Vagbhata* (6th Century CE). Spanning not just centuries but over a millennium, these texts, as Phadke described more often than he did for the scientific literature, were sometimes contradictory and needed to be specifically contextualized in order to be properly understood.

A key goal of this work was to make space for conversation between these bodies of texts and prove compatibility if not agreement between the construct of ancient *Hindu* values and western scientific knowledge surrounding eugenics, the latter viewed as essential to the making of functional societies. In order to attain this goal, these texts and the knowledge systems producing them needed to be deliberately arranged in a manner that made them agree with each other so as to dually achieve the goals of nationalist revival and scientific engagement. For example, at the close of his argument on heredity that like-produces-like, Phadke concluded:

> This brief exposition of the subject is, we hope, enough to satisfy the reader as to how there is a consensus of opinion among scientists regarding the main broad principles of Heredity, though the filling up of the details or the forging of the minor links in the chain may be a matter on which all of them agree to differ. It would be both interesting and instructive to study how these modern conclusions about Heredity bear out those ideas of the ancient Aryans on which they based the Hindu marriage system; and it would give us food for patriotic thought, too![72]

[72]Ibid., 42.

An important effect of such an effort by Phadke to arrange knowledge systems is the voice of authority that he charged these texts with. It is clear that Phadke was a proponent of the notion that science was a voice of incontestable objectivity – science, to Phadke, *was* authority. Specifically regarding eugenics, Phadke asserted that western science had uplifted it to a 'very high degree of perfection' based upon a foundation of 'vast research and indubitable facts.'[73] His chapter on the theory of heredity, detailing the central scientific tenet of biological inheritance upon which the eugenic program rested, reflected the assumption that the biological self and not the social environment was to be first regulated in order to purify the Indian race at the 'fons et originos.'[74] In this chapter, Phadke used a layman's description of the science of heredity to uplift the already intuitively understood phenomenon to the level of 'truth and significance.'[75] To this end, the scientific indisputability of Spencer's physiological units and Darwin's gemmules allowed the otherwise more morally informed social notion of 'like begetting like' to be validated and legitimized. To Phadke, the thorough inquiry that science represented meant that the theory of heredity stood 'unassailable.'[76]

In order to position the eugenic program as *equally* endorsed by science and the Indian past, a central agenda of this book was to find a parallel instructive voice in the texts of ancient India. To do so, Phadke invited his readers to the 'beach of Sanskrit literature [on which] lie many a sparkling shingle of interesting and instructive passages wherein are given scientific directions for those couples that desired fit and fair sons.'[77] He claimed that a religious color had

[73]Ibid., 18.
[74]Ibid., 28.
[75]Ibid., 34.
[76]Ibid., 42.
[77]Ibid., 21.

been imposed upon the ancient Aryan texts on procreation as a deliberate measure by those producing these texts. He elaborated that Aryan leaders aimed to convince a society that held a 'popular attitude of implicit faith towards all religion', therefore sugar-coating what were truly scientific principles with a religious tone.[78] A purpose of his work was to uncover these internal truths, therefore reorienting ancient texts not as coming from myth but as sources of science. Phadke pointed the reader to hymns from ancient manuscripts on matrimonial customs, depicting how they reflected the Aryan bride and groom's desire for 'valor and lustre… an abundance of wealth and sons… all long-lived… and well endowed progeny.' He argued that as a race that had recently colonized the Indian subcontinent, the Aryans were keen on growing and establishing a strong population imbibing them with inherent eugenic sensibilities. This was the crux of his argument that ancient Aryans and eugenic scientists alike agreed upon the objective fact that the sole purpose of marriage must be the production of healthy and productive progeny.

The idea of society's failure to properly absorb the knowledge of ancient texts is also highlighted in Phadke's discussion of child marriage. Phadke presented a body of western scientific knowledge on the physical and psychological maturation of the female body in relation to various ancient texts that prescribed apparently early ages for marriage and procreation. Phadke was attempting to reconcile progressive, scientific knowledge that women needed to be of mature age prior to conceiving children with prevailing customs of child marriage that were especially prominent in non-urban Indian settings. In order to do so, he looked to the controversial *Manusmriti*, the manuscript of the Hindu sage *Manu,* prescribing proper conduct, values and behaviors to the upper castes – a manuscript that was used by the British to produce legal doctrine in nineteenth century India. The text, as Phadke described, endorsed child

[78]Ibid., 94.

marriage, by applying pressure on the father to marry off his daughters prior to their reaching sexual maturity so as to protect the honor of the family. Whereas Phadke claimed that much of the survival of the tradition of child marriage can be linked to society's misinterpretation of these 5th BCE texts, he did give brief mention to other possibilities such as a response to invading Mughal armies more than a millennium after the previously mentioned texts. However, Phadke was more concerned with the ancient texts and their alleged endorsement of child marriage.

To contest the allegation, he used medical treatises from the *Sushruta Samhita* – produced by an ancient Hindu physician in the 7th century BCE – that clearly warned against the threat posed by premature procreation to the mother's and child's health. The source suggested that the child coming out of such procreation either 'withers away' before birth or is born 'weak and crippled.'[79] It advised particular ages – sixteen for women and twenty-five for men – at which childbirth would ensure fit, able bodied and illustrious progeny. It is apparent that Phadke privileged such ancient medical texts over others in his evaluation of the Aryan past:

> It may be safely said that if we are willing to profit by the conclusions of our ancient medical authorities like the Sushruta and the Charaka, and by the latest pronouncements of Western Medicine, we must so fix the marriageable age of the girl that she will remain untouched by man and unencumbered with premature motherhood until her physique has attained full growth and ripened into real maturity and perfection.[80]

In these ways, the reader is asked to apply a specific rationality to the comprehension of ancient textual material. On one hand, this is done through foregrounding the contexts in which these texts were produced, such as Phadke's persistent reference to the Aryan race as one that was obsessed with its need to grow. Contradictorily, the reader is also persuaded to look at these texts as existing in a separate realm from the contexts in which

[79]Ibid., 117.
[80]Ibid., 107.

they were produced. Phadke traced the history of child marriage, for example, to a social past in which the true meaning of the content within ancient texts was allegedly obscured to society. Conversely, Phadke's solution to child marriage rested upon revisiting this past – however, not the lived reality of it but the 'rules' of the time as written in the texts. The nationalist pride that could be gained from a reclamation of the past was, according to Phadke, through a proper, rational reinterpretation of India's textual history.

In doing so, the texts were given not only an instructive voice but the status of being *agents* in the same way that scientific texts had its instructive voice and its own status as an *agent.* That is, both the ancient and the scientific texts could be separated from the contexts that produced them and instead could themselves produce an idealized society – the texts were to be seen as actors with agency. This process enabled him to posit ancient Indian texts and western medicine as equal and parallel streams of knowledge. Phadke called on his readers to utilize a rationality of objective truth in their reading of scientific texts while closely selecting Hindu religious texts that merited this same logic of objective truth. Strikingly, Phadke's own understanding of science and how it should be read closely mirrored the logic that was traditionally utilized for the interpretation of religious text – instructive and irrefutable. Phadke positioned science within an interpretive framework that was not only more familiar, but perhaps more convincing in the context that he was writing in. Ironically, while Phadke's project was one of finding a scientific voice in ancient religious texts, it had the outcome of bestowing a religious voice to scientific texts. This not only reflects the internalized constructs surrounding science vis-a-vis religion that Phadke, as someone who wasn't himself a scientist, was working within. It also demonstrates how projects such as Phadke's contributed to a dynamic social process of defining what science was, and how it needed to be read.

The Science, Religion and Pseudoscience of Marriage

A critique of the Hindu marriage system was central to Phadke's assessment of where Indian society stood and how it could be improved on the basis of eugenic principles. Particularly, Phadke used the facade of marriage reform to reach into the sphere of sexuality and envision a eugenically-minded model of sexual morality through the language of marital behavior. Marriage, in which lied the 'ultimate springs from where the race rises,' needed to be examined and its defects resolved so as to allow it to reach its full eugenic potential. To Phadke, the very foundations of marriage were closely tied to bringing 'organic unity' to society and therefore needed to be purified in instances where this functionality was lost.[81] As per his narrative on the history of the marital institution:

> A strong sense of communal pride was found to be lacking where the institutions of marriage and family did not thrive. Hence… the marriage custom was appreciated by people who cherished to maintain their own supremacy and prosperity… Marriage in short came to be desired as an infallible means of raising society to a formidable position.[82]

The imagination of an ideal system of marriage, therefore, took up significant space in his book and holds interesting clues as to Phadke's engagement with science and non-science as measures of social progress. To Phadke, not only did marriage need to be rescued from the 'tyranny of religion' that it was seemingly overburdened with, but it was further complicated by its entanglement with astrology. The Hindu marriage system closely relied upon the alignment of the bride's horoscope with the groom's and marriages were traditionally deemed to be feasible only in instances where such alignment was clear. This, according to Phadke, distorted an institution that should serve to objectively strengthen the Indian populace.

[81] Ibid., 61.
[82] Ibid., 62.

The threat of astrology was that it posed as a stream of scientific knowledge when in fact 'it cannot yet be ranked with the perfect sciences… very few of the predictions derived from astrological principles come true in an unqualified manner.' Clearly lacking these qualities that only science possessed, astrology, to Phadke, was undeservingly taking up a position of authority in matters of matrimony. The eugenically sound match making process ensured that the fittest lines of heredity found each other, unobscured by external pressures that forced marriages between the unfit and the non-matured. Astrologically fit marriages were often not eugenically fit, and Phadke mocked its far-fetched assertions on the marriage system:

> The father [can] adequately conceive the hardships… if [his daughter's] horoscope indicates the early demise of her future in-laws… if Mars is badly placed or evilly aspected in a girl's horoscope, to arrange for her marriage becomes a task hopeless to the uttermost degree. A irrevocable ban is put on the union… no matter how ideally fit and worthy of each other they might really be.[83]

The result was a 'regular succession of imbecile, weak, diseased, dull-minded and cowardly men and women… and the nation sinking down the abyss of annihilation.' The failure to separate astrology from marriage was equally the failure to embed it in eugenics, even as the nation's survival was at stake. The task of removing the influence of astrology was then also one of re-accessing and re-interpreting national history. To this end, astrology was not only non-scientific, it also had no place in his text-based history of who Indians truly were. That is, astrology was not endorsed by the authoritative voice of the ancient Hindu texts, suggesting that 'the canker of astrological consultation must have entered into the marriage system owing to some historical accidents.'[84]

In these ways, the authority that was falsely claimed by astrology needed to be returned to the world of science and to that of the body of ancient texts used by Phadke. In evaluating the

[83]Ibid., 103.
[84]Ibid., 104.

validity of astrology in society, Phadke claimed that his measure was its ability or inability to bring social cohesion as the only measure. However, it is clear that Phadke used facets of the western scientific methods – their ability to accurately predict outcomes and their rational soundness – as yardsticks to disqualify astrology from the status of science. In this way, Phadke's close engagement with astrology offers strong evidence that his work was not simply one of cherry-picking evidence of compatibility in ancient texts. Phadke, instead, used a deliberate framework in the categorization of these various texts and traditions. Certain texts such as the *Shastras* and the *Sutras* were, by his analysis, written by the authoritative, eugenically minded Aryans and could be properly contextualized in order for messages supporting eugenic programs to be drawn from them. A series of blips in history followed, some of which blurred the actual sources of historical scientific authority and led to the rise of 'dysgenic' institutions such as child marriage and dowry. Others, like astrology, even wrongly posed as scientific authority itself. These fell into the category of not only non-scientific but also ahistorical. Categories strictly set, the idealized form for the Hindu marriage system could now be imagined as one that was scientifically and historically sound.

