Re-Wiring Bodies

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Introduction

The "Rewiring Bodies" project was conceived in an attempt to prepare the ground for the field of critical technology studies in India, thus providing better purchase points than hitherto available for an adequate response to technology, both in the form of policy and critique. It began with the porosities of the present, visible in preliminary understandings of digital technologies, and has been looking through that lens at the history of technology. It uses the women-technology relationship as a unique entry point of investigation. To this end, this investigation will

1. lay down the historical and geo-political contexts for the critiques of technology in India
2. explore the role experience has played in supporting these critiques, particularly exemplified in the case of the relationship between women and technology, and
3. work towards generating a different kind of critical debate on technology through a revision of how we understand 'exclusion', or the relationships between knowledge and critique in a broad sense, using technology and women's perspectives as place-holders for the same, and
4. suggest strategies for testing of the hypotheses being set forward in the investigation.

This is in order to contribute, eventually, to a specific unpacking of the concept of technology that will in turn help evolve a more robust response to it than has been our understanding so far. Inasmuch as digital technologies are concerned, this should also help provide a pre-history of such technologies and responses to them.

In doing this work, this investigation will consider it necessary to engage with existing concepts like context, postcoloniality, organicity, perspective, and exclusion that have come into use with the critical responses to technology in India, as also, most importantly, with

interpretations of the lived experiences of women in what is called the third world. Such engagements will provide, it is hoped, a different articulation of these concepts – one that can alter the contours of critique of technology.

The work is divided into six chapters and a conclusion. The first chapter lays down the hypothesis and chief assumptions of the project, including the reasons why a preliminary survey of digital technologies prompts a closer look at technology in general. One way to do this is by examining the rationales for promotion of technology in the Indian context, and the second, third and fourth chapters do this, examining nationalist and Marxist attitudes to technology, and alongside, examine the trajectories, the shifts, and the legacies of these attitudes, including the fields of inquiry they affected, primarily for this investigation, feminism. Through the chapters, methodologies of critique are extricated and examined, and in the last two chapters, an attempt is made toward a different set of responses, following a different cognization of technology itself. It is hoped that in a follow-on to this project, digital technologies can be studied in their empirical settings in greater detail, so that the inferences suggested in the conclusion may be tested.

chapter 1

THE TECHNOLOGY QUESTION IN INDIA: INTRODUCTORY NOTES ON THE GENEALOGY OF AN ATTITUDE

The language of the relationship between human and technological elements in India has changed considerably since the time of Nehruvian socialism. While this has partly to do with more and more constituencies asking for attention in the industrial polity and development frameworks, it also has to do with changing perceptions of technology itself. Thus it is that strongly positive and dynamic images of technology (to be found in the Indian scientific and medical establishments) as well as strongly critical positions (anti-development stances, eco-feminist movements, postcolonial theorizing, to mention a few) reside side-by-side in the discourse around technology in India, in a manner that appears to be the particular characteristic of postcolonial societies today. This is what I somewhat cryptically refer to as an attitude toward technology – a concatenation of discourse and material practice that produces an effect not simply of acceptance or resistance, but of a constant movement between the two. This attitude may be found in policy, popular discourse, and critiques, and I hope to elaborate upon this through the investigation.

Such positive and negative images are, however, not neatly allotted to State and 'civil society' positions, respectively, meaning that it is not a simple State-versus-the-people problem. A cursory examination of development scenarios in the area of reproductive health as an instance yields evidence of a situation where State Population Policy dictates, as part of infrastructural requirements, an increasing use of technology, while at the same time insisting on an attention to women as repositories of "indigenous systems" in order to "fill in gaps in manpower [that can access or use technology] at village levels" (National Population Policy 2000). Science and technology policy in recent documents (2003) also encourages increased entry of women as professionals into academic technological institutions. Represented in both

policy and critiques, across state and civil society positions, are approximately four responses to technology – **presence**, **access**, **inclusion**, **resistance**. Reflected from the vantage point of women as one of the disadvantaged constituencies with respect to technology, these are voiced as the demand for **presence** of women as agents of technological change – either through presence in production or through incorporation of their "native" wisdoms into the system; sometimes as the demand for improved **access** for women to the fruits of technology; at other times the demand for **inclusion** of women as a special constituency that must be specially provided for by technological amendments. And then again, the demand for a need to recognize technology's ills particularly for women, and the consequent need for **resistance** to technology on the same count.

There seems to be a connection between these seemingly disparate responses. For one, they each espouse a vision of *technology as discrete*, bounded, and separate from the human (body), woman being a 'case' thereof. The 'human' is sacred, either in control of such technology, or its frail victim. While the story of science's triumphant progress would adopt the version of control, critiques of technology that found greatest voice in postcolonial theorizations would seemingly consider the frail human as rendered even frailer through an exclusion from such technology. Following such a vision of technology as instrument or tool separate from human agency, and the necessary corollary of the pristine human who is in postcolonial theorizations aggravated into empirical subalternity, the debates seem to hover endlessly over technology being beneficial, devastating, or a judicious mixture of the two. Complementarily, the "pre-technological" – available either in the past or in the 'undeveloped', depending on the lens of examination – appears free of, or lacking in, the instrumentality of technology; and "everyday technologies" relying on women's lived experience seem to offer respite in the shape of an embeddedness in community. At the very least, they appear to possess the mythicity, the poiesis, that critics so wistfully regret the absence of in modern science. And these two – everyday technologies and the pre-technological, in their common possession of such poiesis, such anarchy, seem organically tied and a natural vantage point for a critique of the modern technological. While what I call the access critiques have mostly believed therefore in asking for more (inclusion in the technological world), these latter critiques, from the vantage point of organicity, have been

asking for less (withdrawal).

We might point to the more obvious elision here. The separation of the human subject from technology is enacted through a separation of technology from her body, carrying within it the classical mind-body duality that constitutes Western philosophy, and we will see that the reality of digital technologies complicates just this duality.

What, therefore, *obviously* happens to an understanding of technology as discrete, and to this version of critique, with the arrival of digital technologies? It may be accurately stated that digital technologies are *employed* by state agendas on the same principles of access, information, or development as earlier technologies. The ICT technologies are a case in point. Once we widen our attention, however, from digitisation as the route to building data bases, to digitisation as attempting the work of representation, for instance in systems like immersion medical simulators, digital diagnostic systems, or robot surgeons, we find a curious (some would say deadly) shift. Representation in the classical scientific tradition is no longer what is at stake, if nothing for the simple reason that separations between 'wo'man-technology are not easy to observe in these technologies, and they can therefore not simply be read as providing extensions of, or voice to, the human. What is happening, rather, is *simulation*, with a putting together of *'wo'man-machine as co-constituents of a system*, which now produces neutral yet arbitrary predictions, and these predictions *cannot be tied to ethical responsibility* in the way that representation could be. For where does technology end, and the woman begin? Where are the boundaries, the separations, the detachments between knower and known that have hitherto helped us complain of the problem with neutrality and objectivity of scientific knowledge and practice? Old wirings of women-technology where one is independent of the other have become circumspect with evidence, at least on the surface, of overdetermined relationships of wo'm'an-machine-nature. Technologies are no longer conceivable as envisioning, *objectifying* woman, for technologies are now *touching*, enveloping her, in messy, unpredictable ways. This is not, however, a new holism, a philosophical promise against duality. More recently, this messiness, this difficulty of separation, has been suggested as purported evidence of a hybridity between body and technology, and by extension between the human subject and technology. But this imaging of the relationship between bodies and

technologies does not need to do away with the dualism either; it is a sharing of parts where bodies and boundaries remain intact. Following on such a sharing, hybridity is used more as an accurate description of the ambivalence at the heart of dominance, sometimes a curtailment of dominance itself, and the heterogeneity of the sites of resistance. Could we, on the other hand, see this messiness as not only a disaggregation of power but as a movement, as Donna Haraway puts it, from old hierarchical dominations to a new informatics of domination? An unpacking of the word or concept 'technology' itself has also therefore forced itself to attention in this scenario.

These surface complications as brought in by new technologies, however, may be seen as a *symptom of the malaise of the old understanding* rather than as a new development. And it is in this context that it might be useful to *unpack the concept of technology*. More specifically, I would suggest an *unpacking of the relationship of technology to its constituencies*. What might result is the development of a field that we could tentatively call critical technology studies – a field that does not merely name each new technology as example and carve a field around it, but brings back a study of each to enrich the originary understanding of technology. I conduct this investigation around one implicit node – women-technology. I therefore insert into this investigation a series of questions – once we give up on the wiring between women-technology that populates mainstream positions as well as the critiques, which also means a giving up on the representational relationship between women and technology, how does one speak at all of gender and technology? Of gender and science? Gender and development? Further, the relationship, of wo'm'an-machine-nature, an overdetermined relationship, *need not necessarily be a symbiotic one*. Once this is taken into account, how does one talk of the difficulties of technology? The devastating effects? If we shift our expectations of technology from the beneficial or the symbiotic to the *arbitrary*, and moreover, once we have refused to talk of nature or pre-capitalism or cultural practice as pristine or prior entity, what of the critique?

Considering that women's lived experiences vis-à-vis technology and Western scientific practice have served as the vantage point for all four of the above-mentioned responses to technology in the Indian context, such an investigation will also require a revisiting of the idea of experience itself, and an exploration of the ways in which it might be

made critical, rather than valorizing it as an official counterpoint to scientific knowledge, and by extension to technology.

