

# INTRODUCTION

## CONCEPTUALISING CONCEPTIONS

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Assisted conception has become a visible part of contemporary Indian reality.<sup>1</sup> Popular culture, print and electronic media, and the expansion of in vitro fertilisation (IVF) clinics in many Indian cities and towns have together popularised and normalised the idea of ‘test-tube babies’ in a country of more than one billion people. Though traditionally long considered a stigmatised condition, infertility and its cultural (biomedical) management has never before in the history of the modern Indian nation been so vocally and publicly articulated.

The primary aim of this book is to show that infertility and assisted reproductive technologies in India lie at the confluence of multiple cultural conceptions. It addresses how assisted conception is understood by both the infertile and their clinicians by placing this encounter in the broader cultural context in which these technologies are received, used and promoted. The book’s title, *Conceptions*, invites attention to cultural conceptions that lie behind the struggles of the protagonists (patients/clinicians) who feature in this research. The term ‘conceptions’, however, appears problematic to a listener trained in filtering semantics in a classic positivist/empiricist truth-seeking tradition. It sounds pejorative because it renders assertions deemed conceptions as false, untrue and subjective, pointing to a flawed understanding of ‘facts’, which modern science deems otherwise. An anatomical exploration of the term, on the other hand, yields a rich, multifarious body of paradigmatically encrusted meaning. According to the *Oxford Dictionary* the term ‘conception’ means:

1. The act or an instance of conceiving; the process of being conceived.

2. An idea or plan, esp. as being new or daring.
3. Understanding, ability to imagine.

This polytonality of meaning unpicks the many cultural processes shaping the very notion of 'conception'. The usage of the term goes deeper than establishing a mere correspondence between the biological act of conception and its medically assisted version. In shaping the overall project of understanding infertility and assisted conception in India, this book on one level draws on the term to contain and problematise the biological act of conception, assisted by the modern biomedical edifice, by showing how the two are in the 'process of being conceived' by biomedical experts and infertile patients. On another level, the book deals with social conceptions about infertility and its biomedical management, focusing on how they are understood not only as 'new daring ideas', as they emerge in media discourses and on the politico-commercial face of biomedical expertise, but also as an ancient 'imagination' of infertility management, a cultural frame that resonates with contemporary clinical, as well as social, infertility experience. It is to these conceptions that the anthropological project of understanding the finer relationships between these myriad strands attaches itself.

In other words the book deals with 'conceptions' deemed old and new, seemingly modern and traditional, purportedly scientific and religious, noticeably biological and technological. Conceptions are multiple, some manifestly prominent and others playing a role which is seemingly peripheral. This account reinforces the idea that conceptions seldom provide coherence, especially analytical coherence. That is, some conceptions predominate; others trail; still others seem to be rank outliers disturbing the possibility of narrative coherence. In this sense, this book is also about the incoherence implicit in conceptions jostling for attention. But together these conceptions reveal something important about infertility and assisted conception in India: the destruction of certainty in medically managing conception and the anthropological ability to narrate these complexities.

At the outset I outline four dominant themes that inform my analysis and understanding of infertility and procreative modernity in contemporary India. The first of these undercurrents is located in debates surrounding conceptive technologies in the Euro-American cosmogony. In particular I isolate the ideology of 'nature' as central to the Euro-American worldview – as both a historic project and a contemporary belief – which social science debates endeavour to unpack and problematise. I grapple with the social science critique

of nature's place in the so-called Western ideological corpus to better contrast global articulations, such as those in India, where assisted conception is less preoccupied with the figure of nature. Second, if the nature/culture binary underscores much of the historical and contemporary engagement with reproduction and its biotechnological management in the Euro-American formations, an equally entrenched binary of tradition/modern demands critical scrutiny in the Indian context. As the book shows, the twin conceptions of 'tradition' and 'modernity' continue to offer a fascinating conceptual insight into the burgeoning growth of assisted conception in India. Third, the cultural production of infertility and assisted conception can no longer be understood as a solely Euro-American concern. On the contrary, assisted conception in the new century is strongly positioned at the intersection of the local and global. For example, the transnational movement of Euro-Americans in search of conception to India and beyond has demonstrated the true global reach of assisted reproductive technologies. Lastly, as observed in the preface, this book has long been in the making, and disparate ethnographic encounters and representational quandaries have shaped it in very specific ways. It is to these encounters and representations I return briefly as I narrate facets of assisted conception in India today.

### **Nature/Culture: Assisted Conception in Euro-American 'Feminist Cosmogony'**

The concept of nature stands as an important theme, foregrounding both feminist concerns vis-à-vis the impact of new reproductive technologies on Western women and social-anthropological debates on its implications for ideas of kinship and relatedness. Feminist cartography has long charted the cultural genealogy of nature in Western civilisation. The pre- and post-Enlightenment engagement with nature in Europe emerges as rooted in a cultural conception of man's superiority to nature – a maxim enshrined in the Book of Genesis: 'Fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the air and over every living thing' (Genesis 1:28).

This ancient belief of man's right to dominate nature receives a further fillip in the work of Enlightenment scholars who propounded a philosophical view of the universe as mechanistic, following predictable laws; those who could liberate themselves from the fetters of medieval superstition could discover through science

and manipulate through technology (Davis-Floyd 1990). According to Carolyn Merchant (1983), during the seventeenth-century period of rapid commercial expansion within Europe, the machine came to replace the organism as the underlying metaphor for the organisation of man's universe. Prior to this idea, the earth had been viewed as a living organism infused with a female 'world-soul'. Merchant further argues that philosophers like Descartes, Bacon and Hobbes

transformed the body of the world and its female soul ... into ... a mechanical system of dead corpuscles, set into motion by the creator, so that each obeyed the law of inertia and moved only by external contact with another moving body ... because nature was now viewed as a system of dead, inert particles *moved by external rather than inherent forces*, the mechanical framework itself could legitimate the manipulation of nature. (Merchant 1983: 193; emphasis added)

By the seventeenth century – the beginning of modern science – Descartes had effected a conceptual separation between mind and body upon which the metaphor of body as machine came to be predicated (Burkitt 1999). Since the body was viewed as an appendage of the mechanistic natural realm, it came to be viewed (medically) as a mere mechanism that could be 'taken apart and put back together' (Kleinman 1995: 36). Some feminists argued that the man who established the idea of the body as a machine firmly established the male body as the prototype of this machine (Davis-Floyd 1990; Davis-Floyd and Dumit 1998; Rothman 1982). This is seen as a significant departure from the ideas propounded in medical texts from the ancient Greeks up until the eighteenth century that described male and female bodies as fundamentally similar. Women had hitherto been conceptualised as embodying the same genitals as men inside their bodies, thus relegating women to 'a lesser version of the male body' (Laqueur 1990; Oudshoorn 1999). Merchant (1983) further argued that any deviation from the male prototype became valid grounds for viewing female biology as abnormal and defective and as untenable as nature itself, thus in need of man's manipulation. Robbie E. Davis-Floyd (1990) similarly concludes that the demise of the midwife and the rise of male-attended mechanically manipulated birth followed close on the heels of the wide cultural acceptance of the female body as a defective machine.

This cultural imagination that placed the female and nature along the same continuum had in fact received critical anthropological attention before Merchant's (1983) groundbreaking *The Death of Nature: Women, Ecology, and the Scientific Revolution* (MacCormack and

Strathern 1980; Rosaldo and Lamphere 1974).<sup>2</sup> Carol MacCormack (1980) questioned assumed links between nature and women as inherently given and, together with a group of scholars, MacCormack and Marilyn Strathern (1980) persuasively critiqued 'universalistic' visions of natural and cultural that located femaleness in biology (nature) and maleness in the social domain (culture). These early feminist and anthropological critiques profoundly influenced the social scientific view of biomedicine and subsequent feminist accounts of reproductive health and technologies. Feminists now began to question the 'othering of women' (Oudshoorn 1999) as a special category of 'patients' within the medical domain from the eighteenth century to the biomedical gynaecological discourses of the nineteenth and twentieth centuries (e.g. Davis-Floyd 1990, 1992, 1994; Martin 1987; Moscucci 1990; Oudshoorn 1994). With biomedicine firmly established as a fundamental source of male assumptions about women's bodies as being closer to nature, and therefore as legitimate objects of scientific study (Oudshoorn 1999), feminists began to evaluate critically new forms of 'biomedicalisations' of the reproductive process (Clarke and Olesen 1999).

The 'new' technical possibilities of bypassing infertility only accentuated feminist disquiet over the increasing medicalisation of birth and the implicit metaphoric postulations of manipulating unpredictable nature (women) through cultural (male) knowledge and artefacts. Whereas the earliest polemical accounts, like Shulamith Firestone's (1971) *The Dialectic of Sex* and Marge Piercy's *Women on the Edge of Time* (1979), viewed technologies of procreation as liberating women, the radical feminist challenge of the early 1980s – spearheaded by Arditti et al.'s (1984) *Test Tube Women: What Future for Motherhood*, Andrea Dworkin's (1983) *Right-Wing Women* and Gena Corea's influential *The Mother Machine: Reproductive Technologies from Artificial Insemination to Artificial Wombs* (1985b) and *Man-Made Women: How The New Reproductive Technologies Affect Women* (1987) – critiqued the new reproductive technologies as instruments of oppression where dominant male scientific enterprise dehumanised, repressed and systematically objectified women.

Subsequent research was less conspiratorial in tone but critically expanded on these earlier concerns, in particular the works of Klein (1989), Klein and Rowland (1988), Lasker and Borg (1989), Spallone (1989), Spallone and Steinberg (1987), Stanworth (1987b). These scholars were now beginning to argue that a 'particular feminist reading [mainly the radical feminist challenge] which sees in these technologies an unmitigated attack on women was

inadequate' (Stanworth 1987b: 3). These feminists raised questions about the experimental nature of reproductive technologies and the fear of turning women's bodies into 'experimental sites' (Klein and Rowland 1988).