This was a marriage system in which care for the nation's progress and stability became highly internalized and embodied through the act of procreation. Marriage, serving its role of constraining these sexual acts and devoting the parents to the upbringing of progeny, maintained sex such that it was both limited in quantity (birth control) and perfect in quality (eugenics). It is interesting to note that these functions of marriage that Phadke hoped the Hindu marriage system will regain, are functions derived from his analysis of natural scientific progression as well as social history. An entire chapter in his book was dedicated to this analysis, titled *The Institution of Marriage*. Scientifically, marriage served a sole purpose of producing and maintaining

genetically fit progeny. The social history of an ideal marriage, in brief, was founded in the need for successful societies to find numerical strength, internal unity and therefore material wealth. This differed significantly from long-standing views of marriage as a means for the preservation and strengthening of family honor – a means to maintain and enhance the status quo.

The form of marriage that Phadke advocated for was love marriage, an idea that carried a relative amount of scandal for the average Indian reader, who came from a long-standing tradition of marriage arranged by the parents of the groom and bride. The idea behind Phadke's support for love marriage was rooted in his ambition to completely separate the decision of marriage from social forces – the family, astrology and other backward customs such as dowry and child marriage. Giving precedence, instead, to the 'lovely flower blossoming on the creeper of love' ensured that marriages were not merely products of various social pressures but, instead, of an informed decision made by mature men and women.[85] This was indeed based upon the assumption that young Indian men and women would, by re-accessing scientific and ancient knowledge, be eugenically minded and prioritize the needs of the nation. Love marriage, to Phadke, in fact brought the marriage system closer to its idealized ancient form, here citing the contexts of the Hindu mythological epics:

> Love marriage was a popular form of marriage in the days of the Mahabharata and the Ramayana… there is no evidence to show that it led to wide-spread immorality or acted as a destructive influence on society. On the contrary, every available description proves that the people of those times were continuously growing stronger, healthier and greater in every way.[86]

This was particularly ironic given that it also these ancient texts, the people writing them, and the cultures inheriting them that articulated the very institution that worked most opposingly against love marriage – caste. It was caste anxiety that underlied the systems of child marriage and

[85]Ibid., 125.
[86]Ibid., 126.

parental interference so as to ensure caste homogeneity. The caste system prohibited relations within the same *Pinda* (blood-related family) and in the case of the Brahmin upper caste, within the same *Gotra* (priestly ancestral lineage, of which there are seven). Most importantly, at least to upper-caste concerns of purity – the caste system also prohibited relations between the four *Varnas* – the category most commonly known as the structure of the Hindu caste system, of which *Brahmin* is the upper priestly caste, followed by the military *Kshatriya* caste, the mercantile and agricultural *Vaishya* caste and the working *Shudra* caste as the lowest caste.[87] As per Phadke's interpretation, the prevention of marriage within *Pinda/Gotra* was testament to the eugenic wisdom of the writers of the caste system and could be defended by the modern knowledge that 'crossing is an exceedingly advantageous method of breeding both in the plant world and the animal world'.[88] According to him, while this logic was sound in the times that it was written, it did not hold true so many years later when priestly lineages, *Gotra*, were so diversified and expansive that there was no longer any risk of eugenic unfitness. Phadke also used reasoning based in these biological principles to invalidate the usefulness of the *Varna* distinction, making the claim that it was 'not easy to defend the old injunctions against inter-caste marriage on any scientific or eugenic grounds'.

The eugenic principles that Phadke looked to restore, then, directly contested the logic of caste therefore threatening the very instruments – the educated Marathi upper caste – through which his sexual reform project would be propogated. Furthermore, caste based on eugenic principles, would potentially hinder his agenda of Marathi upper caste reforming marriage *within* themselves, before presenting as role models to the rest of society. Phadke's strategy for devising

[87]This does not include Dalits or 'untouchables', who are not categorized within the Varna system and form the caste-less bottom of the pyramid
[88]Phadke, *Sex Problem*, 128

a 'eugenically sound' form of love marriage that still somehow left caste-consciousness unthreatened was to brush over the implications of eugenics on inter-caste marriage and instead emphasize its implications on intra-*Gotra* marriage – a justification for 'homogenous marriages'.[89] The important implication of eugenic principles, to Phadke, was that marriage between 'homogenous persons of eminent qualities' – socially, physically and economically adept and coincidentally upper caste – was valid. Especially given that *Gotra* was a category strictly restricted to the Brahmin caste, Phadke deliberately used eugenic principles to more actively endorse the greater possibilities of within-upper-caste marriage than he did to dismantle the prohibition of inter-caste marriage. Moreover, at no point did Phadke invalidate the caste system itself, only pointing to the particular context in which its eugenic basis were constructed and how they needed to be modified. Furthermore, Phadke maintained that eugenically sound love marriage did not have to be at the cost of the caste system:

> 'We have no desire to hurt the feeling of those who honestly believe that marriage must be heterogenous in Gotra and homogenous in Varna… But the most important obligation which they must learn to respect first and above everything is the Eugenic obligation.'[90]

As such, while Phadke's project was strictly about foregrounding the scientific principles of eugenics and finding evidence for how ancient Hindu textual knowledge agreed with these principles, the question of caste necessitated the perfect mix of calculated leniency and deliberate brushing-over. This was imperative to ensure that the ultimate goal of his project – that of making eugenics a decidedly Marathi upper-caste middle class led program – remained intact. Phadke, therefore, intentionally obscured the inter-Varna possibilities that a purely eugenic marriage system enabled, instead focussing on the upper-caste-strengthening possibilities it

[89]Ibid., 130
[90]Ibid., 133

would allow. The looming question of whether Phadke's proposed system of love marriage called for the opening up of inter-Varna relations remained intentionally hazy.

Phadke's concern around the his audience's reception of love marriage – as it posed a threat to caste, as well as to traditional culture – also came to the fore in his effort to dissuade his readers from associating love marriage with western values. By his own characterization, love marriage in western society had led to an 'atrocious anarchy of sexual relations.'[91] Phadke did not intend to propose that India import such a morality surrounding love marriage. It was strictly, instead, the specific eugenic and scientific promise of love marriage that could benefit Indian society:

> Why should not we then argue that the bitter fruits of love marriage in the West are a product, not of the seed, but of the soil, and that if the seed be sown in the soil of our Aryan culture it will bear the sweetest fruits?[92]

Marriage, therefore, was a central target for Phadke's proposed reform movement. While these concerns were part of a much broader concern with reforming Hindu marriage, Phadke's project was specifically and uniquely linked to sex and eugenics. His work set the guidelines that the middle class could use to present as role models for the rest of Indian society. These guidelines ensured a marriage deeply rooted in the science of eugenics and the authority of the *Shastras* and *Sutras*, yet purified from misguided social practices and the pseudoscience of astrology.

Conclusion

Phadke wrote in a context in which modernity was actively defined as rooted in scientific progress. He found himself in a larger network of upper-caste middle-class Marathi writers and thinkers who not only saw themselves as ideal leaders of social reform but

[91]Ibid., 125.
[92]Ibid., 127.

also as individuals who could ensure that social reform was based on rationalist ideologies. Stemming from a concern with overpopulation and a desire to channel his nationalist inclinations towards a convincing social reform movement, Phadke used various ancient Hindu texts to recall a 'eugenic sense' that Indians once possessed. This chapter has shown how he gave these texts a parallel and equivalent voice to that of modern science, as well as his decisive use of categories to separate these systems of knowledge from the misguided institutions of child marriage, dowry and astrology. Phadke, therefore, both used a scientific tone to shape his proposal of a eugenic program and gave specific meaning to what could and could not be included in the realm of the 'perfect sciences'. The chapter that follows transitions to the late- and post-colonial work of A.P. Pillay that allowed him to more freely engage with western sexological movements. Furthermore, as a doctor that was not linked to the same nationalist projects that Phadke was and more linked to global reform movements of sexual science, Pillay's project operated in relation to its own distinct stakes.

Chapter 2

A.P. Pillay: Framing Knowledge as a Cure

Alyappin Padmanabha (A.P.) Pillay, more so than Phadke, was closely linked to institutions of western science. Graduating with a medical doctor's degree from Madras Medical College, Pillay served as a physician in the Army Medical Service through the first world war. Until 1929, Pillay was committed to general practice in Sholapur – a small city in the western state of Maharashtra – where he aligned his work to eugenics and birth control projects emerging out of Britain and being adopted in India. In Sholapur, as director of the Sholapur Eugenics Education Society, Pillay set up a wives' clinic specifically focussing on issues of contraception, sterility, and problems of sex within the marriage sphere. These functions were formulated as part of an effort to ensure eugenically minded decisions with regard to childbearing.[93] The clinic mirrored similar efforts in the West, specifically those of London's eugenics and maternity welfare societies, and even directly borrowed their educative materials including pamphlets, posters, films and exhibition charts.[94] Moreover, the clinic was imagined to serve as a blueprint for similar efforts to reverberate across India and manifest a physician culture rooted in birth control and eugenics efforts.[95]

In India, Pillay recognized that physicians in general had an inability to offer eugenically sound advice – advice that would consider the hereditary nature of patient's ailments. Moreover, Pillay saw this inability as arising from physicians' unwillingness to

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[93]The Sholapur Eugenics Education Society: Aims and Objectives, 1929, Sholapur Eugenics Education Society SA/EUG/E.10, Wellcome Collection, London, UK.
[94]A.P Pillay to CBS Hodson, Undated,Sholapur Eugenics Education Society SA/EUG/E.10, Wellcome Collection, London, UK; A.P Pillay to Hon. Director, The Eugenics Education Society and Hon. Secretary, The Maternity and Infant Welfare Association, 7th June 1929, Sholapur Eugenics Education Society SA/EUG/E.10, Wellcome Collection, London, UK.
[95]A.P Pillay to J.A Madan, 1930, Sholapur Eugenics Education Society SA/EUG/E.10, Wellcome Collection, London, UK.

understand and discuss matters relating to sexuality more broadly.[96] While this was channeled towards a call for the study of eugenics by physicians, this vision broadened through Pillay's career. Relocating to Bombay by 1934, Pillay continued to conduct clinical work on issues of sexuality through his 'Eugenic Clinic' which provided him with a qualitative and quantitative stockpile of sexological data that would become heavily featured in his work.[97] At this time, Pillay started an internationally published journal, *Marriage Hygiene* (1934-37), addressing issues of sexuality through the colonially palatable lens of marital-societal health and eugenics.[98] Legitimized by the Eugenic Clinic's letterhead, Pillay used this journal to come into contact with doctors in the west who had expanded the discourse on marriage hygiene to topics of sterility, sexual weakness, sex disorders and sexual psychology – the field of sexology.[99] By the late 1940s, following independence, Pillay was seemingly no longer heavily shaped by the colonial context's emphasis on endorsement by British birth control and eugenics movements.