Bearing in mind the existing attitude to technology that I speak of, and the fresh set of tools that I arrive at in this exercise, and that could provide a more adequate response to technology, I shall briefly flag them here, leaving to the succeeding chapters the work of further elucidation. First comes the question of representation. The classical scientific tradition is predicated on the method of objectivity, that is, a purported representation of natural kinds that is neutral, detached, publicly available, existing independently and separately from us, and *as things really are*. While much ink has been put to paper in speaking of the mediations inherent in representation, or in the attempt to rethink objectivity and its characteristics, thus challenging the stated conditions of transparency or neutrality, the shift into a different register of reality – one of simulation – where natural kinds are no longer the starting point even for data collection, and where separations between woman-machine are not discernible – has not been taken into account by critique. It is therefore in this classical framework of representation that an empirically identifiable excluded perspective – of a different culture, or a constituency, say women – may be spoken of, as one which now needs inclusion. It is such a perspective that may also resist, disallow technology. It is such a perspective that may perform the exception, the anomaly that resists explanation. I try to suggest that given the loss of the classical, such a notion of perspective as fixed cannot provide an understanding, or a response, to the technology question. Rather, a sense of perspective as bizarre with respect to the given common sense about the world, but one that provides therefore a completely different picture of the world; hence an aporia, might help here. Such a perspective is contingent in both space *and time*, therefore can be held only temporarily, momentarily perhaps. It is when such a perspective reaches the state of absolute aporia that a different view of the world is made possible. This is the state of revolution that Kuhn refers to in his work on anomaly-crisis, a state that is reached when a scientific anomaly becomes crisis. This is perhaps also an analogy that can be drawn for politics. Resistance has, in our contexts, often, couched in Marxist metaphor, been made to stand in for revolution. It might be worthwhile to recognize that revolution indicates a paradigm shift, in Kuhnian language – a language useful for our purposes here. Revolution requires not merely a turning

one's back on, but a turning on its head of, the common-sensical picture of the world. These are the connections I see between the metaphorical tools I use in this investigation.

I seek to approach afresh, therefore, the nature of the relationship women-technology that may help articulate a response to the 'problem of technology', without turning it into either a monster or a benevolent entity. This would involve *understanding control strategies* which, as Haraway puts it again, may have more visibility on border regions rather than as disturbing the integrity of 'natural objects' – women and their bodies among them. This would involve a shift from articulating better policies, and politics, of representation, to *understanding simulatory strategies* of new digital technologies. And this would involve, putting these two together, recovering not a pristine narrative of women's experience – either homogenous or varied – but an attention, instead, to the *possible aporeticity of women's experience vis-à-vis dominant systems*.

Inaugurating such a field of critical technology studies with specific focus on the women-technology relationship would be a daunting task. It is also one that would require, for further elucidation, sites that could be used to validate the argument. While empirical research is not yet within the scope of this exercise, an investigation such as this will, it is hoped, provide some purchase points to reformulate our responses to technology in India.

Having laid down some of the reference points for discussion, I now proceed to trace, in the next three chapters, the contours of the technology question as it has unfolded in Indian contexts – nationalist, Marxist, and postcolonial.

chapter 2

embracing technology: nehruvian development agendas and the nationalist moment

> The key to national prosperity, apart from the spirit of the people, lies, in the modern age, in the effective combination of three factors, technology, raw materials and capital, of which the first is perhaps the most important …
>
> (Scientific policy resolution 1958)

The department of Science and Technology was established in May 1971 with a mandate, among other things, to formulate science and technology policy, co-ordinate among different organizations at state and non-state levels engaging in technological research, articulate scientific programmes in newly emerging areas of science and technology through various apex bodies, liaise through central and state government S&T departments with allied ministries like space, earth sciences, atomic energy or biotechnology, with professional bodies like the Indian National Science Academy for the promotion of the sciences, and with statutory boards that provide financial assistance to promote the development and commercial application of indigenous technology, or to adapt imported technology for wider domestic application (see appendix for the S&T system in India).

This consolidation into a State department may be considered the logical culmination of an attitude to technology in the nationalist and post-nationalist phases of India's history. The understanding of nation-building and development in these imaginations was one that would involve large-scale industrial advancement with a trickle-down effect, and the constitutive attitude to technology as a necessary and welcome tool of development is well in evidence in the first organised articulation of S&T policy in India in 1958, where, in the

climate of science as the promoter of wealth, values, and welfare, technology as an application of science is sought to be developed.

In such a climate where technology is seen as a necessary tool for development, it may be useful therefore to briefly reflect on the trajectories of development as they played out in Indian and 'Third World' contexts. I will, to this end, trace the changing meanings of development from *economic* growth in the 1800s to *social* parameters, the translation into and production of a 'Third World' through this shift of parameters, and the somewhat forceful insertion of culture and indigenity into the argument in a manner that both shapes policy and drives critiques of technology today.

Development economics, the 'third world', and the coming of culture

W. W. Rostow identifies three conditions that made possible the birth of development economics in the early 1980s – wartime planning for the post-war period (this included the Bretton Woods conference, the institution of the Food and Agriculture Organization, the setting up of the regional commissions for Asia and the Far East), the movement of the setting for policy and thought during the years 1948-49 from European reconstruction towards developing regions (the first loans being sanctioned, Truman's speech on the Trusteeship of Palestine in the 1948 UN General Assembly), and the Korean war, all of which meant that foreign aid took the form of security rather than development for about a decade. The 1950s were a period that saw the establishment of connections between development theory and policy, with major resolutions for the economic development of under-developed countries, and in the latter 50s, increased development assistance. The 1960s saw the Alliance for Progress for Latin American nations, and a 27% increase in official development assistance by OECD countries between 1960 and 1965. With increased growth rates but mass poverty and unemployment, there was also an intellectual revolt against the orthodox development positions of the '60s, with a resultant mooting of the "basic human needs" strategy. The year 1969 saw publication of the *Partners in Development: Report of the Commission on International Development* that led to the Columbia Declaration of 1970. There was also the

discovery of the second oil stock in 1979-80, and the Iranian revolution.

Mainstream theorists like Rostow saw the earlier concentration of anaylsis on Anglo-American nations as having to do with the parochialism of American and European economists who dominated the formal literature. Also, in the period 1870-1939, when economics became a professionalized and academized discipline, not much multi-disciplinary work – required for development analysis – was happening. From the 1950s, however, critiques of colonialism that associated its evils with those of capitalism began to dominate the scene, and the stage was now set for development economics at the 'periphery'.

Apart from the movement of economics to the periphery, and the associated birth of development economics as a discipline, another shift is to be taken into account – on the referents of development. What is evident especially after the setting up of the OPEC is the shift from straightforward economic indices of development to 'social' indicators – literacy, the quality of life, the condition of women, to name a few. Such a notion – of fresh indicators of development – had been put in place post-1945. But while development as a category is said to have emerged around this time, when it was addressed to East European countries – latecomers to European industrialization – in literature originating from the Royal Institute of International Affairs (later this included Asia, and in the post-1960s, Africa), it was around the 1960s, with the beginning of the first development decade, that the shift in the official meanings of the word 'developed' became visible. And this shift accompanied another – the shift from a critique of State as hampering the market (the incentive to *laissez faire*) to a categorical conferring on it of the responsibility of containing the collateral effects of economic growth or skill specialisation. The classical economists, notably Mill, had already demonstrated the impulse to press for education and better status for women. The State now became the fundamental instrument in the process that can make this possible. And it is in this context that population policy and social indicators of the wealth of nations brought into focus a new notion of *growth as development*. A shift from the economic to the social in understanding development, in a scenario where the separation was already in place post-1870s, could now begin.

There was more happening. As Rostow and others (Kabeer 1994: 2) have identified,

this was also the period of protests in the South against the prevailing economic order, protests in the North against racism and class oppression, civil rights and black liberties movements especially in North America, and the culmination of several third world liberation struggles. Liberal feminism, the second wave, and the campaigns for what could be defined at the time as the particular interests of women – access to abortion, equal pay for equal work – had reached their height in the US and parts of Europe. These were movements for social space, for space within the social.

The identification of the *social as a domain* that housed problems was, therefore, well in place through these moves. But did this strain the explanatory potential of the *economic model* of growth? Rather, it might be said that it became, for post-classical economic theories, the domain of collaterals that needed to be taken care of in order to ensure that growth progressed adequately. In such an event, the movement from growth to development, from the centre to the periphery, from the economic to the social, may be seen as shifts in visibility rather than shifts in perspective. The only point of contention was the route through which these problems might be addressed.

In India, socialism was the prominent route through which development, or at least development policy, was conceived. Already, post-1945 and World War II, various nationalist struggles in the 'Third World' – identified as a cohesive space on the dubious plea of their greater population and colonization by western powers – were being re-read as anti-imperialist, and therefore as class struggles in the Marxist frame. This therefore involved, as a response, the recruiting into world history of this 'Third World', as against the ideology of these as 'non-historic' nations that had had to be brought into history by European explorers. It also imputed to struggles in this imagined Third World a moral weight that legitimized them, and demanded for them a relationship to the centre that was not exploitative. This form of third-worldism apparently emerged out of the crisis of Stalinism, and prospered mostly in the 1960s. In this movement to the periphery, therefore, it was important to mark the position of third world societies in the universal scale of growth, as the 'stages theory' of Amilcar Cabral does. Marxist readings of history had, as against Marx's own method of immanent critique, by now declared a science of history, where history was a rigid evolution of economic

conditions and a true realisation of the Enlightenment ideals of Reason, progress and science. For Marxist theories, this meant classifying the means of production in the Third World as feudal, semi-feudal, and so on, a debate that is familiar enough in the Indian intellectual-political landscape. While generally Marxist theorists were divided on the question of whether it was the objective forces of production or the subjective experience of the proletariat that would bring about change, the Indian Left were deeply divided on the composition of the agents of change as well – the national bourgeoisie, the working class, or the peasantry. Post-Lenin, Marxist readings of the nationalisms in various parts of the Third World also entered into a variety of relationships with non-Marxist nationalist elements, addressing them as 'progressive' nationalism, rather than 'reactionary' nationalism. This constituted the internationalism of Marxism, but it also often meant that the 'political core' of Marxist practice in these spaces became confined to a series of organisational and strategic questions (Seth 1995). The Indian Marxist model itself – once its political core had been redefined in this way – was divided on the correct mode of production represented in the Indian reality, a division that led to the two major splits in 1962 (the CPI and the CPI[M]) and 1967 (CPI[M] and CPI[ML]) among the political parties on the Left in India.