In the 1990s, however, there emerged a body of feminist scholarship that negotiated with infertility and assisted conception as something to be understood critically and accommodated rather than overtly rejected (e.g. Birke et al. 1990; Cussins 1996; Franklin 1997; Franklin and Ragoné 1998; McNeil et al. 1990; Ragoné 1994; Sandelowski 1990, 1991; Strathern 1992b). Research focused increasingly on the 'lived worlds of infertility and reproductive medicine' (Cussins 2000), though the adverse effects of technologies on women were not entirely ignored and 'the ideological hegemony of the technocratic paradigm as potential future-shaper' was critically revisited (Davis-Floyd 1994: 1125; Davis-Floyd and Dumit 1998). The biomedical perspective on infertility, like that on other biological processes, was therefore seen as illustrative of the 'reflexivity of values in medicine and society', replicating cultural norms in biomedical ideologies about the nature and treatment of disease (Becker and Nachtigall 1994). Scholars like Emily Martin attracted criticism from within this new feminist terrain. For example, Naomi Pfeffer (1993: 176) questioned Martin's interview schedule that excluded infertile women and their experiences, thus conveying the impression that 'all women who live in Baltimore, USA ... inhabit fertile bodies'. Arthur L. Greil (1994), on the other hand, critiqued Martin and Davis-Floyd for treating women's responses to medical definitions as an 'epiphenomena' without giving due attention to women's creativity and agency in working within the medical framework to achieve their own ends, like the infertile women in his study, who transformed the medical model without accepting or rejecting it to better meet their own goals. Sarah Franklin (1997: 165) similarly showed, in the case of women undergoing IVF, that despite the cost and pain, women endorsed the technique and felt that it had 'made something of them' as women. These scholarly negotiations with the new technologies of conception were born partly out of an interest in examining the lived worlds of infertility and reproductive medicine. Feminists now 'granted the technologies a much less monolithic, oppositional and inhuman role' (Cussins 2000: 55–56) in favour of 'a much more mediating and active role than their predecessors had' (Thompson 2005).

These shifts within the feminist terrain concealed a broader tension that Stanworth (1987b: 4) earlier outlined as central to the

feminist concern, where ‘on the one hand, medical and scientific advances offered women a greater chance to decide if, when and under what conditions to mother, while on the other, they increased the potential for others to exercise an even greater control over women’s lives’. Charis Thompson (2005) echoes this dilemma in a comprehensive review of the growth of feminist thinking in relation to infertility and assisted conception. In charting the evolution of this feminist discourse, she isolates two broad phases – phase I from 1984 to 1991 and phase II from 1992 to 1999 – while arguing that a paradoxical tension in feminist engagement with infertility and reproductive technologies lies between empathising with infertile women and their need to seek treatment and recognising the risk that in doing so they perpetuate already entrenched gendered roles and stratifications (Thompson 2005).

This feminist quandary is in a sense produced in relation to the dominant ‘technocratic imperative’ permeating the Euro-American<sup>3</sup> social matrix:

*If it can be done, it must be tried ... if it can be tried, then I must try it. In other words, the existence of new reproductive technologies (NRTs) opens up new potentials for reproduction; once they are open, because they exist, they cannot be ignored. At the same time, options that arise out of a more organic or holistic worldview ... are rendered invisible in the face of the dazzling potentials of the NRTs. (Davis-Floyd and Dumit 1998: 7)*

Franklin’s (1997) research similarly suggests that women express two primary aims in relation to IVF: if they succeed, they achieve the ultimate goal of a take-home baby, and if they fail, at least they know they have tried everything. ‘The pair of alternate resolutions’ according to Franklin (1997: 107) ‘was seen to guarantee success one way or the other, a positive outcome was assured’. This ‘technocratic imperative’ ironically re-emphasises the Euro-American distrust of nature on one level. Davis-Floyd and Dumit (1998: 9) succinctly articulate this distrust, writing that ‘because we so deeply trust technology, we cannot trust nature anymore. Natural reproduction, when successful, becomes a special category: lucky’.

Parallel to these debates, nature itself had become a subject of intense social scientific examination. While Thomas Kuhn (1970) unprecedentedly problematised the working of science, many scholars questioned the very idea of an untainted ‘nature’ waiting to be scientifically uncovered. These scholars showed how natural reality is actively constructed as an object of scientific study (Gilbert

and Mulkay 1984; Latour 1987; Latour and Woolgar 1979). Correspondingly, nature and the life sciences included under the rubric of biology and biomedicine came to be viewed by feminists as 'socially, historically, culturally and economically constructed' (Clarke and Olesen 1999: 9). Feminist anthropologists like Strathern (1992a) were quick to point how different historical periods in England had defined and debated nature differently. Postmodern scholarship expressed this new state of nature by questioning 'what remains of the natural when nature is cultural – a product of discourse – and when what had been the territory of the natural is taken over by the intervention of human engineering' (Robertson et al. 1996). From within the disciplinary boundaries of sociology, scholars posed similar but more specific questions about how to think about nature. They emphasised paying critical attention to the issue and shied away from providing grand narratives in reply (Haimés and Williams 1998). On the other hand, anthropologist Paul Rabinow (1992) predicted a future whereby 'nature will be known and remade through technique and will finally become artificial', just as culture would become natural.

While scholars like Merchant placed the emergence of medicine in the context of rapidly expanding industrialism in Europe, which displaced the organism in favour of the 'machine metaphor', postmodern scholarship scrutinised biomedicine in the context of emerging technocratic culture within (late/post) industrial society. Similarly, if the industrial technology was geared to produce a particular kind of mechanistic rationality, which looked at the organic in terms of the inorganic (machine), then the newly emerging technocratic culture produced a rationality that juxtaposed the organic and the inorganic. It has thus become

routinely thinkable in the post-industrialism of the late twentieth century – or at least presentable in Euro-American media – to make play with juxtaposing images of the organic and inorganic. We are not just supposed to think that machines are like bodies, but that there are aspects of machines that function no differently from parts of the human body even as human beings may embody technological devices within themselves. (Strathern 1992b: 2–3)

This positioning of the organic in relation to the inorganic (or non-human) heralded the birth of 'juxtapositions' (Strathern 1992b), 'hybrids' (Latour 1993) and 'cyborgs' (Haraway 1990, 1991). Haraway's pronouncements that 'we are all cyborgs now', 'cybernetic organisms', 'a fusion of the organic and the technical',

'shocked into being from the force of the implosion of the natural and the artificial' (Haraway 1999: 42–43) further disrupted the idea of 'natural reproduction'. The cyborg metaphor re-emphasised the mediation of reproduction by different kinds of 'technoscientific interventions' (Davis-Floyd and Dumit 1998: 11); it has touched all aspects of assisted conception. Semen, a bodily fluid, technologically processed by semen banks, became 'technosemen', a cyborg (Schmidt and Moore 1998). In vitro fertilisation similarly came to be seen as a 'hybrid of human and machines, of physical practices and textual practices' combining 'old and new reproductive technologies', a cyborg that allowed a retrospective glance at the 'constructed nature of conception' (Mentor 1998: 69–70). The disjunction between the metaphors of the body as machine and the body as cyborg also rendered late twentieth-century engagement with technologies like IVF 'fundamentally schizophrenic and ambivalent' (Mentor 1998). The issue at hand, therefore, is no longer one of critiquing metaphors of bodies working like machines but of machines working both with and within bodies, and while 'natural conception/birth' is still desirable, feminists are equally alert to women's growing unease with leaving 'reproduction' to the caprices of 'nature' (Mentor 1998).

The cyborg metaphor not only problematised the process of 'natural conception' but, more significantly, 'what was now to count as natural' and its implications for the ideas of kinship and relatedness. Thompson (2001) however tempered the discussion by describing the imagined implosions of nature and culture as counterproductive. Instead Thompson (2001: 198) showed the 'productive negotiations of boundaries and explanatory relations between cultural and natural concepts' in a specific area of contemporary infertility clinic in the United States. In fact, anthropologists had been arguing for some time that the twentieth-century conception of nature was inherently biological (Ingold 1986). As a consequence, the idea of natural kinship became biologised, and the meaning of what was natural became more specific (Strathern 1992b). The Euro-American 'reproductive model', according to Strathern, is premised on suppositions about the connections between natural facts and social constructions. Strathern's (1999: 23) remarks that the 'social recognition of parenthood must follow the biological fact', that the act of having sex, transmitting genes and setting into motion the biological development of the embryo followed by the foetus represents a modern, twentieth-century view. Technologically, however, assisted biological parenthood

does not replicate exactly the old concept of natural kinship, but it does introduce a contrast between artificial and natural process, where assisted conception creates the 'biological parent as a separate category' (Strathern 1992b: 19–20). The connections between the natural and the social aspects of kinship are therefore rendered variable, with assisted conception offering different ways of configuring biological kinship, i.e. of other ways of 'doing' kinship that configure the mixture of nature and culture differently (Cussins 1998a: 43–63). The twentieth-century 'natural parent' – one who embodied the genetic and social 'kin' credentials – is dispersed either by enabling fertilisation outside the body or by involving donated 'third party' gametes. Franklin (1997: 7) thus speaks of the late twentieth-century British kinship dilemma, 'which is the question of how to make sense of new forms of technological assistance to conception which create new "relativities" in the space where certain relations once stood'. Franklin has two concerns: first about the relationship between 'traditional' kinship idioms of relatedness and the new forms of connectivity put in place by assisted conception; and second about the 'relationship with science and technology', which is rapidly complicating the Euro-American understanding of the self.

The anthropological focus thus rests on 'the emphasis Euro-Americans give to personal and kin identity via the facts of biology, and thus the cultural nexus between conception, sexual connection and individuality that is simultaneously reinforced and bypassed by the new reproductive technologies' (Strathern 1999: 25). Nature, so assisted, is compromised in one significant way; it is no longer a domain from which intervention is absent and 'what is taken as given, is no longer given by nature' but is 'visibly circumscribed by technological capability' (Strathern 1992b). Strathern placed this loss of nature into the wider 'enterprise culture' of the late twentieth century, where 'prescriptive consumerism' derives satisfaction from meeting the desire to consume. In this Euro-American context, where life is being increasingly 'enterprised-up', Strathern (1992b) discerns a subtle shift in the idea of naturalness as related to conception from being 'part of the workings of physiology to attributing it to parental desire'. Desire in the enterprise culture becomes choice, both in the consumerist sense and as a 'natural' desire to be a parent. This technological assistance is considered natural in that 'as long as some element of the entire process of childbirth can be claimed as natural [e.g. a couple's own gametes, or the womb as a natural space], technological

intervention appears enabling [and transforms assistance to mean that] nature sometimes needs a helping hand' (Strathern 1992b: 56–57). This is a potent sign of the postmodern age for some feminists, where the Euro-Americans have 'moved so far into the cyborg realm that only those technological transfusions [called] "assisted reproduction" – safe, monitored, controlled – are considered "natural"' (Davis-Floyd and Dumit 1998: 9). However, while the natural became biological in the twentieth century in very particular ways, paradoxically this biological also became inherently 'relative' (Franklin 2013). This biological relativity compelled yet another dissolution of the biological and the technical as IVF not only relatively 'denaturalized' biology but also 'cultured up' the biological exponentially (Franklin 2013: 4).