This set the stage for the *International Journal of Sexology* (1947-52), a post-colonial and post-war revival of Marriage Hygiene that was decisively more concerned with issues of sex itself – its significance as a human experience, its disorders and disharmonies, and its science.[100] Pillay charged himself with the responsibility of establishing sexology in India as a legitimate and separate field of study, 'not tacked onto psychology, urology or endocrinology'.[101] Instead, it would be an all-encompassing field that integrated knowledge from medical science and

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[96]A.P Pillay, A Plea for the Study of Eugenics, Undated, Sholapur Eugenics Education Society SA/EUG/E.10, Wellcome Collection, London, UK.
[97]Ahluwalia, *Reproductive Restraints*, 41-43; Srivastava, *Passionate Modernity*, 42-44
[98]"Objects," *Marriage Hygiene* 4, no. 1 (August 1937).
[99]A.P Pillay to Dr. Blacker, 1st June 1934, Sholapur Eugenics Education Society SA/EUG/E.10, Wellcome Collection, London, UK.
[100]"Objects," *The International Journal of Sexology,* 5, no. 4 (May 1952)
[101]A.P Pillay, "Common Sense Therapy of Male Sex Disorders," *The International Journal of Sexology*. 4, no. 1 (August 1950): 19-22.

psychoanalysis to specifically address a wide variety of normal and abnormal sexualities.[102] Creating such a space for sexology, according to Pillay, would ensure that individuals suffering from sexual disorders were not driven to unsuitable – exploitative and uninformed – authorities on sexuality.[103] Drawing on his own clinical practice, Pillay ascertained that a majority of the sex disorders faced by the patients he saw could be cured by 'common sense therapy' based in sexology. Such was a form of therapy that was not restricted to the confines of physiology (as conducted by urologists and endocrinologists) or of psychology that attempted to dissect every case through rigorous psychoanalysis. Pillay envisioned a multi-faceted field such as sexology, instead, as a distinct branch of medicine that would openly, specifically and effectively treat sexual problems.

(Left to Right) Lady Julien Cahn, Sir Cowasjee Jehangir, Sir Julien Cahn, Lady Cowasjee Jehangir, and A.P. Pillay. Taken from Marriage Hygiene, 1937.[104]

[102]Pillay, "Common Sense Therapy," 19.
[103]A.P. Pillay, *Ideal Sex Life: A Doctor Answers Confidential Personal Questions* (Bombay: D.B. Taraporevala Sons & Co., 1949), v.
[104] "Notes and Comments," *Marriage Hygiene* 3, no. 4 (May 1937).

In his quest to institutionalize sexology within India, Pillay employed a range of texts to explicitly address sexuality and the common experiences of individuals with 'defective' sexualities or fears thereof. Together, his journals contributed to establishing sexuality, and Indian sexuality, as a site that could be scientifically observed, studied and documented. Pillay, in addition to contributing to these journals, also re-produced his own clinical findings and the latest global sexological knowledge for the common audience. The chapter that follows will look at two of these works – *The Art of Love* and *Sane Sex Living* (1950) and *Ideal Sex Life: A Doctor Answers Confidential Personal Questions* (1949) – which were intended to address these issues in a more public realm. Pillay's work was situated within his broader advocacy for a form sex education that was deeply rooted in science. Sex education in such a form was, in Pillay's eyes, a hallmark of modern society and was a task that needed to be taken on from everyone between the modern parent and the modern scientist.[105]

Semen-Anxiety, Gandhian Sexual Morality and Pillay's Counter-Movement

The common trajectory witnessed by Pillay amongst the sexual lives of his patients was from excessive adolescent masturbation, to developing psychological afflictions due to misinforming literature, to finally losing the ability to engage sexually with their marital partners:

> After they [the patients] were masturbating for months or years, they read such and such, in a book or the literature of some firm of advertising quacks, that masturbation and nocturnal emission were very harmful and the 'victims' were sure to become impotent. This tightens them and they stop the practice. Then nocturnal emissions start which scares them even more. They lose even the bed erections they used to get… They lose sleep, appetite and suffer from every imaginable complaint and become neurasthenic and then come to the clinic… the complaints of 80 cases were *diagnosed* as due to ignorance of biological facts.[106]

[105]Pillay, *Ideal Sex Life*, 22.
[106]Pillay, "Common Sense Therapy," 19. Emphasis added.

To Pillay, this represented a general *diagnosis* of the Indian male populace that he saw as experiencing an abundance of sexual problems, bolstered by a lack of trustworthy authority on matters of sex. In response, Pillay pioneered a project that would mobilize the scientific study of sex – institutionalized as 'sexology' – in order to rectify the epidemic of misinformation that had plagued the realm of sexuality. This was a project that would essentially have to rewire the ancient and contemporarily revived logic of 'semen-anxiety' that had governed social perceptions of and standards for male sexuality.

'Semen-anxiety' came from a long-standing notion that the unrestrained loss of seminal fluid had an all-encompassing weakening effect on the male body. '*Viryanash'* or the loss of seminal fluid either on account of excessive masturbation, pre-marital promiscuity or even marital sex was seen as not only decreasing sexual potency and virility but also physical and mental strength, and relatedly economic potential. Tellingly, the term *'Viryanash'* literally translates to the destruction (-*nash*) of masculine energy, a word that became the euphemism for semen (*Virya*-). Botre and Haynes' work on letters written by middle class men to *Samaj Swasthya*, a sexual health journal circulating in 1920s and 1930s Bombay, reveals that these were deeply held anxieties amongst Indian middle class men.[107] Among the hundreds of letters addressed to this journal, their work found a trend of middle-class men being highly concerned about achieving '*brahmacharya*' – an idealized life of celibacy that evaded the categorically deleterious effects of semen loss. *'Brahmacharya'* was a concept finding its origins in *Vedic* (1500 BCE) and mythological (500 BCE) texts, resurfacing within Hindu reform movements (late nineteenth century) and prominently featuring in Gandhi's national project.[108] '*Brahmacharya'* was pushed and accepted as the desired state for masculine sexuality and was

[107]Botre and Haynes, "Sexual Knowledge, Sexual Anxieties".
[108]Haynes, "'Gandhi, Brahmacharya": 1163.

seen, especially by those prescribing it, to be of benefit to the individual, the marriage, the economy and the nation.[109]

This idealization of the age-old push for Brahmacharya, and more largely the creation of a moral code surrounding male sexuality, operated at various levels beginning with prescriptive work by nationalist leaders on the virtues of adopting a celibate life. For example, Joseph Alter has demonstrated how Mahatma Gandhi, combining Christian and Hindu codes of ethics, theorized that conquering the seductive power of sexuality was essential for the ultimate quest of pursuing what is real and true.[110] This was a truth that was unwavering and inherently good, and seeking its realization would be the foundation of a free nation. A world governed by insistence upon truth – *Satyagraha* – was a central tenet of Gandhi's philosophy on freedom wherein freedom would ensue if and when an absolutist moral code based in truth was achieved. At one level, to Gandhi, the very physicality of semen – when retained – provided a heavily masculinized truth-force necessary for his project of celibate truth-finding. More commonly however, Alter points out, the prevention of semen-spillage was postulated as a personal conquest of mind over matter – one that served as a "physical and personal means to a socio-political and ultimately spiritual end."[111] Simply put, the preservation of semen was necessary for individuals to effectively engage in Gandhi's non-violent freedom efforts. As such, the restraint and maintenance of semen, became a highly embodied and masculinized nationalist ideal. These logics were often adopted by local masculinity cultures such as North Indian

[109]Swami Shivananda's *Brahmacharya Hech Jeevan, Viiryanash Hech Mrityu* (1922), translating to Brahmacharya is Life, Viryanash is Death was a prominent treatise in the local arena that legitimized the glorification of brahmacharya vis-a-vis the renunciation of sensuality.
[110]Joseph S. Alter, *Moral Materialism: Sex and Masculinity in Modern India* (New Delhi: Penguin, 2011), Chapter 2: Celibacy and Sexuality, 41-92.
[111]Alter, *Moral Materialism*, 83.

pahalwan (wrestling) culture that stressed upon the importance of celibacy in order to maximize physical and mental strength.[112]

Locally, Newspapers and periodicals, beginning in the 1930s, included sex columns addressing the common anxieties of individuals and couples, as well as advertisements for pharmaceuticals and therapies – traditional and western, scientific and moral – addressing perceived sexual defects. Advertisements of sex tonics curing overall masculine weakness arising from the 'debilitating and shameful' effects of seminal wastage flooded the press and energized local and global flows of masculinity invigorating medications.[113] This emphasis on boosting sexual vitality and potency side-by-side with the anxiety surrounding seminal loss, reflected a larger phenomenon amongst Ayurvedic and Unani (traditional medicine) cultures that Alter describes as a 'paradox of virility'.[114] Importantly, a reasonable proportion of these advertisements fed into a mainstream, partially Gandhian, moral code that idealized celibacy and both the restraint and vitalization of semen.