This hyphen between Marxism and nationalism was evident in the Indian nationalist movement as well. A version of Marxism pervaded Nehru's nationalism – one that espoused the "scientific, economic sense" of progress. Some of the emphasis the Indian National Congress placed on economic issues, particularly during the 1937 elections, was the direct result of Nehru's urgings. This changed after 1937, but Nehruvian socialism, inasmuch as it valued a materialist conception of history, or considered the economic as important in the last instance, continued to pervade nationalist agendas. Analyses of India's problems too were in this mode – "Parties [in an independent India] will be formed with economic ideals. There will be socialists, anti-socialists, zamindars, kisans and other similar groups. It will be ridiculous to think of parties founded on a religious or communal basis" (Nehru 1931, quoted in Seth 1995: 212). Nehru's stand on nationalism, by distinguishing between oppressor and oppressed nations, also legitimized certain nationalisms, while remaining critical of nationalism in general. Needless to say, this vision of nationalism had rationalist Enlightenment thought as its underlying philosophy, and was also tied to internationalism and progress – a progress that

would bring socialism as a "saner ordering of human affairs" rather than as a "moral issue" (Nehru 1987, quoted in Seth 215). To that end, the scientific temper, as Nehru reiterates again and again, is the requirement. And to realise that requirement, Nehru did take up the philosophical debate, apart from his policy efforts, by pointing to "the essential basis of Indian thought for ages past … [which] fits in with the scientific temper and approach" (Nehru 1946, quoted in Chatterjee 1986: 139). In this version of nationalism, the scientific temper informed analyses of colonialism, cultural difference, religion, and industrialisation; the first three were attributable to economic backwardness and disparity, and the removal of these disparities, accompanied by the development of 'big' science and technology, was the answer. As far as Nehru was concerned, the colonial state was the enemy of such industrialisation, partly owing to its own selfish commercial interests, but more importantly because such interests went against universal models of economic growth wherein developing nations also needed to grow in order to keep the rich nations healthy. For his version of scientific socialism, then, a critique of colonialism could not simultaneously be a critique of reason or modernity – colonialism was 'wrong' primarily because it did not fulfil the requirements of modern growth. Clearly, for Nehru this also involved certain expectations of the national bourgeoisie who would provide political leadership. What confounded him, therefore, were the 'spontaneous' peasant uprisings, as also the Gandhian philosophy of development that was singularly in conflict with his own notions of progress. Both of these meant for Nehru a shift not only from reason to unreason, but also a parallel – and in Nehru's view problematic – movement, from the political to the utopian.

Chatterjee (1986) suggests that Nehru solved the problem by granting to Gandhi a stage in the 'passive revolution' where, once the stage had been set for the real political battle, the 'masses' could be won over to the larger nationalist cause through faith, emotion, or other such means both incomprehensible and vague of objective (to Nehru). The larger nationalist cause was the promotion of large-scale industry over small-scale or cottage industries, since "the world and the dominating facts of the situation that confront it have decided in favour of" the former (Nehru 1946, quoted in Chatterjee 1986: 144). The 'masses', by whom Nehru usually meant the peasantry, needed to recognize, like the rest of India, that small-scale industry in these "dominating facts of the situation" could only function as a "colonial

appendage" (413). Industrialisation and expert knowledge were what were needed for progress and a modern nation. After independence, this project of the modern nation was taken up by planning – what Chatterjee calls the new systems-theorists' utopia. In this scheme of things, once political independence had been achieved and independent state control set up, economic disparities would gradually disappear, for the only real problem would be one of access, a technical rather than political issue. Planning, as far as Nehru was concerned, would take care of this. Planning involved experts, and an approach to individual concrete problems at a practical level, not a political philosophy. "Planning essentially consists in balancing" ... (Nehru 1957, quoted in Chatterjee 1986: 159) and "co-operation in planning was particularly soothing ... in pleasant contrast to the squabbles and conflicts of politics" (Nehru 1946, quoted in Chatterjee 1986: 160). Further, "[s]cientific planning enables us to increase our production, and socialism comes in when we plan to distribute production evenly" (Nehru 1962, quoted in Chatterjee 1986: 159). Socialism too, rather than being a system of thought or a violent class struggle, becomes, in such a formulation, the pragmatic planning of a national economy – one that, if adequately planned, would automatically produce the "classless society with equal economic justice and opportunity for all, a society organised on a planned basis for the raising of mankind to higher material and cultured levels, to a cultivation of spiritual values … ultimately a world order" (Nehru 1936, quoted in Chatterjee 1986: 161). Chatterjee sees this selective appropriation of scientific Marxism as a way in which the reason-unreason binary was precipitated, giving rise to a different politics for the elite and the subaltern in mature nationalist thought. In the next section I will try to demonstrate how this formulation of Chatterjee's was one of the foundations from which the critiques of development too took off.

My point in elaborating these debates here is to cull from them both the routes taken in development thinking, and the contexts for postcolonial approaches to the science and technology question. Marxism, in its early nationalist avatar, presented an approach to science that involved its accurate interpretation, application and access, rather than any critique. As is evident from the debates between Nehru and the Communist Party of India (CPI), and Nehru's own writing on the subject, colonialism was considered equivalent to capitalism, the anti-imperialist struggle of the Indian masses was the route to independence, and the change

in forces of production would needs must bring about a change in the means of production. For Nehru then, the nationalist agenda consisted at least in part of bringing to the third world access to technology and a transformation in the forces of production that would address poverty and unemployment. In the Marxist-nationalist space, the debate was about what would be the agent of change – the nationalist bourgeoisie or the working class; also whether it would be forces of production by themselves or the subjective sense of the proletariat.

Third-worldism in this form, however, did not last. Cabral, in his analysis of the trajectory of third-worldism, speaks of the shift from a 'revolutionary' third-worldism to a reformist agenda, the latter of which works with a picture of the third world as ex-officio revolutionary, virtuous, and exploited. This latter provided the impulse for state intervention and development policy. Nehru's own turn to development policy in independent India may be usefully read in this frame. This translated later into the Non-aligned movement, the Soviet line, etc. Later, however, this too died out, with a movement into peaceful co-existence, dependency instead of non-alignment, and so on. Reformist third-worldism too had come to an end.

In this section, I have presented the movement in the discipline of economics from a focus on growth to development, the trajectory of development thinking in its movement away from the Anglo-Saxon world to its former colonies, as also the legacies of classical economic theories of growth carried in this trajectory. These legacies included social reform agendas, the sense that increased population is not enough stimulus for growth, the attitude towards 'unproductive' labour, the shift in discussions on population from the metropole to the periphery, and the insight that development is a discontinuous rather than an organic phenomenon. It is clear in an examination of these trajectories that technology and industry stand in as metaphors for development, and by extension, growth and economic advantage for nations. This section also helps identify, in the Indian context, the Marxist-nationalist responses to technology and development that transformed into the later postcolonial critiques of development and western science and technology. With this picture in mind, let us now proceed to look at the critiques.

Post-development positions

Both third-worldism and Indian nationalism had other, powerful and different approaches to the same questions – the analysis of colonialism and the required response, the question of technology, the concept of the state/cultural difference, than the ones we have been discussing. For post-development positions like that of Arturo Escobar, the visibility of the social had been some time in gestation. Escobar notes:

> As a domain of knowledge and intervention, the social became prominent in the nineteenth century, culminating in the twentieth century in the consolidation of the welfare state and the ensemble of techniques encompassed under the rubric of social work. Not only poverty but health, education, hygiene, employment, and the poor quality of life in towns and cities were constructed as social problems, requiring extensive knowledge about the population and appropriate modes of social planning (Escobar 1992a). The "government of the social" took on a status that, as the conceptualization of the economy, was soon taken for granted. A "separate class of the poor" (Williams 1973, 104) was created. Yet the most significant aspect of this phenomenon was the setting into place of apparatuses of knowledge and power that took it upon themselves to optimize life by producing it under modern, "scientific" conditions. The history of modernity, in this way, is not only the history of knowledge and the economy, it is also, more revealingly, the history of the social.
>
> (Escobar 1995: 23)

Having critically read the separation of the economic from the 'social' in the nineteenth century, Escobar suggests, following Foucault, that the social was being created, conceptualised, *produced through* strategic interventions. The social here was produced *as pathological*, and poverty as a social evil related to the pathologies in question, both therefore justifiably constituting domains of intervention and exclusion, with the modes of exclusion acquiring new meaning. With the flowering of this "governmentalisation", and the beginning of the process of "developmentalisation" post-1945 with the definition of two-thirds of the world as poor, not only was the link between poverty and the social made self-evident, one was made responsible for the other, and turned therefore into a justified zone of intervention (Escobar 1995). Women too, in this ever-expanding frame, came in as a group requiring

governance in the interests of development.

For Escobar, this 'making' of the third world, or the social, as a zone of intervention for the hegemonic, activated a response that included both a micro-politics of *negotiation* with the hegemonic, and the need to reclaim the third world as *resistant*. Such a position, that categorises itself as 'post-development', offers a critique of western science as hegemonic, and also makes the case for a re-making of the third world. Applied in straightforward fashion to development agendas in India, what would such a remaking involve? An example could be taken from reproductive health that is a central part of development agendas, particularly after their turn to the social. We could juxtapose on the one hand reproductive health policy that advocates the increasing use of technology to make reproductive health safer and more widely available but also sees indigenous systems of knowledge as fillers within this frame, and on the other hand intellectual analyses of the perspectives that drive indigenous childbirth practices in various communities.

The National Population Policy 2000 suggests that local traditional knowledges must be incorporated in reproductive health initiatives, to "fill in gaps in manpower at village levels" (12). Parallely, an anthropological study of the "medical world of the tribals" that includes case studies of *suine* women or midwives offers the following justification for its work:

> … a study of ethnomedicine from a symbolic and meaningful perspective will definitely lend great insight into the medical beliefs and practices of the tribals and be of great use in developing and shaping health care and health education programmes.
>
> (Tribhuvan 1998: viii)

The attempt here is clearly to highlight the traditional birth attendant, the *dai*, the *suine* … and other people not yet granted the epistemic privilege of a name; allowing them to come from a heterogeneous array to a name, a category. For post-development positions like Escobar, while category formation may indicate an appropriation into the hegemonic, the activation of epistemic privilege is important, and the formation of uncontaminated categories a possibility, allowing thus a re-making of the third world, in other words a reclaiming.