Hence, central to the biomedicalisation of infertility is the concept of nature, as an ideal to be both opposed and embraced. While cyborgification has broken down and juxtaposed the nature/culture binary, as a process of cultural change, it appears to have turned the 'cyborg experience' into one that responds to (and improves) natural processes and redefines them as 'relatively' cultural. Arthur Kleinman (1995) argues that 'biomedicine instantiates the Western tradition's idea of progress', to which one can add Franklin's (1997: 166) contention that the interplay between reproduction and technology deploys two of the most powerful Euro-American symbols of future possibility: children and scientific progress. It is in this respect that the cyborg conception and eventual birth instantiates the idea of progress and continuity with the future. Establishing this connection has displaced and reconfigured certain core cultural ideas about nature in the Euro-American worldview, and it is this that much of the feminist and social-anthropological scholarship continues to debate.

This vast body of Western literature and debates – and others – relate to this book in three crucial ways. First, despite the manifestly different cultural context in which technologies of conception are embedded in India, the selective use of some substantive ideas in this literature helps to locate globalising fertility techniques in specific cultural concerns. After all, the very idea of 'nature' with a distinctive Euro-American provenance remains implicit and embedded in globalising technologies, like IVE, that reconfigure in different cultural contexts. Second, distinct from the Euro-American experience, the idea of nature in India – *prakriti* – is in some ways equivalent to the divine unknown and unknowable. It is enchantment par excellence, and any human effort to reveal and unravel it

only serves to further deepen its ‘unknowability.’ Nature in this respect becomes a shrouded presence on the margins of human cognition. Nature in this schema is also ontologically multiple: actual, self, real. The continual search for one’s true nature has underscored meditative struggles in India for millennia. In brief, nature in India can be imagined as pure philosophical wonder dressed up as context sensitive explanation. The ethnographic context will later show how, as a shrouded, unnamed entity, nature remains present as a quasi-divine object in the narratives and theodices of patients and clinicians. That said, it is important to stress that I do not use the notion of *prakriti* as an analytical trope to understand ‘Indian encounters’ with assisted conception. The category cannot be made to dovetail a notion of Indian reality any more than the idea of nature explains the entirety of the Euro-American experience. In explicating these conceptual possibilities, I merely gesture towards echoes of these cosmogenic constructs that remain tantalisingly familiar and yet incoherent enough to not map seamlessly onto ideas of ‘Indian’ or ‘Euro-American’. Third, unlike Euro-Americans, their Indian counterparts seldom relate to the category of nature – at least in the Hindu cosmology – as a domain from which human intervention is absent. In this cosmology, to be nature (*prakriti*) is to remain in a symbiotic relationship with the human and subject to human industry and action. To be brief, according to Hindu tradition, there are four *purusharthas* (forms of human action): *dharma* (righteous/virtuous conduct), *artha* (generation of wealth), *kama* (pleasure, desire and regeneration) and *moksha* (liberation from worldly cycles of birth and death). Manifestly the *purush* (man) / *prakriti* (nature) symbiosis is encoded with a distinct patriarchal bias. At a meta-level, this union underscores a primordial, epochal procreative theory of creation wherein the heteronormative male and female principals come together to reproduce and elicit change and difference. In practical terms this amounts to nature being made/extended/modified through human action just as human action is shaped/curtailed/facilitated by a dynamic nature. At a philosophical level, this symbiosis also symbolises man’s attachment to *prakriti* through intervention and domination. Hence, as with all living things, growth, change and movement are inevitable. The only impediments and obstacles in this worldview are the torturous growth pains that mortal resistance to change brings. It is to these changing conceptions that we now turn.

## **Spliced/Betwixt: Conceptualising Modernity and Traditions in India**

As counterparts, modernity and tradition are key to understanding the burgeoning spread of assisted conception technologies and the social implications of infertility and childlessness in India. In so arguing, the book does not allude to the emergence of a 'new modernity' but rather attempts a conceptual incision into the disrupted reproductive terrain. It examines the 'spliced' nature of Indian modernity where the improvised domains of traditional and modern symbiotically sustain, contain and enable the other. The result enables a relationship with the past, present and reproduced future.

Much ink has been spilt on the question of modernity and its multiple, mutating global contours. Whether conceptually demarcated as 'modernity and other traditions' (Friedman 2002), modernity and capitalist hegemony (Comaroff and Comaroff 1997) or simply rampant 'modernity at large' (Appadurai 1996), conceptual notions of the modern can be gainfully captured as being 'co-produced' by the global circulation of capital and capitalist economy. However, the point I wish to make vis-à-vis India is much simpler. At its most elementary, in India today, to be modern is to be anchored in the spatial configuration of the new and in the temporal dimension of the now. In this worldview, tradition, far from being antithetical to the spatial and temporal project of the 'new-now', produces exceptional and contingent modernities that (re)animate the 'then' in the here and now. In this variant of the modern episteme, the Weberian 'calculating spirit' (*Rechnenhaftigkeit*) routinely miscalculates and subrogates 'the disenchantment of the world' (*Entzauberung der Welt*) with an enchanted, instrumental rationality adept at worshipping at the altar of charismatic authority. This peculiarly modernist thought experiment shaped, in large part, postcolonial politics, state and institutions, cultural production, both 'high' and 'low', as well as scientific and technological advances. Lawrence Cohen's (2004: 166) insightful commentary on the elite and state planning reproducing colonial and nationalist structuring of 'masses: ... subjects capable of passion but not reason' further illustrates this modernist conundrum. The contradiction according to Cohen is as follows: the Weberian, ascetic modernisation (instantiated by the state-sponsored population control policies), is 'organised around a transformation of reason and will in the production of ascetic moderns, but it takes as its material for transformation a population it constitutes as radically disjunct from reason itself'. The sterilisation operation

for Cohen (2004: 166) has a redemptive quality that civilises the masses and produces a body that becomes ‘as if it had undergone a transformation of reason’ and has become ‘inhabited by an ascetic will’.

Paradoxically, the elite state-sponsored discourse, which occupied the space vacated by the colonial modernist self-fashioning, routinely projects similar passions onto the bodies of its citizens. Nation-building in India has always been driven by passion. The passions rage and range from the Nehruvian kind (cf. Roy 2007), to ones shaped by the reaction to the manufactured state of emergency (Tarlo 2003) or reanimated under the impulse of neoliberalisation (Gupta and Sivaramakrishnan 2010; Patnaik 2014) and religious chauvinism (Reddy 2011; Sharma 2006). It appears that postcolonial India has knowingly or unknowingly renounced reason in favour of a passionate embrace of reason. This reasoned modernity is delivering growth, wealth and prosperity while at the same time deepening social poverty, social exclusion and social suffering. Governance in the passionate mode is almost always contingent and tacit rather than rational and calculating. Manifestly, the rational bureaucratic trope, a Weberian ideal type, appears to typify the Indian civil services or its colloquial variant *babu raj*. However, in the ‘rough-and-tumble of everyday life’, the ‘illegibility’ of the state (Das 2004: 251) produces as much a descent into unreason and chaos as the passionate masses it seeks to control. In this sense I argue that India’s modernist journey is marked by passionate reason: the passion on occasions delivers all that is good and desirable, and reason accentuates millennia old inequalities and uncertainties.

Technologies, such as IVF, that are routinely used to assist conception are not transferred into cultural voids. Rather, local considerations, be they cultural, social, economic or political, shape and sometimes curtail the way in which these Western-generated technologies are both offered to and received by non-Western subjects (Inhorn 2003). In the Indian context, this essentially translates into grappling with complex notions of tradition and modernity. In fact, anthropologists often encounter creative tensions between these concepts and essentialist imaginations of India as standing at the confluence of Western philosophical paradigms and its own perceived normative traditions (Dumont and Pocock 1957). What kind of anthropological response can therefore adequately unpack and explain the interplay between imagined traditions and the supposed modernities in a rapidly globalising India? Let me attempt to step tentatively out of this conceptual problem.

Anyone who has had sustained contact with the contemporary Hindu worldview would notice its unique ability to continuously engage its cultural past. The so-called 'Western' and 'modern' in this worldview emerge embedded in the traditional, a process that connects the imagined past to the present, and the present to an imagination of the future. Milton Singer (1972: 385) tried to explain this as early as 1972, by arguing that 'the traditionalism of Indian civilisation lies elsewhere – in its capacity to incorporate innovations into an expanding and changing structure of culture and society. This capacity is reflected in a series of adaptive mechanisms and processes for dealing with the novel, the foreign, the strange'. In this scheme, therefore, nothing is excluded, making cultural transformation less painful. Hindu epics and deities are invoked in everyday Indian parlance and news media analyses. Objects like nuclear bombs get construed as *brahmastra*, the deadly weapon of Brahma the creator. Similarly, aircrafts are recapitulated as the *pushpak vimana* (aircraft) on which the Hindu God and mythological hero Rama flew back with his wife Sita after killing the demon Ravana, and guided missiles are imagined as Arjuna and Rama's arrows that struck with lethal accuracy in the great wars of the Hindu epics *Mahabharata* and *Ramayana*. A close family friend once referred to (one of the protagonists) Vyasa's rendition of *Mahabharata* (or the Epic Battle) to the blind king Dhritrashtra miles away from the battlefield in the city of Hastinapur, as an ancient form of live television broadcast, a phenomenon that has become an integral part of contemporary Indian culture. Attipate Krishnaswami Ramanujan has likewise shown that new ways of thought and behaviour do not replace, but live alongside, 'older religious ways'. Thus he goes on to assert that computers and typewriters receive *ayudhapuja* (worship of weapons) as weapons of war did once (Ramanujan 1989: 57). Interestingly, this cultural reasoning did not take long to assimilate issues like IVF and surrogacy. Thus, an article entitled 'Sages Knew the Use of IVF' made an appearance in the English daily newspaper *The Statesman*, on 16 January 1995. Similarly the recent advances in embryonic stem cells in India have led scientists like Dr B.G. Matapurkar, who researched adult stem cells in Delhi's Maulana Azad Medical College, to argue that *Adi Parva* of *Mahabharata* gives clear indication that the Kauravas (one of the protagonist clans) were born from stem cells. Not surprisingly, an article appearing in the Indian English-language magazine *The Week*, on 16 September 2001, carried the following banner headline: 'Stem Cells: A Lost Science of India?' (Bharadwaj 2005). More recently, Prime Minister Narendra

Modi courted controversy by suggesting that plastic surgery and genetic science explain the creation of the Hindu deity Ganesha and mythological hero Karna, according to the *Indian Express* (27 October 2014: 1) in an article entitled 'PM Takes Leaf from Batra Book: Mahabharat Genetics, Lord Ganesha Surgery'.