While semen-anxiety was the dominant logic surrounding masculine sexuality, over-emphasizing it runs the risk of preventing a more nuanced understanding of sexual morality and masculinity cultures. Srivastava, for example, points us towards the need to uncover alternative lines of sexual activity that were equally concerned with defining and framing modern subjectivity in the late- and post-colonial state.[115] Charu Gupta, along the same line, has traced the emergence of pulp literature, popular poetry, proverbs and novels in colonial North India that complicated notions of overarching sexual conservatism and provided an alternative sexual

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[112]Alter, *Moral Materialism*, 151
[113]Haynes, "Selling Masculinity: Advertisements": 7
[114]Joseph Alter "Ayurveda and Sexuality: Sex Therapy and the 'Paradox of Virility'" in *Modern and Global Ayurveda: Pluralism and Paradigms* ed. Dagmar Wujastyk, 1st edition (SUNY Press, 2013).
[115]Sanjay Srivastava, ed., *Sexual Sites, Seminal Attitudes: Sexualities, Masculinities and Culture in South Asia*, First edition (New Delhi ; Thousand Oaks, Calif: SAGE Publications Pvt. Ltd, 2004), 19.

moral code.[116] As a concrete example of these shifts, Haynes identified a trend in the late 1930s away from advertisements capitalizing on semen-anxiety to those promoting marital happiness.

This particular re-centering, identified by Haynes, of marriage and happiness within married life was significant, first because it played directly into the male audience's insecurities with regard to their sexual abilities within marriage. Moreover, this re-centering allowed alternative approaches to sexuality to be embedded within the goal of strengthening the marital institution – an endeavor that had nationalist relevance. The work of AP Pillay can be located in these counter Gandhian, yet prominent, propositions of a sexual moral code. Pillay proclaimed his code to be scientifically rooted, and it relied heavily upon denouncing and debunking what he saw as non-factual, unscientific quackery. That said, it was a code that was presented within an ultimate goal of nourishing Indian marriages. Pillay legitimized marriage as a historically-rooted institution, rejected any notion that problems of sex were caused by 'disharmony seen in the institution of marriage itself' and situated his project within the ultimate goal of achieving marital happiness.[117]

Marriage as the Physician's Domain

While Pillay borrowed from various works of western sexology,[118] his identity as a doctor positioned him in close contact with a distinct phenomenon taking shape within physician circles of the western world. This larger network of physicians and psychologists such as Enoch Kisch, Theodoor van de Velde, Max Huhner and Kenneth Walker belonged to an energized European

[116]Charu Gupta, "(Im)Possible Love and Sexual Pleasure in Late-Colonial North India," *Modern Asian Studies* 36, no. 1 (February 2002): 196.
[117]Pillay, *Ideal Sex Life,* vii.
[118]Prominent amongst the sexologists referred to by Pillay were Richard von Kraft-Ebbing and Havelock Ellis.

movement of approaching the morally loaded topic of sex as a scientific object of study.[119] The study of sex and dissemination of information regarding it was posed as a study of marriage, a social institution that was seen to have definite scientific aspects. To do so, pleasurable sex needed to be reconceptualized as a central tenet of healthy marriage as oppposed to simply being a procreative means. This reconceptualization was linked closely, by these writers, to the modernity project. That is, pleasurable sex was defined as a sign of societal evolution wherein civilized societies, specifically, were able to see and experience sexual impulses outside of the realm of reproduction.[120]

Pillay and his contemporaries were invested in the naturalization of the sexual urge, as an outcome of reproductive desires that was equivalent to one's experience of hunger when in need of food.[121] They proposed that modern society was one in which the sexual impulse could be channeled into a healthy and loving marriage, therefore, allowing discourse on sex to be veiled as discourse on marriage. The curiosities of these writers, scientific or otherwise, could then be veiled as ambitions to improve social cohesiveness and overall social health – ambitions of social reform. Such reorientation allowed these writers to publish information on everything from courting, foreplay and love-making to sexual urges, erections and orgasm as part of their treatises on attaining ideal marriages. The renaming of sex as a foundation stone of marriage, as shown in the diagram adapted by A. P. Pillay from an American marriage consultant, allowed marriage to be proclaimed as a domain of the physician, creating a space for sex to be discussed in a legitimate arena.

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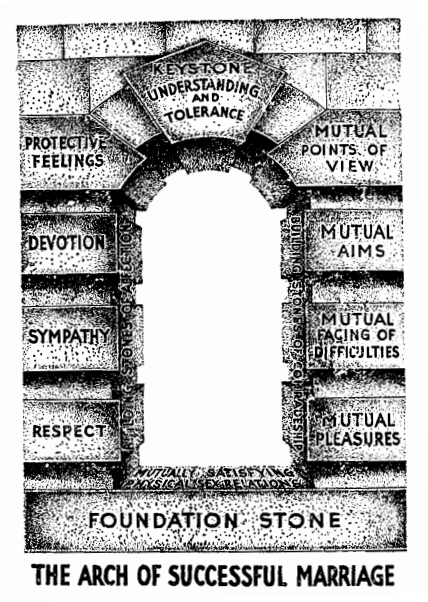
[119]Key works by these physicians, referred to by Pillay, included Theodor Van De Velde's *Ideal Marriage* (1928), Enoch Kisch's *The Sexual Life of Woman* (1916), Max Huhner's *Sexual Disorders in the Male and Female* (1945) and Kenneth Walker's *Sexual Disorders in the Male* (1948).

[120]Theodor Ven De Velde, *Ideal Marriage: Its Physiology and Technique,* translated by Stella Browne (London: William Heinemann (Medical Books), [1926], 1930), 11, 17

[121]Pillay, *Ideal Sex Life,* 2



'The Arch of Successful Marriage' taken from Pillay, The Art of Love[122]

Their books and treatises were seen to offer an objective voice of physiological science that, when digested by the reading public, would equip them with the knowledge required for sexual satisfaction – within marriage – and ultimately heighten psychological and social health. The material they published would not only be consumed by the public, but also served as 'practical treatises' to be consumed by other practitioners.[123] A global community of doctors, therefore, was established who found their authority on the premise of their clinical access to issues surrounding sex. While this was true in some part, such as with regards to the topics of sexual anatomy, erectile disorders, fertility and impotence, physicians often used their perceived scientific authority to expand the boundaries of what they had *access* to.[124] Literary takes on

[122]Pillay, *The Art of Love*, 52.
[123]Max Huhner, *The Diagnosis and Treatment of Sexual Disorders in the Male and Female* (Philadelphia: F.A Davis Company, Publishers, 1945), vi.
[124]Max Huhner, in *The Diagnosis and Treatment of Sexual Disorders (1945)*, includes experimental data from microscopic observation such as that of the interaction between sperm and venereal disease specimen, the effect of heat and freezing on sperm restored from condoms, among others. His work epitomizes how these doctors viewed their voice as being based in scientific observation, experimentation and study.

foreplay, love-making and sexual positions, for example, were integrated with textbook information on anatomy, arousal and attraction to produce chapters on the scientifically-sound attainment of pleasure.[125]

On one hand, these doctors sought to redefine marriage as a scientific space by highlighting the centrality of sex within marriage and establishing the underlying physiology and anatomy thereof. This allowed doctors to establish their authority on the topics of marriage and render it their own domain. On the other hand, by delving into the topics of love-making and pleasure, they also sought to dissolve the distinctions between the scientific-physiological and social-psychological aspects of sexuality. This allowed them to stretch the boundaries of their authority just enough to include topics that would make their work tantalizing for public readership. This complex balancing act reflected the fact that they were both separating their domain from that of pornography as well as directly competing with it.

The focus of the physician's social reform on marriage transferred to India not only in the form of ideology but also physically through western-produced contraceptives and medicines directed towards improving 'married life'.[126] At par with these trends in the West, Pillay sought to establish marriage as the physician's domain in an Indian context where marriage was long seen as a domain of caste, astrology and religion. Under the brand of 'wives clinics' and 'eugenics clinics' set up in Sholapur and Bombay in the 1930s, Pillay put into practice what he envisioned as the idealized role of the physician in guiding and shaping marital decisions. Moreover, this initiative offered Pillay an avenue to obtain the clinical data he needed to be able to quantify and disseminate information on sexuality within the framework of international

[125]Theodor Velde in Ideal Marriage uses a wide array of references from European literary writers such as Stendhal, Giamoco Casanova and Heinrich Heine. Similarly, Pillay's work used literary evidence from Shakespeare as well as ancient writers discussed later in this chapter.

[126]"Advertisements," *Marriage Hygiene*, 3, no. 3 (February 1937).

sexology.[127] Within his project to enable the global circulation of such information through the journals he edited, his ability to contribute to such studies legitimized and cemented his image as *India's sexologist*. By 1950, Pillay published his treatise *The Art of Love and Sane Sex Living*, putting together experiences from his work as a clinician, research in the field of sexology, and reflections on 'ancient precepts' from classicial literary works. The book was what he saw as a necessary intervention by a medical man to reclaim the field of sexuality, and provide a manual for ideal sexuality within marriage – a book 'meant to instruct and not to amuse'.[128]

The book covered a wide array of topics from extensive advice on selecting and courting a marriage partner and attaining satisfactory sex to information on prevelant sexual disorders and physical exercises to improve 'sex efficiency'. The logic that tracked throughout these themes was that everything could be boiled down to biology: The sexual urge was natural because it was the manifestation of a bioligical need, sex.[129] The act of courting or wooing a partner could be inspired and justified by similar practices within the animal kingdom.[130] Questions surrounding the age of marriage and compatibility along the lines of ethnicity and status could find their basis in animal hybridisation and inter-breeding experiments.[131]

This language of biology, according to Pillay, needed to take precedence over the social interpretations of sexuality and marriage. Furthermore, his book went on to demonstrate how these biological facts actually agreed with the 'ancient precepts' that, according to him, had so far shaped the social rules and guidelines for marriage and sex – derived from ancient Persian,

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[127]This work of evidence-collection was reflected in the charter of Pillay's Eugenics Society: 'Collecting statistics and facts that may be of use for legislative and scientific purposes in the country' in "The Sholapur Eugenics Education Society: Aims and Objectives," 1929, Sholapur Eugenics Education Society SA/EUG/E.10, Wellcome Collection, London, UK.
[128]A.P. Pillay, *The Art of Love and Sane Sex Living* (Bombay: D.B Taraporevala Sons & Co., [1950], 1970), 2.
[129]Ibid.,, 4.
[130]Ibid., 78.
[131]Ibid., 48.

Indian, Roman and Arabic literature on sex.[132] Biology simply offered the modern and objective voice that was needed to transmit information to the reading public so that they could effectively engage in sexual relations. Moreover, this project of translation further brought sex decisively within the physician's domain.