Feminist and gender work like that of Gibson-Graham too has engaged in this task, asking for a greater attention to marginalized groups working despite dominant strategies (2001).

The point here is that it is not always clear how these (Escobar and others') critiques of development build; how Escobar imagines that "[t]hinking of development in terms of discourse makes it possible to maintain the focus on domination …" (1995: 6); how "clear principles of authority were in operation" through this discourse; in other words, how the closures to discourse were operating to render domination successful. In the event, the assertions often slip into an earlier form of ideology critique, not the least because it takes the route of adequate representation for a third world that exists *prior to* the representation.

For critics like Gibson-Graham who point to the capitalo-centrism of existing positions, however, it seems more of the problem of consciousness – are these groups or hitherto unacknowledged categories going to be able to effect transformation, or are they forever doomed to the interstices, the position of the resistant but not necessarily counter-hegemonic? To both perspectives, however, Ajit Chaudhury's eloquent response sums up the problem:

> Labour reacts, resists, launches the counter-offensive, smashes the world of objects and the machine – his principal enemy. But this is not inversion. This is turning things upside down, which is different qualitatively. The inversion of a function implies an interchange in the places of the arguments – in this case of the master and the servant. The qualitative space of capitalism precludes the possibility of a functional inversion because of the absence of a concrete master visible to the servant – in this case the worker.
>
> (Chaudhury 1987: 250)

Although Chaudhury makes the argument in the light of the specificity of workers' rebellion as different from peasant rebellion, his general argument in this essay has to do with understanding the 'outsideness' of Lenin's socialist consciousness with respect to concrete labour, or the worker. He is at pains to demonstrate that resistance to the capitalist frame cannot be understood in terms of a physical turning upside down – such as is seen to be activated by the worker alone. Such a turning upside down, he wryly remarks, cannot effect a downside up, that is, a standing of *capitalism on its head*. In the event, marking physical rebellion

may mark resistance to the framework, but not necessarily revolution. I have mentioned, at the outset, resistance as one of the modes of response to technology in the Indian context. The present discussion helps show how the desire for an inversion of the dialectic – in other words, the metaphor of revolution – marks all analytics of resistance. We encounter this problem in postcolonial theorizing, and in the articulation of the 'subaltern' in critiques of technology. We will go into this more fully in a later chapter.

This chapter has tried to put down in some detail the historical conditions for the debate between culture and technology in the Indian context. To recapitulate, the discussion began from economic growth being seen as the crucial requirement for the progress of nations, went on to trace the shift from growth to development as the focus of economics, the naming of the 'social' as at least as important as the 'economic' as indices for development, the associated shift from the centre to so-named peripheral nations within these analyses, and the naming of the 'third world' and its urgent need for development in this frame. Such a notion was also reflected in nationalist thinking in India, and, accompanied by the notion of technology and industry as bulwarks of development, resulted in a full embracing of the 'trickle-down' effect in Nehruvian as well as, paradoxically, Marxist agendas that stood on the 'change in the mode-of-production' dialectic. There are, however, other movements in place that contested this picture or this resolution, namely, the post-development positions. These positions speak of resistance to classical development agendas that have produced the social, or the third world, as lacking, as pathological, as requiring governance; in so doing, they have attempted a deconstruction of the notion of development. The resistance they speak of involves a reclaiming of the name, a re-making of the third world, for instance, that will neither be caught in the rhetoric of pathologization nor in the philosophy of linear growth that inheres in development. I have suggested that this resistance proposes an inversion of the dialectic, in other words, a revolution – a proposal that I will examine in greater detail in the next few chapters. Other nationalist responses, however, took on the mantle of resistance in different and interesting ways, and this will be the focus of the next chapter. As to other methodologies of critique, like the frameworks of hybridity and disaggregation that have informed much postcolonial and gender work in India since the major development decades, these have taken on the task of resistance while attempting to

steer clear of ideological critique; in doing so, they display their own set of difficulties vis-à-vis their explanatory potential for a robust reading of hegemonic systems.

chapter three

"Indigenous technology" or a different perspective on knowledge? the Gandhi-Tagore debates

Having examined the Nehruvian agenda for technology in India, I now go on to discuss two moments that speak a different resolution, one in nationalist language itself, that proposed the opposite stance to that of Nehru – in a word, resistance to technology; and the other, in Marxist agendas – the turn to culture. This chapter will deal with the nationalist moment of resistance.

> Pandit Nehru wants industrialization because he thinks that, if it is socialized, it would be free from the evils of capitalism. My own view is that evils are inherent in industrialism, and no amount of socialization can eradicate them.
>
> (Gandhi 1940, quoted in Chatterjee 1986: 88)

> Instead of welcoming machinery as a boon, we should look upon it as an evil.
>
> (ibid: 87)

> Division of labour there will necessarily be, but it will be a division into various species of body labour and not a division into intellectual labour to be confined to one class and body labour to be confined to another class.

(ibid: 92)

> But where am I among the crowd, pushed from behind, pressed from all sides? And what is this noise about me? If it is a song, then my own *sitar* can catch the tune and I join in the chorus, for I am a singer. But if it is a shout, then my voice is wrecked and I am lost in bewilderment. I have been trying all these days to find in it a melody, straining my ear, but the idea of non-cooperation with its mighty volume of sound does not sing to me, its congregated menace of negations shouts. And I say to myself, "If you cannot keep step with your countrymen at this great crisis of their history, never say that you are right and the rest of them wrong; only give up your role as a soldier, go back to your corner as a poet, be ready to accept popular derision and disgrace.
>
> (Tagore 1921, quoted in Bhattacharya 2005: 56)

The Tagore-Gandhi dialogues – as a window on the contestations between the ambivalent 'modern' somewhat removed from the mainstream of nationalist politics, and the recalcitrant 'pastoral' within the same stream – give a different, more complex idea of the attitudes to modernity and science-technology than the Nehru-Gandhi debates or the former's reading of the latter's philosophy. In a series of letters exchanged between 1929 and 1933, and earlier, in debates conducted in the pages of *Young India* and *Modern Review*, Gandhi and Tagore spoke to each other of rural reconstruction, of the possibilities and limits of handicraft industries and the *charkha* programme, of the discourse of science as opposed to that of religiosity. Although a lot of the dialogue between them is neither direct nor addressing the other's concerns fully, both had blueprints for rural programmes of self-sufficiency; both were opposed to heavy technology, both were opposed to state views on education. For both thinkers, the anti-colonial struggle was symbolised in the protest against foreign cloth, heavy technology, or government-sponsored education. This protest, in the form of the call for *swaraj*, differed in nuance in Tagore and Gandhi, but essentially it signified a moral freedom from the West, a dignity of human labour, a protection of the intellect from colonization. *Swaraj* would involve, for both, a reconstruction of life – the moral as well as the material.

For both, the moral and the material were inextricably linked; the difference seems to be in the stress on attaining *material freedom through the moral* in Tagore, and on attaining *moral freedom through material activity* in Gandhi's thought. Nowhere was this more evident than in the different systems of schooling, both outside the state-sponsored system, which Gandhi and Tagore set up, in Wardha and Santiniketan respectively. Both had different and powerful analyses of the hegemony of western science, and consequently different views on the nature of what could constitute oppositional practice. A point Akeel Bilgrami has noted about Gandhi's thought may be true of both thinkers here, namely, the integrity of their thought, the difficulty of picking strands of it regarding particular issues, or of separating their political impulses from their epistemological ones. Let us, for our purposes, however, force such an initial strand, and take up the programme/metaphor of the *charkha* as 'cottage machine' to look at the debate around development and technology that ensued around it between the two thinkers.

For Gandhi, the *charkha* programme was a symbol for rural cooperation – a 'non-co-operation … neither with the English, nor with the West [but] with the system the English have established' (1921, 'The Great Sentinel', addressed to Tagore). That system indicated the broad sweep of Western materialism, expressed in hugely consumptive desires, and for Gandhi, the *charkha* stood for a rejection of this exchange value for use value – a project of self-sufficiency. Gandhi's early proposals around spinning the *charkha* offered an alternative programme of rural construction, in particular the exercise of self-sufficiency. These were followed up in 1921 in the laying down of 'indispensable conditions for *swaraj*' (188-9). Later, he stood firm through Tagore's qualified scepticism and other critiques, moving from the larger programme to *charkha* as spiritual metaphor; to the perplexed, he said that 'I do regard the spinning-wheel as a gateway to *my* spiritual salvation, but I recommend it to others only as a powerful weapon for the attainment of *swaraj* and the amelioration of the economic condition of the country' (Gandhi 1958, quoted in Chatterjee 1986: 108). In response to the poet's chagrin at the requirement of all to spin, 'I do indeed ask the poet and the sage to spin the wheel as a sacrament. ... The call of the spinning wheel is the ... call of love. And love is *swaraj*. The spinning wheel will 'curb the mind' when the time is spent on necessary physical labour can be said to do so. ... I do want growth ... but I want all these for the soul. ... A plea for the

spinning wheel is a plea for recognising the dignity of labour.' (Gandhi 1921, quoted in Bhattacharya 2005: 88-9). That growth of the soul, that spiritual salvation, the actual realisation of *swaraj*, meant for Gandhi the rejection of the 'system' – the moral force that made it irrelevant. That system included the railways and hospitals, which, however, Gandhi was not 'aiming at destroying … though [he] would certainly welcome their natural destruction … Still less … [was he] trying to destroy all machinery and mills' (Gandhi 1921, quoted in Bhattacharya 2005: 33). For he made the conventional acknowledgement that '[m]achinery has its place; it has come to stay. But it must not be allowed to displace the necessary human labour ... I would welcome every improvement in the cottage machine but I know that it is criminal to displace the hand labour by the introduction of power-driven spindles unless one is at the same time ready to give millions of farmers some other occupation in their homes' (Gandhi 1925, quoted in Bhattacharya 2005: 125).