Archaeology of these developments yields historic echoes that Gyan Prakash archives in his portrayal of the intimate relationship between science, colonialism and the rise of a peculiarly Indian modernity. In the context of colonial science, a prime instrument of the empire, Prakash (1999) shows how the rise of science came to inspire many of the colonised to seek equivalent precedent for scientific thought in India's own intellectual history, creating a form of knowledge that combined Western ideas with Hindu cultural and religious understanding. Thus the very act of displacing the coloniser/colonised binary equated Hindu culture with Western culture and suggested science as the heritage of all Indians (Prakash 1999: 8–9).

However, I do not suggest that this rich historic context adequately explains parallels between the past and the present. Nor do I seek to minimise these occurrences or suggest that Hindu reasoning reduces everything to an antediluvian past. On the contrary, this continuous relationship with the past feeds into daily conversations, acts and attitudes towards the rapidly changing surroundings. There is never a conscious attempt to refer back to these sources, but they crop up either in the act of explaining life and its complexities or cynically furthering political or pseudointellectual agendas. This is a cultural process that is ever present in its apparent social absence. Marilyn Strathern (1992b), in the preface to *Reproducing the Future*, lucidly alludes to how people everywhere express even the most general thoughts in specific and particular forms by making their ideas available to one another. As 'a consequence they are always borrowing, if only from themselves. It is this (cultural) facility that enables us to at once give shape to and provide ourselves with starting points for fresh thoughts' (Strathern 1992b: vii). Thus I argue that, by drawing on and borrowing from the past to make sense of the present, these cultural agents – seen in the examples above – are not trying to establish a truthful and objective narration of the past in relation to the present. Rather, they are trying to assume the 'other' in the image of the 'self', setting into motion the start of a new thought, a new cultural imagination. Whether this produces innocuous and innocent affect or orchestrates certain expedient consequences remains deeply rooted in context.

This process of juxtaposing 'traditional self' with the 'modern other' is best understood in terms of what Veena Das (1999) calls the double entrenchment of tradition in India. She argues that tradition is first entrenched in institutions that may be considered traditional (such as caste or religion) and second in institutions that may be considered modern (such as the bureaucracy and the law). She further argues that:

An untainted traditional telos is as unavailable in contemporary Indian society as a modern institution, such as a law court, [to this we can now add IVF clinics] which has not been coloured by its location. It is this double articulation which makes institutions such as caste or the religious community into new, original entities; this is not a matter of aggregation by which new features are added to old ones. When, for instance, Gandhi used *satyagraha* [literally 'insistence on truth'] as a form of non-violent resistance to the British Raj, he transformed a traditional concept into a new concept. (Das 1999: 53)

This is not to suggest that India faces a 'mistaken modernity' (D. Gupta 2000)<sup>4</sup> or that traditions are in any narrow sense 'invented' (Hobsbawm and Ranger 1983), for as Fuller (2003: 163) points out, 'even an invented tradition, if it is to have any resonance, must connect with a "collective memory", so that it cannot be entirely new and discontinuous'. In other words, when both the traditional and the modern are continually re-made, traditions are reanimated to become new concepts; modern institutions in turn – when placed in the context of these 'sense-making', 'meaning-giving' improvisations, reformulations and reconfigurations of traditional concepts – stand transformed as they get absorbed and further enmeshed in the changing context.

The presence of biomedicine, encompassing assisted conception as a biotechnological means of bypassing infertility, is a fine example of a modern institution in contemporary India which is 'coloured by its location'. Clinical engagement with infertility provides an insight into how people inhabit several domains simultaneously and how they move, extend and reconfigure ideas from these domains to create newer ones. These newer juxtaposed domains (traditional/modern) allow for an imagination of how things really are (Strathern 1992b). This raises two main issues: first, the traditional Hindu cosmological framework that produces beliefs and norms about human fertility/infertility and how these ideas produce the experience of stigma and social suffering in the face of infertility (Bharadwaj 2003); and second, the modern institution of biomedicine, which is

uniquely coloured by its existential location in the wider context of Hindu traditions and whose selective transference enables clinicians and patients to make sense of issues such as the success and failure of assisted conceptive techniques (Bharadwaj 2006). This book focuses on both issues to purport one possible explanation of how seemingly modern and traditional entities in India permeate each other and produce a culture-specific engagement with assisted conception. In the words of Gyan Prakash (1999: 234), Indian modernity cannot be viewed as a simple 'victory of capital over community, modernity over tradition, West over non-West'; none of these neat oppositions dissolve each other; one (modern) does not negate the other (tradition) but rather 'one enables the other's reformulation'. However, it is essential to add a small footnote to Prakash's observation. It is the context-sensitive nature of this precise reformulation that makes, remakes and populates the many differing traditions and competing modernities in India. The resulting image remains shaky, partial and prone to mutations brought about by political, economic and social forces. In this respect, while Parts I and II in this book may appear as straightforward renditions of institutions and the concepts of traditional and modern/secular respectively, Parts III and IV shed light on how seemingly modern and traditional entities permeate each other and produce a culture-specific engagement with assisted conception. Though overtly heuristic and simplistic, this division nevertheless draws our attention to aspects of contemporary Indian reality that have an outward appearance of being modern (and even secular) but remain steeped in traditional concerns at different levels. These traditional concerns, on the other hand, when viewed in the context of modern institutions, reanimate themselves as new concepts that have an outward appearance of being traditional (some may even argue primordial) but are in fact curious new ways of making sense of events within a specific cultural context.

### **Local/ Global: Infertility and Assisted Conception around the Globe**

Acknowledging IVF as a global phenomenon, Strathern (1999) contends that 'diverse locations will find diverse reasons for its use'. Unfortunately, these diverse locations received very little social scientific attention up until the beginning of the twenty-first century. This impasse in the feminist and social-anthropological writings would have persisted uninterrupted had Marcia C. Inhorn's (1994a,

1996a) groundbreaking research in Egypt not broken the silence on the need to examine infertility in non-Western cultural settings and its links with rapidly globalising technologies of conception. The Egyptian example laid bare a bias, within both academic research and the international health community, which views unchecked fertility leading to overpopulation as a predominant attribute of the developing world (Inhorn and Buss 1994). An exclusive focus, in Western feminist scholarship, on the problems of 'affluent Western women' gives the impression that infertility is 'an exclusively Western, bourgeois concern' and in this respect these feminist social scientific endeavours are 'particularly guilty of wearing cross-cultural blinders' (Inhorn 1994a: 26). Thus the 'feminist silence on the plight of non-Western infertile women' and the idea of helping 'infertile subpopulations in high-fertility non-Western settings' has never been a high priority within academia and in the international population circles (Inhorn and van Balen 2002).

Inhorn's (1996b) work drew attention to the silent but swift expansion of high-tech conception in the 'so-called overpopulated' Middle East and North Africa region of the world, deemed to be less developed. Inhorn (1994a: 29) showed how many infertile poor Egyptian women were 'peripatetic pilgrims', travelling to sacred sites, physicians, pharmacists and healers in their 'quest for conception'. She examined their encounters with the 'new' world of 'new reproductive technologies' by focusing on the 'local moral worlds' (Kleinman 1992) of these women, who were often forced to grapple with difficult decisions given that the centrality of Islam in their lives often guided their 'therapeutic praxis' (Inhorn 1994a). By 2003, Inhorn had published a definitive account on the spread of IVF in Egypt (Inhorn 2002, 2003). Other global studies followed, notably on Iran (Tremayne 2006, 2009) and Lebanon (Clarke 2008), and Inhorn embarked on new research covering diverse locales in the Middle East and North Africa (Inhorn 2007, 2012, 2015; Inhorn and Birenbaum-Carmeli 2009). Susan Kahn's (2000) insightful account entitled *Reproducing Jews* spearheaded a wave of new ethnographic engagements with assisted conception in Israel (Birenbaum-Carmeli 2004; Goldberg 2009; Kahn 2002, 2006; Nahman 2008, 2013). In her Ecuadorian ethnography of assisted conception, Elizabeth Roberts (2006, 2007, 2009, 2012) describes a fascinating contemporary example embedded in South America. Lisa Handwerker (2002) focuses on the politics of making 'modern babies' in China.

While Inhorn's contribution is pathbreaking in that it was the first to examine assisted conception in a non-Western setting, her work

on the gendered experience of infertility and ethnomedical healing complements a steady trickle of research on infertility emerging from various non-Western sites. Pamela Feldman-Savelsberg (1994, 1999, 2002) studied infertility in the Cameroon Grassfields, where 'violent imagery of plundered kitchens, cannibalistic witchcraft and theft permeates Bangangté women's accounts of infertility and child loss' (Feldman-Savelsberg 1994: 463). Ulla Larsen's African studies explore differentials in infertility in the Cameroon and Nigeria (Larsen 1995) and childlessness, subfertility and infertility in Tanzania (Larsen 1996). Johanne Sundby's account of infertility in Gambia explores traditional health care practices involving healers and spiritual leaders, who are often invoked as the first line of treatment in place of 'modern health care' (Sundby 1997) and more recent research problematising infertility and health care in Sub-Saharan Africa (Sundby 2002). Trudie Gerrits' (1997) research into infertility amongst a matrilineal ethnic group in Macua, Mozambique, similarly found that infertile women adopt various strategies to have children; of these, the predominant recourse was visiting traditional healers as against modern hospital-based medication. Tola Olu Pearce's (1999) study amongst the Yoruba of southwestern Nigeria explored cultural perceptions of infertile and childless women. Pimpawun Boonmongkon's (2000) research looking at infertility over the life course of Thai women and Melissa J. Pashigian's (2000) study on infertility in North Vietnam, together with her insightful account of infertility and relatedness in Vietnam (Pashigian 2009), provide refreshing perspectives from the Far East.