A striking example of this transference of authority from ancient precepts to the modern physician is found in Pillay's take on astrology which, as we have seen before, held a central position in Hindu matchmaking culture. While Pillay remained skeptical on the basis of astrology, he found there to be basic agreement between biology and four of the eight metrics or *Kutas* of Hindu astrological matchmaking – *Yoni Kuta* (sexual compatibility), *Nadi Kuta* (health compatibility), *Gnana Kuta* (intellectual compatibility) and *Graha-Maitri* (friendship, devotedness). These agreements were found in the 'principles' that underlie biological logic vis-a-vis astrological logic:

> I do not know anything about astrology and many of my readers may have no faith in it. I am convinced, however, that the principles underlying these investigations are thoroughly sound, especially as regards the *Yoni Kuta*, the *Nadi Kuta*, the *Gnana Kuta* and the *Graha Maitri*. The first indicates the sex affinities such as the degree of sex urge, sex compatiblity, the size of the copulatory organs and so on. This is important, though I do not know how by merely knowing one's natal stars, the size of a person's copulatory organ can be decided.[133]

Pillay, therefore, did not disagree with the idea that the *Kutas* needed to be investigated to ensure healthy marriage, but found humor in the fact that the basis of these investigations was the position of natal stars. The authority of these investigations needed to be shifted to the 'best person to help', the individuals with access to the marital partners' actual health information,

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[132]Pillay borrowed from a plethora of ancient literary works that were seen as the ancient equivalents of sex manuals. These included, among others, the 15th Century Indian *Ananga-Ranga* by Kalyana Malla, 15th Century Persian *The Abode of Spring* by Jammi, 1st Century BCE Roman poetry by Ovid, 15th Century Arabic *Perfumed Garden* by Nefzouri and the 3rd Century CE Indian text Kamastura by Vatsayana.
[133]Pillay, *The Art of Love,* 49.

equipped with up-to-date medical knowledge – the physician.[134] The consultation room of the astrologer, the natal stars, and the superstitious couple needed to be occupied instead by the doctor, clinical data, and the biologically informed patient.

This reimagined basis of marital decisions, carried out by a bringing marriage into the domain of the doctor, was only part of how Pillay envisioned the re-shaping of the doctor-patient relationship. Pillay also sought to position doctors – given their authority on matters of the biology of sexualty – as individuals who could provide information, more broadly, on matters regarding sexuality. Borrowing from the French realist Honoré de Balzac's position that 'no man should marry before he has dissected the body of a woman', Pillay saw scientific knowledge as a powerful means towards resolving sexual problems within marriage.[135] To this end, the production of knowledge – based deeply in biological information – was a significant undertaking as part of Pillay's project.

Knowledge as Cure: Towards a Rationale for Informationalization

Pillay's call for a project of information production rested on his previously mentioned 'diagnosis' that the Indian male's sexual problems often arose from or were exacerbated by a lack of scientific knowledge. The idea that providing proper knowledge would work curatively against problems faced during sex not only recurred across his works, but formed the justification for and underlying logic behind the content he produced. Pillay prefaced his book *The Art of Love and Sane Sex Living* (1950) with a clarification that:

> The more I come into clinical contact with sex disorders and marital maladjustments, the more I am convinced that it is not treatment that these

[134]Ibid., 50.
[135]Ibid., 83.

> patients need but the right kind of instruction on biological facts, and this is what I have attempted to impart in this book.[136]

The work Pillay produced was seen by him as a response to a field of sex that until him could be widely characterized by 'ignorance and exploitation'.[137] On one hand, the medical field had not developed or had refused to develop an understanding of sexuality, while 'notorious quacks' – motivated only by financial gain – vended rejuvenating nostrums and tonics by flooding newspapers with 'propaganda'.[138] Furthermore, Pillay was concerned that pornography had become a prominent source of information for Indian male youth. At various points in the consultations recorded in his book *Ideal Sex Life*, therefore, Pillay aggressively asserted the category of 'unscientific' to invalidate wrongful or illegitimate treatments and knowledge. Responding to a client's concern with obsessive masturbation, Pillay categorically adjudicated medicines advertised in the papers as 'worthless'.[139] Similarly, in his response to a mother suggesting the use of physical threats to dissuade masturbation, Pillay denounced the suggestion not on moral grounds but by citing that modern scientific enquiry had disproved the antiquated perception that threats were helpful.[140] Advising a male client with psychic impotence and a chronic masturbation issue, Pillay instructed 'never again read unscientific books, especially those on sex written by scheming quacks'.[141] In certain contexts, Pillay's framing of these consultations seems to decisively address widely believed misinformation on sexuality, such as that of semen-anxiety and sexual weakness, as depicted in this exchange between Pillay – D, for

[136]Ibid., vi.
[137]Ibid.
[138]Ibid., vii.
[139]Ibid., 55
[140]Ibid., 56
[141]Ibid., 89

doctor – and teacher, a client concerned about their duty as a sex educator to students, denoted as T [sic]:

> D: …the dread of masturbation cannot be entirely removed till a ban is put on such advertisements… For the present, the only course open is to show the boys statements from scientific literature about the harmlessness of the practice.
> T: Are you sure that the practice does not lead to sexual weakness?
> D: *Yes, I have not come across a single case of impotence*, and I see many such cases in a year, *that can be directly attributed to masturbation*.

On one hand, Pillay was concerned about pornography as a category that could wrongfully characterize his own work.[142] More significantly, however, he also framed it as a concern in relation to his theory on the emergence of 'sex problems'. Pillay was concerned that pornography, as part of a body of wrongful information about sex had led to individuals, specifically men, developing 'guilt associations' with their sexual urges which tended to impede their abilities to engage in sex in a physically and mentally sound manner. In his book 'Ideal Sex Life', Pillay reflected on the formation of these guilt associations:

> Many manufacturing quacks exploit young men by depicting the 'sins of youth' in the most terrifying terms and engendering in their mind their 'evil effects'. That is why these boys acquire guilt associations. And then there is a lot of pornographic stuff available…[143]

Apart from these 'guilt associations', misinformation at the hands of pornography and quackery also ran the risk of causing 'fixations', a concept that was vaguely related to Freud's category of psychosexual fixations. Fixations, as per Pillay's formulation, were the result of pornography causing a repulsive effect on the consumer which "produced a horror of normal sex life"

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[142]Pillay, *The Art of Love,* Preface; Notes and Comments, *The International Journal of Sexology*, 4, 3 (February 1951): The journal occasionally met with resistance from censorship actions by foreign importers such. The instance highlighted was one in which South African Post authorities had redirected the journal to the Return Letters Office and subsequently destroyed. The materials were found to be obscene, and Pillay's critical response rested upon the fact that these materials were 'professional literature' published by-and-for medical men, therefore removing any reason for charges of obscenity. Pillay mentioned this phenomenon of his work being misconstrued as porn throughout his other works.
[143]Pillay, *Ideal Sex Life*, 7

resulting in sexual frigidity and psychic impotence.[144] Together, guilt associations and fixations, reflected how information itself could have a biological effect on one's ability to engage sexually. This logic was not left in the abstract terms of 'psychic factors' but were further concretized using the Freudian concept of libido. Pillay's argument was that the brain, apart from the sexual organs themselves, belonged to the 'spinal sex centre', as shown in his diagram adapted from American sexologist Max Huhner. The integration of 'genitourinary evidence' of pathology in sex organs with neurological evidence from pschological investigations was a central intervention for Huhner that Pillay was heavily impressed and inspired by.[145] The idea was that defects in the brain, caused by the psychic effects of misinformation, disrupted its ability to 'independently send impulses to the erection centre' thereby impeding arousal.

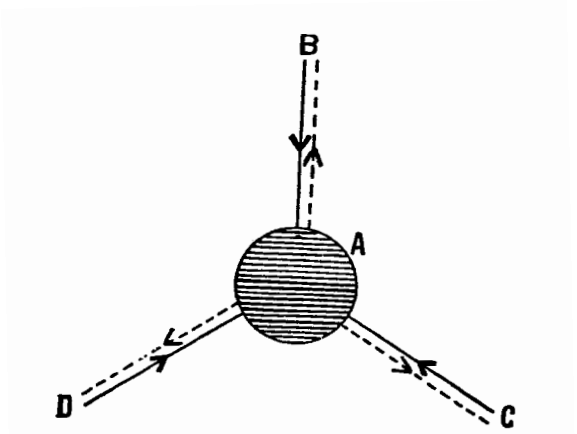

Illustration 11
SPINAL SEX CENTRE
A Erection and Ejaculation Spinal Centre
B Brain
C Penis
D Seminal Vesicles, Prostate and Posterior Urethra
Arrows indicate impulses passing from and to the spinal centre

'Spinal Sex Centre' taken from Pillay, The Art of Love (After Max Huhner)[146]

[144]The idea that certain developmental blocks could lead to a neurological incapacitation of sexual organs – psychic impotence – seems to be inspired by Freudian psychoanalysis, however the use of the term 'fixation' did not relate to Freud's idea of libidinal development.
[145]Huhner, *The Diagnosis and Treatment,* viii
[146]Pillay, *The Art of Love*, 241

While this connection between mind and body was essential to re-framing sexual problems as 'biological' rather than 'moral', it was not a novel or unique formulation. A recurring rationale in his book and a widely circulating concept, neurasthenia, explained sexual performance disorders as a result of nervous exhaustion and physical enervation.[147] Nevertheless, Pillay combined scientific vocabulary in a textbook-like tone with visual evidence from work by his peers in the West, to rationalize an argument for the impact of (mis)information on sexual ability. This allowed him to present 'information' as having a biological physicality, captured in the psychological health of the individual, imprinted in the individual's brain. Importantly, the biological physicality of the individual's interaction with information meant that doctors, by producing information, could directly shape the patient's psychic dispositions and have a profound impact on the patient's sex life. This offered the biological rationnale for a 'project of information' to be at the forefront of his cure for sexual inefficiency.[148]

Pillay also viewed these malefects of wrongful information as a product of the scientific deficit amongst the Indian populace. He implemmented surveys that could quantify the sexual knowledge held by Indian males, which could inform the design of projects to intervene and expand on this knowledge.[149] Insofar as the young who were scientifically informed, Pillay ascertained that pornography did not have a particularly notable effect. The vulnerable

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[147]George Beard, "Neurasthenia, or Nervous Exhaustion," Original Communications, *The Boston Medical and Surgical Journal*, 3, no. 13 (April 29 1869) demonstrates the 19th Century emergence of neurasthenic theory in the understanding of problems of impotence. For more on the circulation of these ideas amongst medical practitioners in the West, see Francis Gosling's *Before Freud: Neurasthenia and the American Medical Community 1870-1910* (1987). These ideas were expanded, critiqued and discussed heavily in the sexological works contemporary to Pillay's writing.