The cottage machine? Was the *charkha* then a smaller kind of technology, and was it small, sustainable technology that Gandhi was advocating against large, impersonal, unwieldy 'things' where human labour even was not visible? Or was the *charkha* actually a metaphor for materiality, for human labour and practice itself, in a way that challenged Western materialism, the discreteness of self, and hence the concept of technology? A closer look at the dialogue in question may yield more clues.

Was Tagore too as clearly opposed to heavy technology? The *yantra danava* is a recurring theme in his poetry, and even at the time of his critique of Gandhi's *charkha* programme, he was writing, in plays like *Mukta Dhara* and *Rakta Karabi*, searing critiques of the effects of technology on people's lives. As far as the rejection of the West went, also, he was with Gandhi, holding him up as the 'Mahatma [who], frail in body and devoid of material resources, should call up the immense power of the meek …' (' Tagore 1921, quoted in Bhattacharya 2005: 55), and reminding his readers that 'I have seen the West; I covet not the unholy feast, in which she revels every moment, growing more and more bloated and red and dangerously delirious …' (ibid, 55-9). His was not the mode of Non-Cooperation, however, for this movement, with its 'noise', its particular strategems that instrumentalised, made 'barren and untrue' the spirit of the Mahatma's words, failed to provide for him the 'melody' he needed. On the yantra itself, Tagore clearly had ambivalent views, for on other occasions in

his poetry he offers what might be *homage* – yantra namah.

While the withering critique of railways, doctors and lawyers in Gandhi's *Hind Swaraj* exemplifies at least the early Gandhi's views on these symbols of modernity and the need for their unconditional rejection, Tagore reacted again and again to such a view, particularly to the moral element shoring it up, complaining, for instance, about the principles of the *charkha* programme - 'economics is bundled out and a fictitious moral dictum dragged in its place' (Tagore 1921, 'The Call of Truth'). While being opposed to heavy technology, Tagore refused to accede to the "magical formula that foreign cloth is impure" (Tagore, 'The Call of Truth'). '*Swaraj*,' he says, 'is not concerned with our apparel only - it cannot be established on cheap clothing; its foundation is in the mind ... in no country in the world is the building up of *swaraj* completed ... the root of such bondage is always within the mind. ... A mere statement, in lieu of argument, will never do. ... We have enough of magic in the country ... That is exactly why I am so anxious to re-instate reason on its throne.' (ibid, quoted in Bhattacharya 2005: 82).

What, then, of his critique of Western materialism? 'You know that I do not believe in the material civilisation of the West just as I do not believe in the physical body to be the highest truth in man. But I still less believe in the destruction of the physical body, and the ignoring of the material necessities of life. What is needed is establishment of harmony between the physical and spiritual nature of man, maintaining of balance between the foundation and superstructure. I believe in the true meeting of the East and the West. Love is the ultimate truth of soul. We should do all we can, not to outrage that truth, to carry its banner against all opposition. The idea of non-cooperation unnecessarily hurts that truth. It is not our heart fire but the fire that burns out our hearth and home.' (Tagore 1921, quoted in Bhattacharya 2005: 59)

In this sense, there was an affinity between Tagore and Nehru – with respect to desirable national attitudes to faith, unreason, or imperialist policy. For Tagore, *swaraj* was, as he wrote to Gandhi, '*maya*, … like a mist, that will vanish leaving no stain on the radiance of the Eternal. However we may delude ourselves with the phrases learnt from the West, *Swaraj* is not our objective' (Tagore 1921, quoted in Bhattacharya 2005: 54).

On the ability of the *charkha* to bring about rural reconstruction, Tagore avers – 'The

discussion, so far, has proceeded on the assumption that the large-scale production of homespun thread and cloth will result in the alleviation of the country's poverty. ... My complaint is, that by the promulgation of this confusion between *swaraj* and *charkha*, the mind of the country is being distracted from *swaraj*.' (Tagore 1925, quoted in Bhattacharya 2005: 118). 'One thing is certain, that the all-embracing poverty which has overwhelmed our country cannot be removed by working with our hands to the neglect of science. … If a great union is to be achieved, its field must be great likewise ... the religion of economics is where we should above all try to bring about this union of ours.' (ibid: 104-6-7). What Tagore perceived as happening in the *charkha* programme, on the other hand, was the 'raising of the *charkha* to a higher place than is its due, thereby distracting attention from other more important factors in our task of all-round reconstruction' (112).

Tagore had other problems with *charkha* and its being tied to *swaraj*. For one, the 'cult' of the *charkha* would not work for *swaraj* because it is an "external achievement", apart from being a call to obedience that only recalled slavery in its worst form. For another, the isolationism enshrined in the act of rejecting foreign cloth only seemed to bring back the "sin of untouchability" in the guise of the *charkha* versus 'impure' foreign cloth. Further, and here Tagore raises his most eloquent objection, his failure to see a difference between the *charkha* and the high machine that introduces repetitive activity, boredom, and alienation in human labour. "Humanity", he says, "has ever been beset with the grave problem, how to rescue the large majority of the people from being reduced to the stage of machines. ..." (104-5). The discovery of the wheel signified, for Tagore, "[t]he facility of motion … given to inert matter [which] enabled it to bear much of man's burden … [and t]his was but right, for Matter is the true *shudra*; while with his dual existence in body and mind, Man is a *dwija*. … Thus, whether in the shape of the spinning wheel, or the potter's wheel or the wheel of a vehicle, the wheel has rescued innumerable men from the *shudra's* estate …" (Tagore 1925, quoted in Bhattacharya 2005: 104). In such a scenario, it may be argued that "spinning is … a creative act. But that is not so; for, by turning its wheel man merely becomes an appendage of the *charkha*; that is to say, he but does himself what a machine might have done: he converts his living energy into a dead turning movement. ... The machine is solitary ... likewise alone is the man ... for the thread produced by his *charkha* is not for him a thread of necessary relationship

with others ... He becomes a machine, isolated, companionless" (ibid). And why is this? Tagore refers back, here, to the discus of Vishnu which signifies the "process of movement, the ever active power seeking fulfilment. … Man has [therefore] not yet come to the end of the power of the revolving wheel. So if we are taught that in the pristine *charkha* we have exhausted all the means of spinning thread, we shall not gain the favour of Vishnu … If we are wilfully blind to the grand vision of whirling forces, which science has revealed, the *charkha* will cease to have any message for us." (Tagore 1925, quoted in Bhattacharya 2005: 104) Therefore we must realise that "*swaraj* will advance, not propelled by the mechanical revolution of the *charkha*, but taken by the organic processes of its own living growth" (Tagore 1925, quoted in Bhattacharya 2005: 121).

Tagore refers, again and again in his polemic, to the dynamicity inherent both in the truth of Vishnu, and in the progress of science, as against the dead burden of "rites and ceremonials" that have produced in "India's people" the habit of relying on external agencies rather than on the self. The *charkha* embodies for Tagore such an external object, static. Is he then subsuming the wheel and its dynamicity in the discourse of science? A careful reading of Tagore's polemic seems to suggest that his point is rather in examining the nature of material activity and making the connection, through dynamicity, without which neither science nor the *charkha* might have any value.

There were other differences. Tagore recognized that for Gandhi, productive manual work, such as that embodied in the *charkha*, was the prime means of intellectual training (1937). The sort of oneness that such collective occupational activity may create for Gandhi, however, fails to move Tagore, for whom the act is a performance of sameness and stagnation. *Charkha*, he says, in one of his many tirades against the programme, is "a befogged reliance on … narrow paths as the sole means of gaining a vast realisation" (Tagore 1925, quoted in Bhattacharya 2005: 114). As such, the philosophy of *swaraj* as it was being enacted, along with the programme of Non-cooperation and rejection of the West, only produced an isolation, a soliloquous discourse, a "struggle to alienate our heart and mind from those of the West … [that could only be] an attempt at spiritual suicide … India has ever declared", he said, "that Unity is Truth, and separateness is *maya*. This unity … is that which comprehends all and therefore can never be reached through the path of negation … Therefore my one prayer is:

let India stand for the cooperation of all peoples of the world. The spirit of rejection finds its support in the consciousness of separateness, the spirit of acceptance in the consciousness of unity" (Tagore 1921, quoted in Bhattacharya 2005: 62). More disturbing for him was the violence enshrined in the principle of Non-cooperation. "The idea of non-cooperation is political asceticism. ... It has at its back a fierce joy of annihilation which at best is asceticism, and at its worst is that orgy of frightfulness in which the human nature, losing faith in the basic reality of normal life, finds a disinterested delight in an unmeaning devastation ... [non-cooperation] in its passive moral form is asceticism and in its active moral form is violence. ... The desert is as much a form of *himsa* (malignance) as is the raging sea in storms, they both are against life" (ibid, 57-8). Tagore was, perhaps, making a stronger critique, here, of the violence embedded in political collectivities, and the moral questions contained in non-violence as a practice.