From within the South Asian subcontinent scholars have begun to examine the neglected topic of infertility. Bhatti et al. (1999) addresses the treatment-seeking quest of infertile women in squatter settlements of Karachi, Pakistan, whereas Papreen Nahar and her colleagues examine the lived experience of infertility amongst the urban slum populations and rural settings in Bangladesh (Nahar et al. 2000; Nahar and van der Geest 2014). Robert Simpson (2004) focused on the cultural and ethical framing of new genetics and reproductive technologies in Sri Lanka. Within India, Deborah L. Neff (1994) examined how amongst the Nayars of Kerala, the construction of infertility is traced matrilineally. Additional studies explore the psychosocial consequences of childlessness in the Ranga Reddy district of Andhra Pradesh (Unisa 1999), treatment-seeking behaviour amongst the urban slum populations in Mumbai, as well as amongst disadvantaged rural and urban populations (Ganguly and Unisa 2010; Kumar 2007; Mulgaonkar 2000), and the experience

of stigma amongst married childless women in South India (Riessman 2000, 2002). Jyotsna Agnihotri Gupta (2000) coalesced years of feminist activism in her comparative Indo-Dutch account examining a range of technologies from contraceptive, assisted, genetic to prenatal and diagnostic. More recently an independent Delhi-based resource group and organisation, SAMA (2007, 2010), has made major contributions through research, international consultations and advocacy to the debate on the spread of assisted reproductive technologies in India.

While these studies point to the emergence of rapidly accumulating new cross-cultural insights into infertility, the spread of high technology assisted conception to so-called Third World sites remains poorly understood (Van Balen and Gerrits 2001). Even when freely available, these interventions are too expensive despite repeated calls for cheaper and affordable IVF in the developing world (Malpani and Malpani 2002; Ombelet 2011; Ombelet and Campo 2007). More importantly, the global spread of assisted conception technologies, notwithstanding the experience of modern biomedicine for many infertile people, remains restricted to outdated and dangerous gynaecological interventions like dilatation, curettage and thermocauterisation of the cervix (Inhorn and Buss 1993; Sundby and Jacobus 2001; Unnithan-Kumar 2004). Consequently, the focus remains on poorly trained medical personnel and under-resourced medical facilities that often have as severe an iatrogenous impact on reproductive health as do some traditional medications (Mogobe 2000). Critics from within Third World sites have also questioned the transfer of assisted conception to so-called 'poor resource countries'. Friday E. Okonofua (1996), professor of obstetrics and gynaecology, for instance argues that two attempts to set up IVF clinics in his native Nigeria demonstrated a lack of necessary infrastructure and funding, despite the availability of professional expertise. In addition, he argues that costly reproductive technologies divert money from high priority health problems to benefit a small segment of the infertile population (who can presumably afford it). Whether to invest in advanced medical technologies in the face of gruelling poverty and primary health concerns is a common dilemma for developing countries grappling with limited resources (ICMR 2000). Perhaps for this reason, treating infertility by undertaking technologies such as IVF is rarely a part of state population programmes in developing countries like Egypt and India, where conception technologies remain confined to the private sector (Inhorn and Bharadwaj 2007).

Globally, infertility is thought to impact 15 per cent of couples of childbearing age (Birenbaum-Carmeli and Inhorn 2009; Vayena, Rowe and Peterson 2002). In India, the exact magnitude of infertility, its epidemiological profile and the true extent of medically assisted conception technologies remains ambiguous. Most experts, clinicians on the frontline offering assisted conception, officials and Ministry of Health and Family Welfare (MHFW) and Indian Council of Medical Research (ICMR) bureaucrats contacted between 1996 and 2010 estimated that 10 to 12 per cent of ever-married couples in India were infertile – i.e. between 10 to 12 million couples. On persistent probing, these experts could not reveal the source of this data. Existing literature often provides dated and partial information. A study based on the 1981 census data for instance analyses the pattern of childlessness among ever-married women in India and finds only 5.6 per cent of women childless (Vemuri and Manohar 1986). Another source draws on the National Family Health Survey (NFHS), India, data and puts the incidence of childlessness at 2.4 per cent of currently married women over forty years old (Jejeebhoy 1998). A close reading of the NFHS (1992–1993) data suggests that 3.8 per cent of currently married women [N=84678] are listed as ‘declared infecund’, who have no living children. These figures, however, do not indicate the causes of childlessness or even the type of ‘infecundity’, i.e. primary or secondary, thus making these data sources problematic. Usha Ram’s (2006) study, based on the 2001, 1991 and 1981 censuses of India and the 1998–1999 NFHS surveys, found the general childlessness rate for India to be between 10 and 20 per cent. The study reveals that ‘the analysis of zero parity women from the census show that 13 [per cent] of ever-married Indian women aged 15–49 were childless in 1981, which increased to nearly 16 [per cent] in 2001’ (Ram 2006: iii). More recent accounts cite extrapolated estimates from World Health Organisation (WHO) figures. The ICMR projects 3 per cent primary and 8 per cent secondary infertility, basing its research on WHO figures ‘guesstimating’ that 13–19 million couples face infertility in India (Widge and Cleland 2009). Little is also known about the exact causes of infertility in India. A recent twelve-state survey by the National Institute for Research in Reproductive Health found that lifestyle-related infertility amongst couples differed in districts as diverse as Thane, Maharashtra (10.6 per cent), Muzzafar Nagar, Uttar Pradesh (15.1) and Maldah, West Bengal (18.1) (Iyer 2013). This emerging data notwithstanding, one of the main causes of infertility in India remains reproductive tract infections and untreated sexually

transmitted diseases. Both of these conditions are commonly held responsible for primary and secondary infertility (Aggarwal et al. 1999; Bang and Bang 1989, 1994; Bhujwala et al. 1988; Chhabra and Fali 1992; Jejeebhoy, Koeing and Elias 2003; Kushtagi et al. 1991; Nandan et al. 2001; Oomman 2000; Parashari et al. 1994). A high level of male factor infertility is now acknowledged as significant. The main causes of infertility amongst Indian men range from traditional tobacco chewing (Kumar and Gautam 2006), genetics (Singh et al. 2005) and chromosomal abnormalities (Mahanta et al. 2011), to environmental estrogens (Rozati et al. 2002) and sexually transmitted diseases and infections (Chaudhuri and Iyengar 1994; Joyee et al. 2007). Genital tuberculosis is also considered a major etiologic cause of infertility in Indian women (Dey 2015; Gupta et al. 2007; Parikh et al. 1997).

There remains a paucity of data on infertility in India, notwithstanding the substantial growth of assisted conception within private health care. In India today, assisted conception is a visible, viable and thriving industry. Gynaecologists and scientists are increasingly moving into this new, more lucrative and prestigious speciality area, making it nearly impossible to count the number of clinics in operation. This researcher for instance could locate more than sixty established clinics (of which some forty could be contacted) offering a range of services such as IVF, embryo freezing and intracytoplasmic sperm injection (ICSI). In the late 1990s alone there was hearsay evidence emanating from my informants that twice as many clinics were in the process of being established. Some unconfirmed estimates go so far as to suggest that there are more IVF clinics in India than in all of Western Europe (some media reports put the total at upwards of 500 clinics). Similarly, Jones et al. estimate that there are over 500 IVF clinics in India (Jones et al. 2007, 2010). In 2013, a high-ranking ICMR official in a newspaper interview argued that the council had identified over 1,100 IVF clinics from public sources (Tikku 2013). Similarly, the British *Daily Mail* made an unsubstantiated claim that there are currently 3,000 fertility clinics in India (Bhalla and Thapliyal 2013). Despite a centralised registry of assisted reproductive technology (ART) clinics in India listing 385 clinics, wild speculations abound ranging from fifty new clinics every year to more than 30,000 functioning ART facilities in India (Sarojini et al. 2011).

India's booming 'medical tourism' industry is probably one of the prime signifiers of India's rise to global prominence in the new century (Bochaton and Lefebvre 2009; Lefebvre 2010). With an

economy projected to grow despite the global downturn, India is expanding its private sector health and corporate hospital care at an unprecedented level (Drummer and Cook 2008; Lefebvre 2010). In the same way that it is seen as key in the global search for human organs (Cohen 2001; Das 2000; Scheper-Hughes 2000), surrogate wombs (Pande 2010a, 2010b; Vora 2009) and clinical application of human embryonic stem cells (Bharadwaj 2008, 2010b, 2013a, 2013b, 2013c; Bharadwaj and Glasner 2009), India has become a global destination for cheap IVF and fertility hormones and an abundant source of gamete and embryo supply.

The reproductive segment of the Indian medical tourism market was valued at over \$450 million per annum, and the ICMR predicted that this would become a 6-billion-dollar market by 2008 (Smerdon 2009). No current assessments indicate whether this whopping figure has now been reached or surpassed. With no regulatory mechanism in place to control the development, spread and application of these technologies – other than ICMR-sponsored guidelines pending ratification by the Indian parliament – the resulting picture is blurry. For example, there are no mechanisms in place to enumerate data on IVF cycles and document their success rate. Individual clinics are left to self-regulate under the auspices of ICMR-sponsored guidelines, which are legally unenforceable. When individually contacted, clinics were reluctant to provide information on IVF and ICSI success rates. This reluctance is born out of an absence of any regulating mechanisms like the Human Fertilisation and Embryology Authority (HFEA) in Britain. The clinics either did not maintain any records or simply ‘constructed them’, as some gynaecologists in Delhi informed me. One clinician even confessed that she had destroyed most of her records for better income tax management since the tax authorities routinely harassed her by demanding access to patient records (to enumerate IVF cycles) to determine her total income per patient. The clinician in question had instead instituted what she considered to be an ingenious system of selectively documenting IVF cycles to reflect her income tax returns!