[148]There were other approaches to treatment, such as medications and changes in behavior and social environment (emphasized in *Ideal Sex Life*) and pelvic sexual efficiency exercises which Pillay spends significant time elucidating in *The Art of Love*.

[149]A.P. Pillay, "Sex Knowledge of Indian Males," The International Journal of Sexology, 2, no. 3 (February 1954): 144-145.

population as per Pillay, however, was also the majority – scientifically unaware and ignorant young individuals. As such, his intervention was not only that of making information available, but envisioning a transformed public that was scientifically informed and scientifically driven. Pillay envisioned a world in which the common-man's sexual knowledge was replaced and subsequently saturated by biological facts – an attempt, seemingly, to colloquialize biological knowledge. Sanjay Srivastava identifies the place of such a project of making information known as part of Pillay's egalitarian utopia within which the knowledge of and participation in sexuality – a requisite for full human potential – could be achieved by anyone. Towards achieving this goal, Pillay attempted to subvert the meaning of self-discipline, an ideal that was vehemently propagated by modernist Indians. Pillay's form of self-discipline came not from an avoidance of sexuality but from a rigorous pursuit of sound biological knowledge on it.[150]

Blueprinting a Project of Information

Pillay's project of producing and disseminating information on sex and sexuality took form through a multitude of avenues. While his journals utilized the form of the scientific article, his writing in *Ideal Sex Life*, took on a highly matter-of-fact and, in that, patronizing tone. The book was set up in the style of dialogues – in a question-and-answer format – between himself 'Doctor Pillay' and his clients who ranged from patients themselves, to the parents of young patients, to teachers hoping to be sex educators. The book was divided into three sections addressing the sex problems of individuals in three life-stages – adolescence, marriage and ageing. Text and illustrations in this book were directly cited from prominent atlases and encyclopedias on sexual anatomy and physiology, medical and psychological journals. Finally,

[150]Srivastava, *Passionate Modernity, 46*.

his book *The Art of Love and Sane Sex Living* offered a systematic review of sexuality – from the onset of the sexual instinct, the ideal channeling of this instinct towards pleasurable marital sex and ways to understand and prevent sexual disorders (primarily relating to impotence).

Evidence for Pillay's interest in information comes from the studies he contributed to his own journals. A common thread amongst these articles were an effort to illustrate, categorize and in some cases quantify the sexual experience of Indians. This was seemingly a task of validating the universality of sex and foregrounding what was otherwise hidden or taboo. Of particular note was his survey, conducted in 1950, of 381 patients of his 'sexological clinic' and an investigation of their premarital sexual experiences, generalized in the title as 'Premarital Sex Activities of Indian Males'.[151] This study was seen by Pillay as a first step towards what needed to be a 'nationwide study on the lines of Kinsey's research' – a scientific classification of sexuality in the Indian male. The study documented information regarding the patients' formative sexual experiences, including engagements with autoerotic, homosexual and heterosexual sex. These categories were further qualified with the patients' reasons behind their acts, whether or not their homosexuality was 'pseudo' (out of habit or due to an inferiority complex) or 'truthful', and evolution of their sex disorders. Through this data, Pillay concluded that there existed a dominant narrative of excessive childhood masturbation, followed by a quack-induced anxiety of semen loss and impotency, resulting finally in psychologically-grounded disorders which were primarily 'erective' and 'ejaculatory'. As resistance against this narrative, Pillay sought to mobilize science and use data to normalize sex as a human activity and create open channels of medical dialogue to effectively address the problems individuals faced.

[151]A.P Pillay, "Premarital Sex Activities of Indian Males," *The International Journal of Sexology*, 4, 2. (November 1950): 80-84.

Such an endeavor, to openly highlight and address the sexual experiences of Indians, was also implemented through Pillay's book *Ideal Sex Life.* In many ways, this book had a textbook–tone, summarizing the biology of various topics including menstruation, the endocrinology of sexual development, venereal disease and its spread, impotence, infertility and contraception. Anatomical figures and illustrations accompanied the monotonous yet elaborate descriptions reminiscent of science textbooks. The creative work of Pillay was that of using such a voice to 'respond to' questions pertaining to long-standing misperceptions on sexuality. A question from a client about the effects of masturbation on menstruation, was responded to with a four-page breakdown of menstruation beginning from the hormonal functions of the pituitary gland to the exact process of ovulation. Pillay cited the study of American scholar Katherine Davis to douse the patient's worry that their tendencies were abnormal.[152] The idea being pushed through such responses was that issues that had long been considered moral and social problems could be easily translated to the matter-of-fact, objective and common-sense tone of biology.

One extremely striking example of this, especially considering the aforementioned context of semen anxiety, was his explanation of semen and its loss. Pillay attempted to address both sides of the previously mentioned 'paradox of vitality' that was constructed by semen-anxiety logic. First, addressing the aspiration for seminal virility, Pillay clarified that potency and fertility were unrelated concepts, and that the volume of ejaculation was in no way a measure of one's ability to procreate much less one's masculine strength. Secondly, Pillay also addressed concerns of seminal loss due to excessive sexual activity or 'nocturnal discharge'. He classified seminal loss as an issue that was not a moral concern, but a biological concern contingent upon certain parameters:

[152]Pillay, *Ideal Sex Life*, 51.

> D: The quantity of [seminal] secretions varies in different persons. Even if profuse, the discharge need not cause apprehension, as it is not weakening to the body, mind or sexual system… When the 'oozing' discharge comes from the seminal vesicle and contains spermatozoa, the condition is spermatorrhoea and if it contains secretions of the prostrate, it's called prostatorrhoea.[153]

Pillay randomly interspersed information derived from his clinical observations, data from studies by western sexologists and physicians and common textbook knowledge. While some questions asked by his patients were answered with bulky text directly sourced from anatomical textbooks, others led him to forays into his own clinical observations and reflections. In some instances, he allowed the voice of his counterparts in the West to takeover, for example by answering a patient's question about an extramarital affair with 'have you heard about Havelock Ellis?' – a segue into blocks of text straight out of Ellis' work.[154] At moments, Pillay's work in *Ideal Sex Life* reads as chaotic due to his flip-flopping between these various sources of so-called authoritative information. It is this, however, that allows him to present an apparently unified body of scientific information – each authority validating the other.

A particularly visible – literally, using a scattering of diagrams and images – element of the information Phadke produced was that regarding the anatomy of human sexual organs. This was derived from the idea that a knowledge of anatomy was essential for one to engage in sex in a scientifically-informed and therefore pleasurable manner. To this end, a whole chapter in *The Art of Love and Sane Sex Living* was dedicated to a discussion of male and female sex anatomy. While the chapter included one diagrams of male sex organs, there was significantly more emphasis on the female body with diagrams of external female sex organs before and after the loss of virginity, and internal diagrams of the female sex organs and vaginal musculature. Each aspect of these anatomies are discussed in terms of their function during sex, with specific

[153]Ibid., 80.
[154]Ibid.,132.

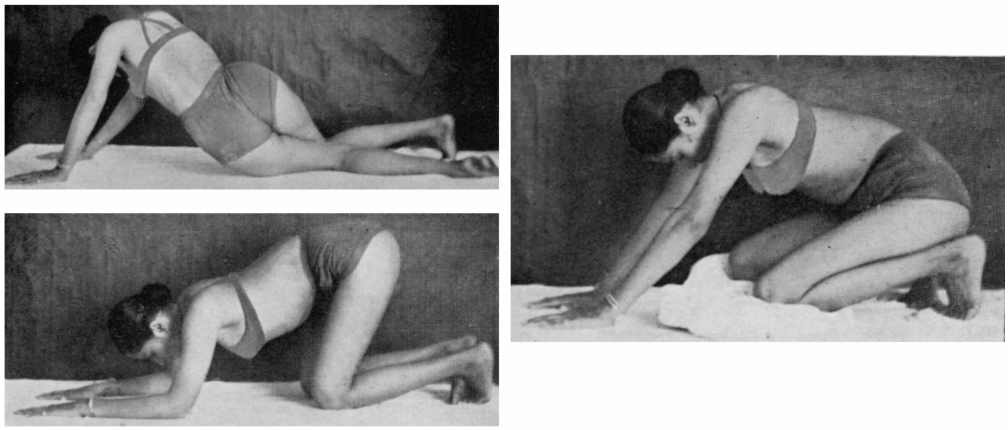
emphasis on aspects closely linked to pleasure – penis size, strength of vaginal muscles, as well as mammary glands. Some quantitative data was also provided, such as the average size of the penis and the lengths of vaginal openings. To Phadke, the knowledge of such data could directly work against the psychic complexes that impeded sexual pleasure:

> Men worry about the length and girth of their penis because they fear that they may not bee able to satisfy women in sexual congress. It should be made clear to them that the depth of the vagina is not so such as untutored men believe it to be. In birth control practice, one finds that the size of the diaphragm pessaries fitted vary from 65 to 85. That means that the depth of the vagina from the sacrum to behind the symphysis pubis is from about 2¾ to about 3½ inches… A penis of about 4 to 4½ inches can therefore traverse the whole vaginal canal. If this fact is realised, much of the inferiority complex will vanish.[155]

Some of his sex advice, as above, could reasonably be derived from data acquired from his clinical practice. As discussed earlier, however, the establishment of his authority as a doctor and a man of science was exploited by Pillay to expand his expertise to information that was clearly outside of the realm of clinical access. Four chapters formed Part II of his book, *The Sex Act*, which investigated the biology at play during intercourse and ways in which knowledge of this biology could be used to maximize pleasure. Particularly notable was his chapter on coital postures, knowledge of which he posed as being beneficial to preventing the 'marital drying up of sex'.[156] His advice for coital postures range from sleeping, standing and sitting positions to specific postures for virgins, stout people, partners of varying height and individuals possessing a range of shapes of sexual organs. These were themes remenescent of pornographic liiterature and graphic sexual sculptures in ancient sex-positive Hindu temples. However, Pillay's use of scientific terminology – flexion, extension, suspension – to describe these positions, ensured that his work was rescued from allegations of obscenity. Any speculation of obscenity, Pillay would

[155]Pillay, *The Art of Love,* 87.
[156]Ibid., 149.

assert, was due to ignorance of his status as a doctor and his work's status as science. Later in the book, a chapter was dedicated to describing various breathing, abdominal and pelvic exercises for women to improve their sexual efficiency by rectifying a 'lax vagina… and pendulous breasts that necessarily means absence of pleasurue to both the man and the woman during coitus'.[157]



Selection of images from Pillay, The Art of Love, section on 'Exercises to Acquire Sex Efficiency and to Correct Sex Deficiency'.[158]

The hypervisibility of the female body in these chapters would be justified by Pillay as simply being part of the scientific information that the Indian male needed to be aware of. It is clear, however, that the information in these chapters was not derived solely from clinical knowledge. Instead, it came from the depths of 'ancient sex manuals' including the *Kama Sutra* and *The Perfumed Garden* and presumably Pillay's own imagination. The inclusion of such content at the border between science and entertainment, may in part be explained by the practical need for these works to compete with pornography as far as public audienceship was concerned. The other possibility, however, that a facade of medical curiosity was exploited by these doctors to quench their male gaze cannot be ignored. Embedding his work in a project of

[157]Ibid., 169.
[158]Pillay, *The Art of Love*, 170

information that had value as social reform and using a strict vocabulary and tone of biology, therefore, gave Pillay the safety net to delve into topics that were tantalizing.