Gandhi responded to the polemic in several ways. At pains to explain to the poet the relevance of the *charkha*, he reminded the latter, in some exhaustion, that "I do not draw a sharp distinction ... between ethics and economics." (Gandhi 1921, quoted in Bhattacharya 2005: 90). Elsewhere he clarifies in no uncertain terms:

> I am always reminded of one thing which the well-known British economist Adam Smith has said … he has described some economic laws as universal and absolute. Then he has described certain situations which may be an obstacle to the operation of these laws. These disturbing factors are the human nature, the human temperament or altruism inherent in it. Now, the economics of khadi is just opposite of it. Benevolence which is inherent in human nature is the very foundation of the economics of khadi. What Adam Smith has described as pure economic activity based merely on the calculations of profit and loss is a selfish attitude and it is an obstacle to the development of khadi; and it is the function of a champion of khadi to counteract this tendency.
>
> (Gandhi 1958, quoted in Bhattacharya 2005: 90)

Further,

> … I have asked no one to abandon his calling, but on the contrary to adorn it by giving every day only thirty minutes to spinning as sacrifice for the whole nation. …

> The Poet thinks that the *charkha* is calculated to bring about a deathlike sameness in the nation and thus imagining he would shun it if he could. The truth is that the *charkha* is intended to realise the essential and living oneness of interest among India's myriads … All I say is that there is a sameness, identity or oneness behind the multiplicity and variety. And so do I hold that behind a variety of occupations there is an indispensable sameness also of occupation
>
> (Gandhi 1925, quoted in Bhattacharya 2005: 124)

Does that involve a separation from the world, an isolationist discourse? Perhaps not … for

> the message of Non-cooperation, Non-violence and swadeshi, is a message to the world ...[through] Non-cooperation [which] is a retirement within ourselves … [for i]n my humble opinion, rejection is as much an ideal as the acceptance of a thing. It is as necessary to reject untruth as it is to accept truth. ... I make bold to say that *mukti* (emancipation) is as much a negative state as *nirvana*. ... I therefore think that the Poet has been unnecessarily alarmed at the negative aspect of Non-cooperation. We had lost the power of saying 'no'.
>
> (Gandhi 1921, quoted in Bhattacharya 2005: 66-7)

As to the rest of the world, "I want the cultures of all the lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any ... Mine is not the religion of the prison house. It has room for the least among God's creation. But it is proof against insolence, pride of race, religion or colour" (ibid: 64).

Elsewhere, in response to alternative positions like that of Bankim Chandra Chattopadhyaya, who believed the absence of cultural attributes had resulted in India's subjugation by the British, Gandhi spoke, rather, of the disjuncture between the prevailing politics and the morality of the community that had resulted in the same. Chatterjee presents the moment of Gandhi in nationalist politics as the moment of manoeuvre, proposing that Gandhi's critique of civil society and representative democracy emerges through his reworking of the relationship between the moral and the political. Without going in to the merits of Chatterjee's formulation here, we could try to understand this separation that Gandhi makes, in order to better understand his accompanying take not only on the value of science, but on a necessary relationship between its use and the morality of the community.

Again and again, in response to industrialisation, in response to the work of doctors of medicine, in response to "much that goes under the name of modern civilisation" (quoted in Chatterjee 1986: 80), Gandhi reacts. "I overeat, I have indigestion, I go to the doctor, he gives me medicine, I am cured. I overeat again, I take his pills again. Had I not taken the pills in the first instance, I would have suffered the punishment deserved by me and I would not have overeaten again. The doctor intervened and helped me to indulge myself" (ibid: 84). And so with history, and so with the law, all of which are the record of visible illness rather than of the truth. In Gandhi's world, it would seem that "[t]rue knowledge [which] gives a moral standing and moral strength" (ibid: 119), can be the only basis for any politics. To that extent, Non-cooperation or satyagraha, as "intense political activity" rather than passive resistance, but in the form of a negation of the existing political frameworks, was born. The "disobedience" here was not only of the British administration, but of existing modalities of resistance. The positive content of the programme was that of rural construction through khadi and the *charkha* programme, which for Gandhi would be the true method of non-violent *swaraj*. This too, however, needed the abdication of the state from responsibility. The collectivity that Tagore found so suspect in this regard was for Gandhi an experiment in the modalities of non-violent mass resistance. And to Tagore's eloquent argument against the *charkha* on account of its staticity, what more eloquent answer than this – "It is a charge against India that her people are so uncivilized, ignorant and stolid, that it is not possible to induce them to adopt any changes. It is a charge really against our merit. What we have tested and found true on the anvil of experience, we dare not change" (ibid: 96).

How does this otherwise rich polemic help us to understand positions on science and technology? Is Gandhi a pastoral philosopher or a peasant intellectual proposing a separate epistemic realm from that of the West? Can he be labelled a Luddite? Is he caught, like the European Romantics were, in the dilemma between Reason and Morality? Or is he making a fundamental distinction between truth and the knowledge encompassed in disciplines like science and history, suggesting that truth cannot but strike elsewhere from knowledge? While the answers to each of these may be difficult, while individual examples for each of these arguments may be found in Gandhi if not seen as part of the integral picture, and while any attempt to intellectualise his thought in isolation from his politics may be doomed from the

start, I might perhaps attempt to say that there is, here, a critique of existing knowledge systems, of which scientific knowledge is one, that calls for a fundamentally new theory of knowledge, a theory of knowledge inextricably linked with morality, rather than a choice of alternate system from the 'West' or any other.

And in the tensions between these two thinkers, both of whom had strong reactions to technology, may be seen an unpacking of the notion of technology itself. Tagore may be read mostly as decrying the ruthlessness, the demoniac nature, the lack of soul, in other words the anti-humanness of technology, thus going back to that notion of technology as instrument that Heidegger demonstrated to be peculiar to Western thought. For Gandhi, on the other hand, the *charkha* is a symbol of labour, *human* labour, thus challenging modern formulations of technology, including Marxist definitions of technology as means of production. The spinning of the *charkha*, then, might well signify a potential re-cognition of the individual. And this might explain why the *charkha* - what could clearly be a metaphor for material practice, or a living example of the same, in Gandhi, is in near-obstinate fashion resisted as insignificant material by Tagore, in an otherwise incomprehensible misunderstanding between the two minds.

This debate in itself did not assume great proportions on the Indian political landscape, nor did it have a profound impact on nationalist agendas vis-à-vis technology policy before or after independence, remaining, perhaps, at the level of a moral insight that had its own faithful band of followers. Gandhi's own thought, however, was to prove influential in offering to postcolonial scholarship the impulse to resist technology, in a particular conflation of his materiality, Tagore's instrumentalism, and the Marxist cultural turn. It is in particular this turn and later postcolonial scholarship that the next chapter will examine in greater detail.

chapter four

Making up to the masses

THE MARXIST TURN TO CULTURE, AND THE IMPLICATIONS FOR TECHNOLOGY

In the preceding chapter, I discussed, through the Gandhi-Tagore debates, the responses to science and technology that did not follow the dominant Marxist-nationalist positions. In this chapter, I will briefly trace the 1980s shift in Marxist thinking in India as a way of approaching the shift in the science and technology question, and following on this, the postcolonial appropriation of this shift in its own responses to technology. This exercise will reveal the ambivalence in Marxist practice toward continuing associations between the 'rational-scientific' on the one hand and the 'revolutionary' on the other. It also hopes to elucidate, in greater detail, the resistance-revolution dissonance that characterized most postcolonial critiques of technology and development.

The importance of the subaltern

Ranajit Guha, writing in 1982, was the first to consider, within Indian Marxism, the structure of subaltern consciousness. Questioning the incidental place hitherto given to the peasant in both Marxist and nationalist frames – in one as part of the mode-of-production debates, in the other as part of the trickle-down theory of development – Guha proposed a re-cognition of the subaltern – here the local peasant – as political and politicised, and not merely a cog in the wheel or an included member of a revolution conceived of by the vanguard. In re-conceptualising or re-discovering (it is not clear which) the political, the Subaltern School, up until the time of Subaltern Studies IV, brought up an analysis of colonialism that challenged early and neo-colonialist historiographies, as dominance *without hegemony* in at least the first fifty

years of its existence. This analysis suggested that colonial power had not only *not* worked with the active consent of 'the people'; it had placed everything before colonial time in the zone of non-history, and by extension, in the zone of the pre-political. Nationalist historiographies had followed the same patterns in addressing the peasant, thus leaving out the 'politics of the people' (Guha 1982). The Subaltern Studies School up until Subaltern IV, therefore, raised the question of subaltern consciousness; it uncovered and articulated the 'role of the peasant in nationalist movements' as the subaltern domain of politics – a domain separate from the 'elite' nationalist domain – rather than an un-political 'sticks and stones' activity; re-read colonialism as a discourse of dominance without hegemony that resulted in separate elite and subaltern domains of politics; challenged existing 'elite historiography' - both colonialist and nationalist; and made these moves through a different mode of history-writing that took into account unconventional sources and used different methodologies, producing, on that account, a different history.

I will not go into the two significant challenges to the Subaltern School that came up with Subaltern IV. For my purposes, the early Subaltern phase, in its shifts from the Marxist-nationalist moment, is important for the ways in which it aligns with (or rather, facilitates) various critiques of technology that permeate discussions around development today, and that sometimes seek alliances with Gandhian philosophies in doing so. Needless to say, all of these relied for their critique on the vantage point of the subaltern. That subaltern was an empirical category or condition as set out in Subaltern Studies. I examine here two of three spaces where this shift from earlier Marxist to subaltern perspectives is visible – the popular science movements, the post-trade-union movements, and the critiques of technology available in the postcolonial school.

People's Science Movements

The **Science and Rationalists' Association of India** (name of the

organization in Bengali is *Bharatiya Bigyan O Yuktibadi Samiti*) established on 1st March 1985, our organization is made up of like minded people coming from different professions. We are not affiliated to any political party.

Our aim is to eradicate superstition and blind faith, which include religious fanaticism, astrology, caste-system, spiritualism and numerous other obscurantist beliefs.

Our view is that rational way of thinking shall be spread among the people as against spiritual or religious teachings, and that alone can bring about social change.

(Science and Rationalists' Association of India http://www.srai.org/sra.htm)

The Medico Friends Circle was set up in 1974 at a national level, to critically analyse the existing health care system in India and 'to evolve an appropriate approach towards health care which is humane and which can meet the needs of the vast majority of the people in our country.' With an emphasis on the necessary role of the state in providing such health care, it demanded 'that medical and health care be available to everyone irrespective of her/his ability to pay … that medical intervention and health care be strictly guided by the needs of our people and not by commercial interests'; and asked for 'popularisation and demystification of medical science and … the establishment of an appropriate health care system in which different categories of health professional are regarded as equal members of a democratically functioning team.' Alongside, it also decided to push for 'active participation by the community in the planning and carrying out preventive and promotive measures,' for 'a pattern of medical and health care adequately geared to the predominantly rural health concerns of our country … a medical curriculum and training tailored to the needs of the vast majority of the people in our country,' and

asked, further, that 'research on non-allopathic therapies be encouraged by allotting more funds and other resources and … that such therapies get their proper place in our health–care.' It also asked that we be attentive to the role of 'curative technology in saving a person's life, alleviating suffering or preventing disability.'