This book is positioned against this vast local and global backdrop of accumulating insights into the culture of infertility and assisted conception technologies. From Euro-American countries and Israel to numerous sites in the Muslim Middle East, Africa, South-East Asia, China and Latin America, the global spread of assisted conception is truly breathtaking. More than thirty-five years since IVF was pioneered and more than five million IVF babies later (Franklin 2013), this monograph seeks to add a critical Indian chapter to this

expanding cultural universe of biotechnological interventions into an ever-increasing number of lives facing reproductive disruption around the globe. Given the enormity of the task, the research has sought to isolate certain key facets of the cultural response to this vast and complex reality. It is to these ethnographic complexities that I finally turn.

### **Encounters/Representations: The Ethnographic Immersion**

Social research on 'post-writing cultures' must contend with the idea that 'ethnographic truths are inherently *partial* – committed and incomplete' (Clifford and Marcus 1986: 7). The genre of authoritative truthful accounts is dead. In the Indian context this means that, unlike the 'social scientists who came into the world of knowledge as part of the anti-colonial, nationalist enterprise, the new generation of social scientists in India have to live with a destruction of certainty as the only condition for the production of knowledge about Indian society' (Das 1999: 54). As Das contends, social scientists cannot represent India as if India were absent and silent, but rather can only insert their voice within a plurality of voices. This book is a small step in this direction – an account of infertility and assisted conception in India that remains somewhat underexplored within the discipline of anthropology.

#### ***Multi-sited Epistemology***

Ethnographically I remain entrenched in multi-sited terrain, a relationship I describe in detail elsewhere (Bharadwaj and Glasner 2009). Although my ethnographic immersion across sites and spaces for more than fifteen years has been rewarding, it inspires me to consider and reconsider my role as ethnographer – as one who is at best providing a partial account in this making of worlds. At its broadest, a multi-sited ethnography inhabits and strings together disparate sites. According to George E. Marcus (1995: 105), '[M]ulti-sited research is designed around chains, paths, threads, conjunctions, or juxtapositions of locations in which the ethnographer establishes some form of literal, physical presence, with an explicit, posited logic of association or connection among sites that in fact defines the argument of the ethnography'. The aim of such multi-sited ethnographic study is not holistic representation or portrayal of a totality, but rather an acknowledgement that the subject is dispersed

across several different locales. Methodologically, therefore, the research follows a thread – albeit a bit tangled – connecting different ‘sites’ that both locate and animate the ‘life worlds’ of the infertile, their daily struggles and the clinical enterprise of assisting conception. In connecting these locales, a connection of another kind is established, one masked by the use of generic term ‘critical sociology’, which encapsulates an active engagement with feminist theory, cultural studies and science studies, enmeshed into the anthropological voice to complement this multi-sited journey.

The mode of constructing this multi-sited ethnographic account can best be summed up in what Marcus (1995) alludes to as a process wherein an ethnographer’s main aim is to ‘follow the metaphor’. Citing Emily Martin’s (1994) work on immunity in America, amongst others, Marcus (1995) posits that ‘when the thing traced is within the realm of discourse and modes of thought, then the circulation of signs, symbols, and metaphors guides the design of ethnography’. He further argues that such an approach involves tracing social correlates and grounding associations that are at their most vocal and alive in language usage and print or visual media. In Marcus’s estimation, ‘the most fully achieved multi-sited ethnography is in this mode’.

In understanding the presence of infertility and assisted conception in India, I attempt to chart a similar route, tracing the ‘metaphor of conception’ through multiple sites, from ancient textual sources to ‘modern’ technologies of procreation, infertile couples, their families and their engagement with clinical conception, medical practitioners and their representation in mass media, and state policies on health and health care in the private sector. What emerges is a web of connections that conjures a crucial part of the still foggy bigger picture. Clearly, ‘this gives the ethnography a fragmented character and invites further reflection on the picture of anthropology as it addresses the questions posed by new technologies’ (Das 2000: 284).

### *Parasitic Location*

The methodological contours of ethnographic practice, as an activity of discovery, learning and representation, and the existential predicament of the ethnographer can be best described, following Michel Serres (2007), as inherently ‘parasitic’. The parasite according to Serres (2007: 79) is ‘the essence of relation’. The parasite, both as biogenetic substance and social actor, thrives on the host. For Serres (2007: 182) it is a simple relationship, irreversible like a river’s flow: one feeds on another and gives nothing in return.

This 'elementary relation', like white noise, feeds on sound, sign and information without reciprocation (Serres reminds us that in French, the word for parasite also means noise). Reciprocity, and the accompanying *hau* (spirit) that anthropology has done much to theorise and describe, are turned into social relations predicated on feeding as opposed to receiving and reciprocating. The production of ethnographic knowledge remains parasitic as hosts are forgotten, remade and returned to, but only for more information – a relationship driven by the hunger to know. In Serres's (2007: 216) words, the host soon discovers that 'his parasites are eating him up', and their noise covers his voice. This realisation troubled me for the better part of fifteen years spent feasting on information my respondents produced, policy documents revealed and media reportage projected. This unending cycle, where hosts and parasites swap places only to temporarily establish the illusion of reciprocity, masks an unabated feeding frenzy.

The masking or unwitting interpolation of 'native' voice with anthropological noise is a difficult aspect of ethnographic ontology. For some time I have sought to explain the eclipsing of voice with noise in the register of a 'native ethnographer' (Fahim 1982; Ohnuki-Tierney 1984; Srinivas 1997). However, given the impossibility of an 'undivided native position' and the inconvenience of simultaneously inhabiting several communities of sentiment (Clifford 1997), I soon became convinced that native advantage notwithstanding, my position remained fraught and that of an excluded 'other'. Perhaps in order to appreciate 'otherness' we have to draw inspiration from the lessons of anthropology of reproduction. Biological reproduction is the quintessence of a parasitic relationship between a host ('mother'/ womb) and parasite ('child'/ foetus). However, the very act of reproduction introduces difference, and, in the case of biological reproduction, difference that is both made of self and in need of being made self. This difference is reproduced as the other on the confluence of structure and cognition. Cultures possess an exceptional ability to cogitate difference as part of structural realms that continually redefine a shared sense of self. In the end, the challenge lies in being able to accept the invitation of a generous host while remaining cognisant of the (ethnographic) inability to reciprocate. It is also worth mentioning that a host seldom expects anything in return. Perhaps the host is almost always aware of her location in the food chain, or, perhaps, contrary to the established consensus around reciprocity, in a parasitic relation, a host is simply socialised into never expecting a reciprocal prestation. I am aware that my

methodological location allows me to analyse the parasitic dimension of ethnographic practice. However, I struggle to imagine a situation where ethnographers can meaningfully forge a relationship of reciprocity. The host, or informant, provides much more than mere 'data'. S/he or it offers the material basis for constructing our academic identities, careers and scholarship. I can only speak for myself: this is one debt I can neither repay nor reciprocate in any meaningful sense.

### *Journey*

This book draws on ethnographic contact with the field spanning fifteen years. During this period I returned to India at least once every year to (re)establish contact with some of the IVF clinics, catch up on new developments and renew old ties. The introductory ethnographic phase lasted from 1996 to 1998. The next phase of exploration was from 2003 to 2005, followed by further years of consolidation in 2008, 2010 and 2013. In total, more than 100 couples were either interviewed together or one partner at a time. A further thirty-five medical personnel and officials of the government of India were contacted and interviewed. The fieldwork itself was spread across six Indian cities: Delhi, Jaipur (Rajasthan), Mumbai (Maharashtra), Bangalore (Karnataka), Chennai and Salem (Tamil Nadu). In three clinics in particular – one each in Delhi, Jaipur and Mumbai – I spent time observing the daily 'life worlds' of the clinics and their day-to-day dealings with infertile patients.

### *Conversations*

The research process generated many conversations, mostly semi-structured, open-ended interviews with individuals and couples and lengthy, open-ended interviews with clinicians and other medical personnel. Interviews with the directors of two Mumbai-based adoption agencies were also recorded. With the exception of two interviews with research scientists on the sensitive topic of the politics of conception (explored in Chapter 3), all semi-structured interviews were tape recorded and later transcribed or listened to repeatedly in order to extract pertinent information. The names of the (treatment-seeking) interviewees (where available) and clinicians or scientists have been replaced by pseudonyms to maintain confidentiality. There is, though, one exception: the identities of those covered in media reports are not concealed as these names are already public. Interviews with the treatment seekers were conducted in English and Hindi. Clinicians and scientists were all interviewed

in English. I translated and transcribed the interviews from Hindi to English, though some of the grammatical and syntactical structures posed great difficulty (Ercikan 1998). In such cases, I carried out an approximate translation to correspond with the broader meaning.

### *Experiences*

The process of interviewing was, in most cases, less than ideal, as the couples could be approached only in the clinics. As a consequence, the possibility of follow-up interviews was minimised considerably, since many of these couples came to the clinics under difficult personal circumstances (financial hardship, familial pressure, IVF cycle schedules, geographic distance and accessibility, etc.). Limited access forced me to interview cases as and when I could. There was no conscious attempt to interview individuals separately, as couples, husbands or wives (however much this might have been desirable, for example to avoid a bias arising from gender inequity in relationships), yet, due to the sensitive nature of the research and the problems with accessibility, it was not always possible to interview the couples together. On many occasions women came alone to the clinic while their husbands were at work, or only husbands could be interviewed while their wives were undergoing either sonograms or embryo transfers. Additionally, over 60 per cent of the interviewed treatment seekers, especially in phase 1, were living in joint families, which made conducting interviews outside the clinic even more difficult. Though I was occasionally drawn into some couples' struggles with infertility (explored in Chapter 7), the interviewees were on the whole extremely reluctant to yield personal information. This raises the complex issue of what constitutes private as against public in a research project that explores human struggles with potentially stigmatising conditions. It became clear from this experience that, while there is no fixed private sphere, topics and activities regarded as private vary cross-culturally and situationally (Lee 1999). Interviewee responses varied greatly to questions that I viewed as potentially unproblematic. The majority of the interviewees were not prepared to share personal details like names, class background or even employment or income profile. On one level, this was extremely disappointing, especially since the experience of medicalisation in India is best captured and understood in the context of class and gender ideology (Unnithan-Kumar 2001, 2004). However, repeated probing in casual conversations before and sometimes during the interviews failed to elicit this concrete information. The most common form of resistance encountered was either a long silence or

an ambiguous reply. This is not an unusual experience for researchers dealing with sensitive topics, especially in situations where respondents feel an element of unease when asked questions about their finances or sexual behaviour (Goyder 1987). Jocelyn Cornwell (1984) argues the case for repeat interviews to get beyond 'public' accounts to discover 'private' ones, but this option was not open to me. Christopher McKevitt (2000), however, argues that while some open-ended interviews can yield narrative accounts, others do not. Drawing on his own research experience amongst elderly stroke patients, McKevitt found that while some respondents in his interview transcripts came across as engaging and produced lengthy narratives, others were reluctant to assume this role, responding to the questions with brief answers and resisting probing questions with smiles and silences.