Conclusion

A.P. Pillay saw himself as part of a larger phenomenon in the West of physician-led intervention in the sphere of sexuality. His (and their) scientific authority was imagined as coming from their access to bodies and sexualities via the clinic and the medical textbook. Social reform, by Pillay, was seen as the doctor's duty of disseminating this information. The power of disseminating sexual knowledge rested on Pillay's subscription to a model of sexuality in which sexual efficiency – performance and happiness – was closely tied to the mind which, according to him, had been shaped by various strands of wrongful information on sex that were abundant in public culture.

By knowing sex, as explained through scientific terminology, these individuals could reverse the disorders and inefficiencies within their sex life. Writing in various registers – his scientific journals, a book in the form of dialogues and various treatises on specific sexological topics – Pillay provided the blueprint for how knowledge dissemination would and should take place. Outside of the production of text material itself, Pillay envisioned the re-shaping of the doctor-patient relationship as one that would openly bring sexuality into its realm.

To make his project legitimate and relevant, Pillay thought of marriage as the site at which doctors would intervene, using traditional systems of calculated match-making – the *Kutas* – to justify this shift. Otherwise, the place of ancient knowledge in Pillay's works was much less prominent as well as much more global – including Indian, ancient

Roman, and French sources – than that of Phadke's. This not only reflects Pillay's relative separation from Hindu nationalist movements, but a distinction in where he located authority. The final concluding chapter will compare Phadke's and Pillay's projects to show that the core of their differences is the distinctiveness in how authority was understood and where it was located.

Conclusion

N.S. Phadke and A.P. Pillay can both be located within a movement that recognized the value of science in shaping the sexual life of the modern Indian. They both belonged to the same colonial milieu of birth control ideology and family planning advocacy. In a physical sense, they shared Bombay's twentieth century backdrop of an energized print culture, ideological and technological exchange and nation-building aspiration. Importantly, until 1947, they were both colonial subjects – carefully navigating the influence of western civilizing projects and European science on one side, and nationalist sentiment and traditionalist revivalism on the other. This concluding chapter will contextualize Pillay's and Phadke's shared interests within Bombay's nation-building and nationalist movements, transnational conversations with key Western birth control advocates and the direct influence of the colonial state. More importantly, however, it will present their projects as existing in separate spheres, using distinguishable rationales and logics, and pushing distinct – and sometimes conflicting – agendas. Specifically, it will show that while both figures used a shared rhetoric of scientific objectivity, their understanding and mobilization of science and their orientations and ties to scientifically-grounded social reform were markedly unique.

Pillay's and Phadke's Spheres: Overlapping yet Distinct

N.S. Phadke, A.P Pillay and their projects deserve separate attention for reasons that are three-fold. First is a matter of the cultural contexts in which their ideologies brewed: Phadke's was that of Marathi Upper Caste reformism while Pillay's was a more cosmopolitan world of the modern English-educated doctor in urban Bombay. Relatedly, Phadke's work was clearly oriented in the direction of a local audienceship while Pillay's was further directed towards the

global journal-funders and physician-sexologists. Importantly, Phadke and Pillay raised distinct issues as central to their projects, depicting the unique ways in which sexuality was being problematized. This distinctiveness became especially apparent, as we will see, beginning in the late 1940s when Pillay was able to more freely discuss sexuality outside of the confines of eugenics and birth control. Whereas Phadke addressed sexuality as an issue primarily situated *between* people in the form of marriage, community, race and nation, Pillay was instead deeply concerned with the internal and intimate experience of sexuality *within* people – masturbation, pleasure and intercourse. As such, while Phadke strictly stressed upon what sexuality could produce outside of the individual engaging in it – durable marriages, a healthy race, economic resourcefulness and sustainability – the productive effects of sexuality as per Pillay were also inside the individual – psychological balance, sexual performance, happiness.

Their differing takes on the site at which sexuality most productively operated – external for Phadke, internal for Pillay – played out in their differing interpretations of the institution of marriage. For Phadke, marriage was the only legitimate expression of sexuality for the very fact that marriage was the vehicle through which his eugenic program could be implemented. Furthermore, to Phadke, 'marriage, instead of being the conjugal act, is the restraining and limiting of the act'.[159] This, according to Phadke, was not natural in itself but the natural expression of human civilization and progress. Phadke's project in no way posited dismantling this institution, simply revitalizing and strengthening it with eugenic principles. Pillay also did not envision dismantling the institution of marriage. Unlike Phadke, however, this was not because he hoped to make it the central site through which his project functioned, but simply because 'till a better substitute has been evolved, the duty of all medical men is merely to advise

[159]Phadke, *Sex Problem,* 60.

how to contract suitable matches and all existing marriages happy'.[160] The prominent point of departure between the two, however, was that Pillay recognized, validated and legitimized expressions of sexuality outside of the confines of marriage itself.

Ishita Pande's work on temporality has explained the range of sexual behaviors delineated by Pillay as having been given specific temporal meaning.[161] Within this paradigm, each life stage was ascribed specific biologically natural vis-a-vis morally normal sexual behaviors.[162] Pande's work, more extensively analyzing Pillay's contributions than Phadke's – within the argument of temporality – did comment on Phadke's own naturalization of age. Phadke set clear parameters within marriage – the only form of sexual expression he endorsed – suggesting that ancient Indian and modern western medicine both agreed on sixteen and twenty-five as the ideal age of marriage. Going beyond Pande's analysis, it is intriguing to highlight the fact that Pillay's and Phadke's temporal naturalization of sex directly contradicted each other. Whereas Phadke stagnated sexuality within his proposed age limits for marriage, Pillay broadened the natural sexual experience from youth, to adulthood and further to aging. This not only reflected their opposing takes on marriage, but the manner in which science – insofar as the naturalization of time was a scientific construct – was used differently and even conflictingly.

In part, the differences in their projects are explained by the specific manner in which Pillay and Phadke were oriented to their local contexts vis-a-vis the west. Writing in English, both Phadke and Pillay's major audiences were the Indian educated middle class, however, the differences in their projects reflect that this was far from a homogenous group. Phadke was writing on behalf of a wider Marathi literary and social reform movement that sought to establish

[160]Pillay, *The Art of Love,* 60.
[161]Ishita Pande, *Sex, Law, and the Politics of Age*, 205
[162]Pande, *Child Marriage in India*, 201

themselves as social leaders on both scientific and moral grounds. Through the 'revival of our true ancient Aryan culture' – *their* true ancient culture – Phadke was also playing into the nationalist sentiments of these movements.[163] By defining national culture as the Brahminical material culture of the ancient texts revived by Phadke, his project imagined a nationalist movement rooted in upper-caste morality. Situating science in both works from the modern west and the textual Indian past was productive for his audience who sought to imagine a scientific future that still valorized the ancient Hindu Brahminical past. While this was the background from and to which Phadke wrote, Pillay's work was not only oriented to an audience that was more directly affiliated to the medical field, but was also further complicated by the global circles he was working within. Pillay's work, initially, was heavily shaped by his position as a leader in birth control and marital hygiene. Gradually, his work came more into the realm of sexology. Even during his years of his wives' clinic and eugenics society, Pillay networked with physicians in the West who were participating in the energized field of sexology. By the late 1940s and early 1950s, as in his book *The Art of Love and Sane Sex Living*, his work – stylistically and thematically – resembled similar work emerging from the west, even if also grappling with locally-specific ideas surrounding marriage.

The shift in Pillay's voice was reflected in the changes in the objectives inspiring his journals. Every issue of the journal *Marriage Hygiene* was prefaced by its objectives – to medicalize issues of conjugal hygiene in order to ensure racial/national welfare, treat marriage scientifically and as a social and biological institution, and to advance, co-ordinate and consolidate the ambitions of contraceptive and birth control clinics.[164] The International Journal of Sexology, in contrast, was concerned more broadly with the study of sexuality, not necessarily

[163]Phadke, *Sex Problem,* 150.
[164]"Objects," Marriage Hygiene, 3, 3. (February 1937).

limited to its role within marriage, community and race. This shift was reflected in the objectives that introduced each volume of this new journal, which were now 'to secure adequate recognition by medical and social science of the significance of sex' and 'to educate the public by publishing authoritative scientific articles in the field of sex.'[165] Published in post-colonial India, Pillay was perhaps less entangled within British standards for censorship, enabling a shift away from the orientalist lens that was much more apparent in *Marriage Hygiene*.

While Pillay's and Phadke's projects, as shown here, could be distinguished by the ends to which they utilized science, there was something more fundamental at play. Pillay and Phadke had differing takes on the way in which society itself operated. To Phadke, society was comprised of morally distinct groups, specifically the middle class and lower class. The former would be the focus of the modernizing project, and embody scientific knowledge in their values and behaviors, which would then trickle down to the rest of society through role-modeling. To Pillay, society was comprised of individuals, each of whom had desires that were restrained or acted on based on how these desires were shaped by the sexual knowledge individuals could access. Within this model, each individual – ideally – could access and put into practice scientific knowledge. The crisis of sexuality – and society more broadly – was located at different sites for Phadke and Pillay and as a result, they both had distinct ways of imagining and utilizing science. The section that follows uses the contrast between Pillay's science and Phadke's science as a lens into the distinctiveness of their takes on social reform.