Community Development Medicinal Unit, an independent non-profit voluntary organisation, was set up in 1984, to 'achieve the basic societal need of facilitating access to essential medicines,' to 'provide unbiased drug information to health professionals and consumers, to weed out spurious and "irrational" drug combinations from the market through consumer information and pressure on government, to "negotiate with the Government to formulate people-oriented drug policies and weed out irrational and hazardous drugs from the Indian market, [and to] … conduct community-oriented research on drugs' (http://www.cdmubengal.org/aboutus.html).

These were a few of the many organisations that grew in the 70s and 80s to nurture the 'social', 'civil', 'cultural' space. Alongside other organisations like the Janakiya Samskarika Vedi (Democratic Cultural Forum) in Kerala, these determinedly claimed an autonomous, non-profit *guardianship of* '*the people*', reacting as much to the violence in the political life of the entrenched Left as to its vanguardism. Their primary aim, therefore, was to increase access and availability not only to the fruits of scientific knowledge, namely drugs and curative technologies, but to that knowledge itself, so that programmes of 'popularisation and demystification', rural needs, 'alternative system use', were incorporated and taken up as the activities of local science clubs.

On the other hand, the stress was on 'active participation', which did not need an unpacking of knowledge systems or knowledge-making, but rather an involvement at the level of knowledge-dispensation, as also an extension of the WHO slogan '(think globally) acting locally'. But the stress itself possibly had other histories. Autonomous

or otherwise, these organisations came out of what Raka Ray has called the 'hegemonic field' of the Left, in Bengal and Kerala, among other spaces. In attempting to move away from the notion of vanguard party and the 'mass', 'the people' of a democratic state became the organising metaphor for these 'movements' that not only 'took science to the villages', but also admonished technology for its inattentions to the people. Appropriate technology and best practices, then, were the logical next step, as also the accompanying challenge to big dams – all manifestations of technology that suppressed subaltern voice.

While the *Bigyan O Yuktibadi Samiti* may be the most caricatural version available today, most of the people's science movements did rely on associations between 'rationalist' and scientific ideas, using the one to bolster the other, or, in the later turn to the PSM, accuse the one on account of the other. In this later turn, the PSM share the philosophy of the anti-development positions, in their attention to the vantage point of the subaltern as an empirical identity from which to critique the existing knowledge frames. Part of the earlier expectation from such movements, that they would eliminate 'nativism' and challenge 'fundamentalism', then, was obviously not met in the later turn, and explains a complaint by Nanda – an activist-scholar wedded to the rationalist cause.

> Why have PSMs not taken the fight to the priests and the temples? … I believe that the nativist turn by an important segment of Gandhian social activists and intellectuals made it unfashionable to question tradition and religion. It became almost obligatory to defend the 'wisdom' of the masses, as opposed to the 'violence' of modern scientific ideas themselves. This kind of thinking moved the focus to 'safer' targets, like big development projects, MNCs and such in which 'modern' technology and modern institutions were the main culprits and people's traditions the source of resistance (I am not suggesting that the left should not oppose MNCs and big development projects, as and when they need to be opposed. But they have to be opposed while defending a

> progressive, secular worldview; not in order to defend the 'people's wisdom' which contains many inherited prejudices and superstitions). Science movements imbibed the populism and cultural traditionalism of leading Gandhian/postcolonial intellectuals who took a highly anti-modernist position for nearly three decades, starting around late 1970s (coinciding with Indira Gandhi's emergency).
>
> (Nanda 2005: http://www.sacw.net/index.html)

Nanda's statement is at the cusp of the postcolonial appropriation of Marxian terminology in its anti-technology arguments. We will go into these in more detail in the next section.

'Terrors of technology': the postcolonial and the 'past'

I have been building towards an understanding of how the anti-technology arguments in India have been posed in the nationalist and Marxist positions. I now go on to look at the arguments put out by the postcolonial school, their appropriation of Marxist terminology, and their stances against Marxism in responding to science and technology in general.

> Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it.
>
> (Heidegger 1949: 279)

> By the very nature of its instrumental-managerial orientation to Indian society, modern science has established a secure relationship with the philosophy and practice of development in India. Indian developmentalists are now faced with the obvious fact that the developmental vision cannot be

universalized, for the earth just does not have the resources for the entire world to attain the consumption levels of the developed west. It does not have such resources now, nor will it have them in the distant future. The developmentalists, therefore, have a vested interest in linking up with the drive for theatrical science to create the illusion of spectacular development, which, in essence, consists of occasional dramatic demonstrations of technological capacity based on a standard technology-transfer model. Under this model, highly visible short-term technological performance in small areas yields nation-wide political dividends. This model includes a clearly delimited space for 'dissent', too. While some questions are grudgingly allowed about the social consequences of technology – about modern agronomy, large dams, hydel projects, new dairy technology, modern health care systems, space flights, Antarctica expeditions, et cetera – no question can be raised about the nature of technology itself.

(Nandy 1988: 9)

Science and technology have sustained various forms of systemic violence … [p]lanned *obsolescence*, with its de-skilling of communities, … [s]ocial *triage*, a rational framework for treating vulnerable communities as dispensable, … *extinction*, …[m]*useumization* of tribals and other defeated and marginal groups who are unable to cope with modernity and development", … the violence of *development*, including internal *displacement*, … the violence of the *genocidal mentality*, … [*n*]*uclearism* … [*m*]*onoculture* … [*e*]*xclusion* or *enclosure* … as central to the globalisation process … [*i*]*atrogeny* … in which the experts' solution increases the endemic violence or suffering of a community … [and] the violence of *pseudo-science*, or antitechnological movements …

(Visvanathan 2003: 170-2)

> Grassroots movements in India have suggested the ideas of "cognitive justice" and "cognitive representation." Cognitive justice … holds that knowledge, especially people's knowledge or traditional knowledge, is a repertoire of skills and a cosmology that must be treated fairly in the new projects of technological development. Cognitive representation, which is a corollary, presupposes that in the act of science policy-making, the practitioners from various systems would be present to articulate their concepts, theories, and worldviews. Both concepts seek to pre-empt the liquidation of certain forms of local or marginal knowledge.
>
> (Visvanathan 2003: 165-6)

> Modern science began as a powerful dissenting imagination, and it must return today to becoming an agent of plurality, of heretical dissent.
>
> (Visvanathan 2002: 50)

The philosophies of anti-development, as is evident from some of the positions quoted above, have largely turned on the metaphor of violence. The violence of technology, the violence of science, the violence of reason, the violence of the market. The starting premise of most of anti-development has been the correlation between the ideologies of these phenomena – science, reason, the market, and their collective exclusion of experience. The question of science itself has been charted through the question of technology. These connections have permeated western as well as nationalist and postcolonial critiques of mainstream development, with violence being seen as constitutive of scientific knowledge rather than simply an effect of scientific practice or policy. This position is, of course, built by challenging the premises of scientific knowledge as objective, value-neutral, verifiable, and unified.

Shiv Visvanathan, Vandana Shiva, and others challenging these premises of scientific knowledge, suggest that an exclusionary violence is constitutive of such knowledge that activates a subject-object dichotomy although its claims to objectivity are shown up to be false in its imperializing tendencies; further, that it works with a systematization "wherein science becomes an organizer of other mentalities, [affecting] … the domains of work, education, sex, and even memory" (Visvanathan 2003: 164). Like Shiva, Visvanathan marks western science as dualistic, as imbued with a knowledge-power nexus, and as vivisectionist. While Shiva makes a strong proposal for choosing pre-existing alternative knowledges as against reductionist modern science, which she defines through her identification of the ontological and epistemological assumptions of reductionism, traced to Descartes, Visvanathan, however, is reluctant to consider a simple return, looking, rather, for an "escape from the dualism of Luddism versus progress" (2003: 172). He refers to the 'chaos', 'play', or uncertainty that science traditionally allows but that gets disallowed once it enters the text. For Visvanathan, the scientific self is one without shadows, cut off from the moral one, as well as from the playful, spiritual, anarchic self of its initial imagination. The scientific community is merely an "epistemologically efficacious" one that has no internal filters to exercise "ethical restraint", to confront the "perpetual obsolescence that science and markets impose on a community" (2002: 43).

He asks, therefore, at a conceptual level, for a return to a more ambivalent, anarchic self, to play, to a place for grief, to memories of change in a community; at the policy level, for a plurality and democratization among skills and knowledge systems. Such a return to what Visvanathan names a sacred root, is a rescue from the present homelessness of modern science in its secular, proletarianized form – a condition where science is treated as apart from and above a culture instead of being embedded in it. On the other hand, "[m]odern science began as a powerful dissenting imagination, and it must return today to becoming an agent of plurality, of heretical

dissent" (2002: 50). Such 'play', such an anarchy of perspectives, such a form of democracy, embodied for him in "grassroots movements" like the popular science movements of the 70s, where the citizen is seen as a "person of knowledge", and where those "currently designated scientists" become "prisoners of conscience", is what could effect a response to what he calls the secularization and proletarianization of science. He charts a series of exercises that might make this possible – renunciation of science, cognitive indifference to it, a different cognitive justice being among them. "One wishes one had a Gandhi or a Loyola to construct … a book for science, with exercises which, while spiritual, are also deeply cognitive and political. I think in this lies the real answer to the Cartesian meditations or to Bacon's *Novum Organum*" (2002: 47).

While Shiva makes fairly straightforward substitutions between science and technology in her critique, citing the violence of one to indict the other, Visvanathan suggests, at various points, that *technicity* (2002: 41) – by which he refers to an attitude that treats the human as immortal, nature as resource, and technology as both instrument and nearly universal antidote - *is the problem with a science* that might otherwise have been better. "Everyday technologies", on the other hand, being embedded in cultural requirements and practices, release science from expertise.