Silences, or the 'refusal to narrate', and the absence of data such a refusal produces is in itself significant. The individuals who openly shared information on their class and economic circumstances were either well-to-do, or at least middle-class, professionals, working and living in Indian cities or non-resident Indians visiting from the United Kingdom, Kenya, United States and Australia. The remainder of respondents were financially pressed to fund their quests for conception. I could only get fleeting references on financial hardship in some cases, whereas I obtained graphic accounts of financial drain in others, but no systematic data on socioeconomic background could be collected.

This was both intriguing and unexpected, for at the time the query seemed fairly unproblematic compared to some of the painful aspects of stigma and ostracism the respondents were sharing. However, in hindsight this resistance is justified. Although I routinely asserted my disaffiliation with the clinic, interviewees frequently viewed me as connected with the facility. The fact that clinicians often referred patients to me for interviews and that the clinics granted me the freedom to approach patients likely contributed to this (mis)perception. On more than five different occasions, interviewees in Jaipur and in Mumbai showed me medical reports and, despite my persistent attempts to explain my nonmedical background, could not disassociate me from the clinic. As such, some respondents may have withheld information while others may have offered specific details, both on the chance that their replies might result in improved treatment. Specifically, on one hand, many interviewees were eager to describe their financial hardships, perhaps hoping that their comments would reduce treatment costs (Chapters 7 and 8). On the other hand, some

interviewees were less willing to discuss this, possibly fearing that the clinic might perceive them as unable to pay for the treatment, and therefore provide lower quality care. Moreover, many interviewees detailed horrific previous medical interventions while overtly praising the clinic in which our interviews were conducted (Chapter 7 and 8). I am not suggesting that interviewees were deliberately deceptive, rather that they responded strategically. This raises an important methodological question: should interview responses be treated as information about an experience or as constructed narratives (Holstein and Gubrium 1995; Silverman 1993, 2000)? In this case, the responses lie on the cusp of experience and narrative. Even the narratives are intimately shaped by experiences of infertility, social stigma, financial drain and emotional exhaustion.

Given these difficulties, only an overarching range of treatment seekers from different backgrounds could be identified. Individuals and couples interviewed range from the wife of an industrialist in Mumbai to a farmer from a village in Punjab. Taken together these respondents do not compose a social group or class, though they become their own group by virtue of their inability to biologically reproduce. Through the course of these interviews, information on the familial composition (joint or nuclear), marital status and time spent in treatment emerged. The fact that all respondents and clinicians were Hindu surprised me at first. I asked in my diary in 1997, 'Where are the Indian Muslims?' It is now known that several Sharia compliant IVF clinics have emerged in parts of India that attract Muslim clientele from all around the country. I know of at least one PhD project currently examining (in)fertility and Islam in northern India. While there was no conscious attempt to include only Hindu respondents, the fact that I encountered only Hindu patients and clinicians in more than twenty-three IVF clinics made religion a central theme in my research. I was particularly struck by the bold Hindu religious iconography in the clinics. I subsequently incorporated this link between an individual clinician's faith and the practice of assisted conception into the research. The scope and scale of the research had clearly multiplied and scattered into various locales and domains, and relationships between sites were emerging. Faced with this unanticipated turn of events, I sought solace in Gary Alan Fine's (1993) contention that 'good ethnographers do not know what they are looking for until they have found it', cited in Irvine (1998: 170).

The interview process was congenial once the 'ice was broken', which required long conversations about politics, popular culture and the like. As a male researcher, I recognised my constraints in attempting

to interview women on an intimate and painful subject. Women did vocally participate, however, once they decided to be interviewed. With the exception of three women who rejected outright the idea of being interviewed by a man, all the rest engaged in in-depth discussions of their experiences of infertility and medical treatment. The constraints imposed by the 'conjugal setting' of the interview process, on the other hand, are difficult to predict (Hirsch 1999), especially given that the location of these interviews was confined to the clinics. Additionally, some couples were extremely nervous about talking to a stranger about their infertility, an anxiety accentuated by a fear of being identified or discussed in the press. For example, the following entry from phase I – May 1997 – in my field notes is telling:

I met the wife first in the presence of the doctor. She was concerned whether her name or identity would be disclosed. 'We are still quite young', she said to me [husband 26 and wife 23] 'we don't want this getting published or talked about in the press. Nobody knows except my parents and my husband's parents and we'd like to keep it that way'.

Some other couples were even more reluctant to be interviewed since they were seeking treatment without the knowledge of their families (see Chapter 5). The process however became more engrossing once I began to step out of the confines of interview-based interactions.

### *Encounters*

Many lives are touched in a typical day at a fertility clinic. Both the clinics and treatment seekers inhabit their own life worlds, which interact during visits. To these clinical encounters, treatment seekers bring their own everyday experiences of 'living infertility'.

In three clinics in particular – one each in Delhi, Rajasthan and Mumbai – I was able to observe the daily 'life worlds' of the clinics and their dealings with the infertile. I was aware of the problems associated with positioning myself in the 'classic observer role' as I did not wish to approach the so-called data collection from the perspective of a privileged outsider, a disinterested, disengaged onlooker. Instead I spent time at these clinics quietly absorbing the daily activity, the mundane coming and going of patients and their interactions with the clinical world. This usually entailed 'hanging out' in clinic lobbies, an approach that also raised concerns about indulging in covert as against overt research (Goode 1996; Van Maanen 1988). In only three clinics where the clinicians were aware of my research

interests did I have permission to take notes. In other clinics where I was allowed interviews with only the clinicians – often after a very long wait in the clinic lobbies – I took notes, while waiting, on various themes in the waiting areas and on the interaction between patients and clinic bureaucracy. Parts of the clinic were out of bounds. In all three clinics, my access to the laboratory area was severely restricted due to fears of contamination, though I was given a tour of the ‘sanctum sanctorum’ of the Jaipur clinic. Unlike some other researchers who participated in the daily life of IVF clinics, I was not given an official role or title. Charis Cussins’s experience is interesting in this respect:

On the first day of my fieldwork the director, Dr T., hastily greeted me, and, with no further ado, dispatched his nurse to find a white coat that would fit me. Once enrobed, I was informed that my title was to be ‘Dr Cussins, a visiting scientist’, and from then on that is how I was introduced to patients. (Cussins 1998b: 69)

It is just as well that I was not given such a formal title and position, as it would have only reinforced the connections that my interviewees were drawing between the clinic and myself. Sitting in on doctor-patient consultations at the clinics with the express permission of the individuals involved – doctors, clinical staff and patients – produced fascinating insights into doctor-patient relations and a unique glimpse into the social unfolding of infertility in a medical setting.

### *Texts*

Approaching ‘media as text’ allows an interplay between both print and electronic sources. The data is mainly sourced from newspaper dailies, popular magazines, television reports, documentaries, talk shows and serialised-programmes. There is further engagement with government reports, guidelines and proposed regulatory bills as the ‘official response’ to assisted conception is still under formulation.

The research (Chapter 1 in particular) also draws extensively on English translations of the ‘ancient texts’ like Mahabharata and *Dharmashastras*, which significantly includes the *Manu Smriti*, and other codes of law like the *Narada*, *Brihaspati*, *Vishnu* and *Gautama*, *Apastamba*, and *Vasishtha*, etc. that have come to be assimilated under the general rubric of Hinduism. In so doing I am not attempting to assume that there is a Hindu view and that view is made isomorphic with certain texts. After all there is no guarantee that even upper caste followers of Vedic ritualism knew these texts, recognised

their importance, read them and implemented every bit contained in them in actual practice. These texts were mostly in the nature of scriptures, formal literary expressions of normative doctrine, and were not intended to be authentic reflections of 'historical' reality.<sup>5</sup> However, in turning to these textual sources I am merely acknowledging the faint echoes of such ideological and normative notions in everyday engagement with questions of fertility and infertility in India. Chapter 1 uses Johann Jakob Meyer's (1971) English translations of Mahabharata and selectively draws on the translated text. This selective approach is important in light of Uma Chakravarti and Kumkum Roy's (1988) critique of the lack of analytical rigour in pre-independence scholarship on ancient texts: 'Thus, while Meyer is aware of the varna bias of his sources ... and its possible implications, he does not even seem to be aware of the existence of an inbuilt gender bias in the same'. Due to this problematic aspect, the book distances itself from Meyer's analysis and focuses on the rich body of translations of the epic.

Similarly the chapter draws on English translations of ancient legal texts from F. Max Müller's (1894) *Sacred Books of the East* series. However, there is an uncomfortable awareness of the possibility that in these 'pre-independence translations' of ancient texts 'from Sanskrit into English, where religious concepts were frequently used, the translation often reflected a Christian undertone' (Thapar 1989: 218). Reference to the *Manu Smriti* also deserves a brief mention. It is essential to note that:

The East India Company's interest in locating and codifying Hindu law gave a legal form to what was essentially social observance and customary law. The concept of law required that it be defined as a cohesive ideological code. The Manu *Dharmashastra*, for example, which was basically part of Brahmanical *smrti* was taken as the law of the Hindus and presumed to apply universally. (Thapar 1989: 218)

Patricia Uberoi (1993; 1996: 186) similarly argues that legal codes in British India were constructions derived from Sir Henry Maine's reading of classical Roman law in light of *Dharmashastric* texts and nineteenth-century British observations on Indian customary law. Likewise, Lord Warren Hasting's judicial plan of 1772 outlined the 'different traditional laws for Hindus and Muslims' respectively (Conrad 1995: 306). In this sense it is essential to focus on the *Dharmashastras* and 'laws' of Manu in particular because the discourse on personal law that was set into motion by the British

still resonates with contemporary socio-legal thinking, spilling into the contentious issue of a common code of law for various Indian communities.