[165] "Objects," *The International Journal of Sexology.,* 4, no. 4 (May 1952)

Authority: of Science and of its Dissemination

Pillay's and Phadke's projects may be differentiated in terms of where they located scientific authority. To Phadke, scientific authority lay in texts themselves – ranging from texts produced in ancient India to those produced by western eugenicists. Phadke was less concerned with how the knowledge within these texts was being obtained and had no direct connections with those obtaining it, than he was with the compatibility of the texts with his envisioned project of eugenics. For instance, Phadke's rationale for the importance of a eugenic programme is founded on a narrative he drew tracking the works in heredity produced by the classical geneticists Darwin, Galton and Spencer. For Phadke, the nature of their experimentation and the processes by which their knowledge came about was unimportant. The theory of heredity, to Phadke, and science in general was not a dynamic site of production but a stagnant and incontestable 'explanation' of truth:

> The Theory of Heredity is nothing beyond an explanation of the two processes of transmission and variation. This explanation is offered in different forms by different scientists. It is neither possible nor necessary to take the reader into the detail of these differences."[166]

Their findings were presented by Phadke as 'broad principles' in consensus – their scientific observations were written by Phadke as doctrines.[167] The point of referring to their work was not to reproduce scientific information for consumption by his readers, but simply to suggest that Eugenics was grounded in certain 'indubitable' facts of science. Furthermore, Phadke provided no further justification or reasoning behind why this science was to be trusted apart from the idea that the West had brought it to a high degree of perfection.[168] Western science, as per Phadke's formulation, was an abstract entity that could be trusted simply because it was Western science.

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[166]Phadke, *Sex Problem,* 36.
[167]Phadke, *Sex Problem,* 46.
[168]Phadke, *Sex Problem,* 16.

To Phadke, a logic of incontestable, all-encompassing objectivity – a logic that was reminiscent of the consumption of religious doctrine – needed to be applied to the consumption of Western science.

Interestingly, this logic – re-purposed by Phadke as a 'scientific' logic – needed to also be applied to the study of ancient Indian texts. However, the 'eugenic sense' of ancient Indians could only be counted as *valid* if it agreed with the principles of eugenics as per contemporary science. As such, in finding the 'truths' within these ancient texts, a certain degree of contextualization and selectivity was required. The eugenic principles within these texts, according to Pillay, were sometimes either hidden or misconstrued due to the particular social contexts they were written in. As shown in the previous chapter on Phadke's work, by foregrounding context in some cases and ignoring context in others, Phadke's rationale behind the scientific authority of the ancient texts was inconsistent. In some ways, both in the case of the ancient texts and in that of modern science, the measuring stick for the authority of text was, to Phadke, whether or not the texts agreed with and legitimized a project of Eugenics. For these reasons, his argument reads as a chaotic, inconsistent, yet highly persuasive analysis of ancient and modern evidence – all in support of a eugenic program.

Pillay, on the other hand, decisively envisioned science as a dynamic process of knowledge production in which observation, study and dissemination was carried out by the physician. Partly, this is explained by the global network Pillay was operating within, constituted of western male clinicians – gynecologists, urologists and endocrinologists – who saw themselves as the legitimate authorities on sex. As reflected in his appeal for a Kinseyan project to be adopted in India, Pillay aimed to re-shape the doctor-patient relationship specifically in

terms of the status of sexuality within this relationship.[169] The model that Pillay attempted to architect was one by which patients would address their sexualities – either directly or anonymously – and doctors would respond by openly bringing sexuality within their domains.

In part, bringing sex into their domains would be justified by the extensive knowledge these doctors had gathered through their unparalleled access to texts with information on sexual anatomy. However, scientific authority, to Pillay and these doctors, was located beyond the confines of textual knowledge. The doctor had access to the act of sex itself – in the form of the sex disordered and sex curious patient and via the detailed, extensive narratives that these patients were willing to share. While Pillay's intervention sought to create a space where the doctor would impart knowledge, this space equally offered the opportunity for knowledge to be obtained by the doctor. Pillay actively brought the private sexual experiences of his patients into his reach through both his clinical work as well as by issuing notices persuading the public to 'apply for advice' with the promise of confidentiality.[170]

While scientific authority, to both Phadke and Pillay, lied in distinctive realms, they both had clear ideas surrounding who needed to be entrusted and charged with the responsibility of serving as the interface between society and their respective takes on science. By categorically laying out where authority of dissemination lied, Phadke's and Pillay's projects ensured that scientific authority became embedded within the identity of particular social groups. To Phadke, the ancient and modern textual knowledge of eugenics could and should be adopted as social change within the 'educated middle class' – the presumed audience for his English-language book. This educated class would then present itself as an instructive and inspiring behavioral

[169]A.P Pillay, "Premarital Sex Activities of Indian Males," *The International Journal of Sexology*, 4, no. 2 (November 1950): 80-84.
[170]A.P Pillay, "Important Notice", Undated, Sholapur Eugenics Education Society SA/EUG/E.10, Wellcome Collection, London, UK.

model for the otherwise backward other.[171] Phadke saw this backwardness of the Indian poor as their propensity for bringing an uncontrolled number of children into destitute environments, in Phadke's words 'bearing more children than the rags with which they cover their shame'.[172]

Phadke did not see this propensity as a product of economic necessity, but as an indirect consequence of various circumstances – diet, physical activity, mental stimulation, climate and happiness.[173] Together, these circumstances ensured that the poor had lower 'nervous energy', used by Phadke as a explanation for why the middle class was able to make better moral decisions. The same superior 'nervous energy' that enabled the middle class to behave within a eugenically sound framework, was Phadke's justification for their status not only as role-models but leaders who could re-shape the backward environments of the rural and urban poor. A theory – of nervous energy – branded as science, therefore, underlied Phadke's positioning of the educated middle class as moral leaders.

This idea of intellectual superiority as the foundation for morally and scientifically sound reproductive behavior resonated, as Ahluwalia has further shown, with broader middle class concerns about population control.[174] In Phadke's world within a network of knowledge production and social reform by upper caste (Brahmin) Marathi elites, this middle class overlapped almost completely with the upper caste. Botre has argued that aggressive upper caste dominance in the dissemination of sexual knowledge served as a powerful means to construct caste-hierarchies as a knowledge-hierarchy and vice versa.[175] For Phadke, the mechanics of achieving this goal were two-pronged. First, through the revival of Brahminical ancient texts

[171]Phadke, *Sex Problem,* 108.
[172]Phadke, *Sex Problem,* 295.
[173]Phadke, *Sex Problem,* 302.
[174]Ahluwalia, *Reproductive Restraints,* 41.
[175]Botre, "The Body Language of Caste ", 120.

produced with a particularly upper-caste flavor, the authority of science was located. Second and perhaps more enduringly, the upliftment of the upper caste – veiled as an educated middle class – as translators and enforcers of this scientific authority, the authority of science was socially inscribed.

To Pillay, in the same line that scientific authority lied in the power of observation and experimentation held by the physician, the physician was also charged with the responsibility of disseminating information. At one level, this was to be done through the localization of medical writing on sex which until Pillay's intervention was seen by him to be dominated by 'books on sex [that had] been written by foreign medical men… [that] are far too expensive'. At a higher level, Pillay attempted to restructure the doctor-patient dialogue, giving sex a legitimate space within it and in some ways manifesting the very script of his book *Ideal Sex Life: A Doctor Answers*. To Pillay, the cure for sexual disorders, and more widely the cure for marital disharmony, did not necessarily lie in a specific scientific treatment but required 'wide guidance from a competitive doctor.'[176] Therefore, in order for marriage to be based upon scientific principles and sex to be informed by biological facts, the doctor needed to be the marriage counselor and sex expert. Of course, while these doctors were described to be unified by no other category than their identities as medical men, the scientific elite of India was decidedly middle class and upper caste.

The issue of scientific authority and its location was further complicated, in Pillay's case, by his views on knowledge as a means of decentralizing scientific authority. Sanjay Srivastava, as discussed in the chapter on Pillay, has argued that Pillay's project was one that championed an egalitarian sexual utopia.[177] In this regard, Pillay's project envisioned a highly intimate, inward

[176]Pillay, *The Art of Love*, 332.
[177]Srivastava, *Passionate Modernity*, 46.

process of accessing knowledge, applying this knowledge on one's sex life, and re-wiring the deficits that impeded their sexual efficiency. Within this model, where one's own knowledge became their cure, the minds of individuals could themselves gradually serve as the knowledge-dissemination authority for the individual's body. In this way, scientific knowledge and scientific authority could become diffuse and perhaps even democratic. However, this was a utopia only accessible to specific people. Ahluwalia has offered a strong argument in making this point, by pointing us to the way in which Pillay categorized the sexuality of impoverished, rural Indians as merely physical acts lacking the psychological and emotional pleasure of ideal sex life.[178] The sexuality idealized by Pillay in which sex was enacted with intentionallity – not only scientifically informed, but loving and passionate – was therefore an urban elite privilege. The very construct of idealized sexuality within Pillay's framework of modernity was equivalent to the sexuality of the urban elite. Arguably, modernity itself was a privilege of the urban elite. The preceding chapters have gone into detail about Phadke's and Pillay's specific deployments of science – even if defined differently – in bolstering and legitimizing their projects. For Phadke, the idealization of a scientific eugenic program rested upon proving compatibility and continuity between the ancient Hindu past and the modern scientific future. For Pillay, the valorization of science not only ensured that those with the best access to sexuality – doctors – were adequately utilized towards social reform. At a deeper level, however, scientific knowledge served as a cure within his psycho-physical model of sex disorders, which he genuinely believed to be a significant part of human suffering. In both Pillay's and Phadke's work, western and local knowledge systems were contested and oriented in specific ways that could be attributed both to the individual producing the knowledge as well as the collective that was hoped to consume it.

[178] Ahluwalia, *Reproductive Restraints*, 43.

Embedded in this phenomenon is the more obscure narrative on what knowledge was trusted or resisted by the transitioning late-colonial to postcolonial Indian. It was clear, however, that this trust – insofar as it was heterogeneously placed – was exploited and shaped by writers such as Phadke who pursued social change in the name of modernity.

Science, however, as this concluding analysis has shown, was also used to justify their ideas of social leadership with regard to sexuality. Phadke, through his scientifically-branded theory of 'nervous energy', and Pillay, emphasizing 'pleasure' by giving it naturalized and scientific status, both used science to normalize and idealize the behaviors accessible only to the middle class (coincidently, upper caste) Indian. Furthermore, both Phadke and Pillay envisioned a particular class of individuals – Phadke's Marathi literary elite and Pillay's doctors – who would be the intermediaries between scientific sexual knowledge and the Indian populace. As such, they inherently – even if not intentionally – made the behaviors of a certain social group – Phadke's Marathi urban upper caste, and Pillay's scientifically enlightened urban upper class – the ideal for sexuality. Both Pillay and Phadke, then, set the stage for Indian sexual modernity to be guided and governed by the middle-class, upper-caste, complicated, inconsistent yet all-powerful measure of 'science'.

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