### *Categories*

Another 'textual site' integral to this research is a large body of social scientific literature. At this stage, however, I wish to discuss these only in relation to certain conceptual clarifications, namely a critical reflection on the constructed nature of categories like 'India' and 'Hindu'. This is crucial, especially in the light of growing scholarly debates on the perils of a simplistic reading of these terms. Ronald Inden (1992: 1–2), in his critique of the Indological branch of Orientalist discourse on India, shows how the scholarly writing built a theory of a world ordered in a natural and stable way by constructing essences into its metaphors. In contradiction to this view, Inden (1992: 2) proposes a theory of 'human agency', which constructs agents as 'complex and shifting' and endowed with the ability to 'make and remake' one another through a dialectical process in changing situations. Inden's main contribution lies in problematising the empiricist tendency to discredit Indian agency and, instead, ascribe it to the makers of Orientalist discourses, which, in turn, ostensibly justified the civilising mission of the European 'selves' towards the Indian 'others'.

Inden (1992: 5), however, makes one important oversight. In his over-enthusiasm to ascribe agency to the Indians and to emphasise 'the capacity of Indians to make their world', he defines 'Indian' too narrowly. This is a recurring problem in writings on things 'Indian'. Inden and many others frequently equate 'Indian' with 'Hindu', using the two terms congruously. Often, contemporary writers in a scholarly or journalistic 'retrospective mode' refer to agents from the past as present variants of a category (in this case, Hindu) that, in fact, existed in a completely different form. Thus the two terms – Hindu/Indian – are unwittingly made primordial and timeless in scholarly accounts, a fallacy not entirely unknown to both contemporary political jingoism as well as popular and journalistic discourses on the subject. If Inden deploys the term Indian to mean a nation state in the sense Gellner (1983) ascribes meaning to the term 'nation', then the Indian nation state is not old enough to cover the range of historical and political issues that Inden seeks to problematise as products of Indian human agency. If, on the other hand, Inden employs the term 'Indian' to refer to India as a historical nation but an unexpressed state, historical complexities still

point to the emergence of Hindu and Indian as contested entities and not as timeless primordial objects.

Much is written about the relationship between the terms 'Indian' and 'Hindu'. Heinrich von Stietencron's (1991) explanation about the confusion surrounding their interchangeable usage is particularly revealing. Equally insightful is Triloki Nath Madan's (2003) contribution, which outlines historical contingencies underscoring the rise of Hinduism. Richard King (1999) similarly shows how native (Brahmin) informers contributed to Orientalist reformulations of Hinduism as single world religion. Brian K. Pennington (2005) writes that today's understanding of Hinduism evolved from Hindu efforts to portray a homogenous front against colonial British political and religious encroachment. Regardless of these complex historical circumstances, one thing is clear: 'Hindu' and 'Indian' were separate categories that became combined over a period of time.

The terms – Hindu and India – are used in this book in the clear knowledge that they are not timeless or primordial categories against which an alien Western technological 'invasion' can be propped up. Consequently, while referring to classical texts in this book, a conscious attempt is made to resist labelling them as 'ancient Indian texts'. Likewise, the term Hindu is deployed to refer to a body of people in the full knowledge that the term has been transformed in several crucial respects and invested with a range of cultural and political meanings. In its contemporary usage the term Hindu can at best be looked at as encompassing and modifying several disparate strands ranging from *Vedic* philosophy to *Puranic* and *Bhakti* influences (Dalmia and von Stietencron 2010; Sontheimer and Kulke 1991; Thapar 1989). In the context of Das's (1995) argument in the previous section, this amounts to acknowledging a continuous re-animation of tradition and modernity, or rather a continuous way of (re)making and (re)moulding traditional concepts (Hindus) and modern institutions (Indian state), that sustains a continuity with an imagination of traditional self. When I refer to the Hindu cosmology or worldview in this book or to the Indian nation, it is to this modified and transforming face of Hindu/India that I allude.

## The Book

This book explores the experience of infertility and assisted conception in India. It tries to 'make sense', like the infertile and the clinicians in this study, of the way in which infertility and biomedical

assistance structures and disrupts the pursuit of personal and social fulfilment. In the main, the book seeks to explain how assisted conception, as a means of bypassing infertility, is accommodated, understood and used in contemporary India. In so doing, it attempts to unravel critically the complexities underpinning these social processes. This principally entails situating the research in a number of diverse locales, such as the political economy of health in India; the biomedical politics within the private sector; the mass media as a field for promoting and contesting assisted conception; ancient norms and ideas and their reverberation in the contemporary Hindu conceptual domain; and the importance of this cultural frame for producing stigma and making sense of assisted conception. Taken together, these locales unravel the complex nature of infertility and assisted conception in India. The book is organised around four interconnected parts that together compose a cultural account of assisted conception.

**Part I** examines the importance of human fertility in the Hindu worldview and how the lived, stigmatised experience of infertility can be a direct consequence of not fulfilling a cultural expectation of fertility. Chapter 1 slices into what are described as ‘cultural conceptions’. The traditional understanding of infertility as it emerges from ancient texts is contextualised in light of emerging anthropological and sociological evidence from India pointing towards reinterpretation of traditional ideas, norms about fertility and infertility and their resonance in contemporary settings. This framework foregrounds Chapter 2, where the lived experience of infertility is examined by focusing on the entrenched stigma associated with an inability to procreate. This chapter exposes the socially debilitating stigma experienced by infertile couples and addresses how they together manage and resist such pressures. In so arguing, the chapter proposes a rethinking of the conventional dualistic understanding of gendered response to social ostracism. In a culture where it is not uncommon for infertile wives to be abandoned by their husbands and their families, the data in this chapter provides evidence to the contrary that necessitates further research.

**Part II** of the book is devoted to the politics of assisted conception in India. It views the private/commercial character of infertility clinics in relation to the wider public/private sector interaction, aiming to understand the broader biomedical politics of managing infertility clinics as successful private enterprises. Against a backdrop of the political economy of health in India, Chapter 3 examines the politics of conception by tracing the actual controversy

surrounding claims and counter claims within the medical domain that appears to have emerged as a corollary of the rapid commercialisation of assisted conception in India, despite its humble beginnings in the public sector. The chapter isolates an incident where scientists/clinicians are embroiled in a contest over the ascription of proper credit on the issue of being the actual brain behind the first test-tube baby in India and documents the struggle to rewrite the history of IVF in India. The playing out of this contentious issue in the media is emphasised to show that the generation of scientific credibility and reward is produced and ascribed both inside and outside the scientific domain. Chapter 4 situates the emergence of assisted conception in the wider interaction of private and public sector health care in India. This chapter views the emergence and spread of assisted conception as reflecting in microcosm the spread of private sector health care more generally. Given that the spread of these technologies is restricted to the private sector, the chapter goes on to argue that this has pressured clinicians into running their clinics at optimal levels as successful biomedical enterprises, especially in the face of what they perceive as the constraints of operating out of India. More crucially, the strain to remain economically viable has fragmented the ranks of reproductive health care practitioners, which has in turn disrupted the crucial referral chain of patients.

**Part III** takes the book into the domain of those seeking assisted conception and the ways in which both treatment seekers and practitioners make sense of conception technologies. Chapter 5 explores the secret world of 'seeking conception'. It endeavours to understand how within the context of marriage and wider familial location couples pursue assisted conception and what strategies and dissimulations they deploy in managing their fertility treatment and potential births after a long stigmatising wait. The highly invisible and secretive nature of seeking out assisted conception is grounded mainly in the extent of normative conformity to the ideas of relatedness and biological connectedness perceived by these couples. The chapter shows how some individuals manage stigma by withholding information about their infertility and medical treatments from certain loved ones or society as a whole. Chapter 6 provides a conceptual analysis of India's emerging role as the pivot of transnational surrogacy arrangements. The chapter asks what it is to be supplementary and surrogate in India today. In so doing, the chapter interrogates the position of supplementary women and the role of the Indian state in the making of 'the other mother'.

**Part IV** takes us into the clinical realm. Chapter 7 deals with how treatment seekers make sense of their failed past and present encounters with biomedically assisted conception by examining the emotional and financial costs. The chapter also includes the views of clinicians in order to understand how, from within the profession, charges of medical mismanagement are understood. Chapter 8 speaks from a clinical site. The chapter focuses on the paradoxical nature of clinic/patient interaction that both reinforces high expectations and deepens the ambivalent feelings treatment seekers have about their past and present medical encounters. It seeks to understand issues that the treatment seekers bring with them to the clinic and how the clinicians respond to them. In exploring this, several purportedly antithetical themes such as religion and science, altruism and commercial interests, resistance to clinical practice and an active interest in seeking it out, emerge as actively engaging with each other in making up the 'clinical experience of infertility'.

*Conceptions* is an exercise in verbalising multiple sites that were hitherto relatively unexamined. In the chapters that follow, I connect the experience and presence of infertility and assisted conception to reveal a fragment of this complex and endlessly mutating picture.

## Notes

1. Medical and non-medical discourses have long defined reproductive technologies as 'old' and 'new'. A common assumption is that recent advances in reproductive medicine can conveniently be accommodated as new, with the rest relegated to an old stock. However, to avoid ambiguity, the term 'assisted conception' is used here to mean any biomedical or technological intervention geared towards inducing conception on behalf of an infertile individual or couple. This helps to locate a whole range of biomedical practices of infertility management, from intrauterine insemination (IUI) to in vitro fertilisation (IVF) and intracytoplasmic sperm injection (ICSI) among many other techniques, within an Indian cultural context without recourse to any lengthy explanations about their 'age' or 'newness'. However, the prefix 'new' is crucial in one important respect: medical intervention in the process of procreation draws attention to the cultural 'facts of life' brought into a 'new' context (Strathern 1999). The 'old'/'traditional' (and as the book shows, on occasion, archaic) ideas about relatedness and connectivity give way to 'new'/'modern'/'contemporary' possibilities of forging biological and social relations.

2. The first edition of *The Death of Nature* was published in 1980, making it contemporaneous with MacCormack and Strathern (1980).
3. I am very aware that the Euro-American category is no less problematic than the category of 'the Indian'. I use this term as it has become normalised in anthropological literature and to refer to diverse collectivities and formations in Europe and North America and not as an 'othering' trope. I reflect further on categories such as India, Indian and Hindu in the last segment of this chapter.
4. Dipanker Gupta (2000: 5) writes of the 'mistaken modernity' in India, pointing out that while there have been definite moves away from tradition in contemporary India, what ones sees is 'not yet modern'.
5. I am grateful to Professor Jyotirmaya Sharma for this insight.