My purpose, in charting these positions, is partly to identify this peculiar connection, or substitution, between science and technology that most of the critiques stand on in pointing to the violence of mainstream development. The "will to power" of technology in these positions seems, more often than not, an obverse of the "will to mastery" over technology in its most instrumental sense, which is why the debates seem to hover endlessly over technology being beneficial, devastating, or a judicious mixture of the two. The pre-technological appears free of the instrumentality of technology; "everyday technologies" seem to offer respite in the shape of an embeddedness in community; at the very least, they appear to possess

the mythicity, the poiesis, that Visvanathan so wistfully regrets the absence of in modern science. And these two – everyday technologies and the pre-technological – in their common possession of such poiesis, such anarchy, seem organically tied, providing a natural vantage point for a critique of the modern technological.

All these critiques, then, try to offer a release from the 'instrumentality' of technology, but by attaching themselves to a certain instrumental view of technology itself. An instrumental view might be, as Heidegger puts it, the correct view, the fundamental characteristic of technology; is it the true (essential) one? The correct view of technology – in other words, what technology is – for Heidegger, is the instrumental and anthropological view, namely, technology as a tool and means to an end, and technology as human activity. To move from the correct to the true requires an understanding of instrumentality itself, and Heidegger takes up the task of this movement in trying to understand 'man''s relationship to technology. To understand instrumentality is to understand the early Greek sense of responsibility, a bringing forth. "The principal characteristic of being responsible is this starting something on its way into arrival", i.e. an occasioning or an inducing to go forward (Heidegger 1949: 283). This is the essence of causality in Greek thought, and not a moral or agential sense, as populates these and other critiques. This bringing forth is basically a revealing, demonstrates Heidegger, an entry into the realm of truth – *aletheia*. "Bringing-forth, indeed, gathers within itself the four modes of occasioning-causality and rules them throughout. Within its domain belong end and means, belongs instrumentality" (ibid: 284).

What of the difference between the older sense of craft and modern technology? Can it be said that this sense of revealing, bringing into unconcealment, is true only of Greek thought, and can be applied at the most only to the "handicraftsman"? Heidegger holds that modern technology too is to be understood in its essence as a revealing; with the difference that in modern technology, the

revealing becomes a challenging that perhaps converts nature into resource, a "setting-upon" rather than a "bringing-forth". "But the revealing never simply comes to an end. Neither does it run off into the indeterminate … [r]egulating and securing even become the chief characteristics of the challenging revealing" (288).

A turn to Heidegger, then, at least seems to imply that a simple description of technology as instrumental and therefore somehow morally evil cannot be the basis of critique. Whatever the difference between the pre-technological or the everyday on the one hand, and modern technology on the other, both the fundamental characteristics and the essence of technology remain the same; further, techné as a form of knowing is hardly, in its originary sense, reducible to the 'machine', defined in opposition to a romantic vision of 'man'. Although both ecofeminist and postcolonial critiques have declared themselves apart from such a Luddite view, they fail, in their persistent definitions of technology, to sufficiently separate themselves from it.

This 'man'-machine opposition also follows on the debate around a clear separation between the two. In the various engagements with technology, or rather with the machine, we see attempts to bring it around to terms of friendliness with 'man', or to humanise it, or to get it to mimic 'humanness'. Artificial intelligence projects look for the anthropomorphic answer – look in the mirror – to understand intelligence; science fiction longs for the monster machine that can be made human. The critical debates on the Artificial Intelligence project too, insist on some 'extra', some remainder, in human consciousness, that *must* escape computation – an "essence" in Searle, the search for a likeness in Nagel, a methodological mystery for Chomsky and others. For more external critiques, questions of machine learning, representing 'man' adequately, or emotive capacity, take centre stage. It is not too difficult to trace continuities between these positions and the postcolonial ones I have just delineated above, with the development that the frail 'human' rendered even frailer in subalternity now takes centre-stage; and it seems that in both, keeping alive

the sacred boundary between ‘man’ and ‘machine’ is at stake. Haraway, speaking from within the late-twentieth century scientific culture of the United States, refers to this now “leaky distinction … between animal-human (organism) and machine” to suggest that “[p]re-cybernetic machines could [also] be haunted; there was always the spectre of the ghost in the machine. This dualism structured the dialogue between materialism and idealism that was settled by a dialectical progeny, called spirit or history, according to taste. But basically machines were not self-moving, self-designing, or autonomous. They could not achieve man's dream, only mock it. They were not man, an author to himself, but only a caricature of that masculinist reproductive dream. To think they were otherwise was paranoid. Now we are not so sure. Late twentieth-century machines have made thoroughly ambiguous the difference between natural and art)ficial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert” (Haraway 1991: 152). The technological determinism that drives socialist feminist critiques of science and technology, then, and offers natural collectivities of women, or class, in their empirical connotations, as vantage points, is re-opened, so that the fact of destruction of ‘man’ by ‘machine’ no longer suffices as critique. Putting together Heidegger and Haraway, it is clear that it never did, and that boundaries are indeed the sites on which control strategies function, rather than the integrity of natural objects. With such a view, it is obvious that neither questions of vivisection nor of representation stand, with their reliance on wholeness and organicity.

Finally, following Sanil V., it might be said that the history of technology *is* the history of culture. A critique of technology arising from culture, therefore, as the postcolonials seem to articulate, particularly, in their accessing of anterior difference, is hardly a useful, or sound, critique. It is, moreover, an instrumental critique, as caught in the thrall of technology as the mainstream itself, indeed more so. The

necessity might be to recognize the impurity in the separation itself, rather than in, as again the hybridity framework seems to suggest, the negotiations with technology by culture.

To sum up this and the preceding few arguments, therefore, I put down telegraphically the following steps. Predominant critiques of science in India that continue to have valence today have been voiced as critiques of technology. These have drawn partly on Gandhi's critique of technology as instrument, and have articulated the empirical subaltern as seat of resistance to technology, retaining, in this move, the commitment to the 'human' of liberalism that they also purport to critique. Such a subaltern is also seen as having cultural continuities, in whatever inchoate fashion, with an anterior difference – an immutable past. When such a 'subaltern-as-resistant' is purported to offer crisis to western science, as the hybridity framework suggests, resistance is asked to carry the referent of revolution, without fulfilling the promise of inversion of the dialectic that revolution, to merit the name, must carry. I would suggest that, in such a case, resistance remains the Kuhnian anomaly, without converting to crisis.

chapter five

Where are the women? Responses to technology in feminist and gender work in India

I have, in the preceding chapters, attempted to trace the trajectory of the critiques of *technology standing in for science* in the Indian context. In so doing, I have also tried to trace the methodology of critique itself that animates the political in India. I have shown the ways in which these critiques access anterior difference (as in

connections drawn in postcolonial work between the 'resistant' past as prior to colonialism and an 'other' modernity produced within colonialism), the ways in which they posit resistance as providing the crisis to closure of hegemonic Western science (through the appropriation of the language of resistance of Subaltern Studies into the hybridity framework), and the ways in which this resistance fails to meet the promise of crisis (the crisis being a reference to the Kuhnian understanding of crisis that might signal the fall of a paradigm). It follows that the sometimes implicit claim for the rise of alternate systems of knowledge also fails since the criteria for paradigm shifts is not met.

The present discussion turns on two axes. One is that of the political, within which I will try to place the various arguments within feminism and gender work that try to examine and explain science as a political institution, and the options available to negotiate with its power. These arguments understand the political as contained in a discussion about power; they also chart shifts from the responses to power as coherent, singular and monolithic, to a more disaggregated notion of power itself that also then apparently demands a disaggregated response. This shift makes sense if we also follow a parallel shift in the 21st century from a politics based on ideology to one that proposes an attention to micro-negotiations, that proposes a thick description of these negotiations as the alternative. It is such an alternative that pays attention also to context or situation, as also to experience. Along my second axis in this discussion – that of the epistemological – I examine the case for situated knowledges, for experience as the situation of knowledge-making, and the possible movement from here to the articulation of a standpoint epistemology. Indications in this direction I will lay down in the chapter following this one.

In attempting to ask the question of criteria of knowledge through the allegory of what I have called women's lived experience, I adopt in somewhat mutated form the strategy of the 'outside' consciousness, something that has received much

attention, in different ways, in orthodox Marxist and subaltern literature, as an empirical something, a socialist consciousness that can or cannot bring to revolutionary consciousness the 'mass'; also in feminist literature, at times as the empirical excluded, at others as the sign of the 'outsider within' who may challenge dominant formations. At all points in the history of these formations, the translation of formulations of the outside has been at the level of the empirical. A link possibly exists here between this kind of translation and the apparent difficulty of attaching the political with the epistemological in any useful way. Politics, in such a translation, has either been about championing the entry of the empirical outside, or about championing the knowledge attached, ex-officio, to the situation of outsideness. I will, in the formulation I am about to offer, work with an understanding of exclusion to which inclusion in this sense is not the answer. In order to do so, I would also then, beginning with a formulation akin to that of the 'outsider within', attempt an allegorical description of the way in which such an outsider('s) perspective (I bracket the apostrophe in an attentiveness to the difference between the abstract and the empirical here) might offer a response to the act of exclusion.

I am aware as I say this that the first task is to provide a theory of the exclusion itself; in the case of science, to 'prove' that it is constituted by exclusionary acts. Further, it is important to show the operations of technology and its parallels with the operations of science. I have given exhaustive accounts, in previous chapters, of the work that has unconvincingly done this. For more convincing accounts, I rely partly, and in somewhat unrepentant fashion, on certain clues available in the work of 'western' feminist epistemological thinkers – those 'global' feminist accounts that for the first time enabled a possibility of thinking gender analytics outside Marxist frames in Bengal, while remaining hegemonic in the field of feminism; partly on the allegory of the *dai,* whose engagements with the reproductive health system in India I explore in some detail, and partly on a different case for the 'outside' made in the

work of a Marxian thinker in Bengal.

To summarise, I attempt, in these 2 chapters, to offer an understanding of the political that moves from ideology toward standpoint, and an accompanying move from 'one knowledge' not to alternative or many knowledges, but towards a standpoint epistemology.

Notes from a consultation, and from a conversation

The consultation

Tumi ki roj tablet khao? Do you have the pill everyday?

Do ***You*** (the doctor and authority) have the pill everyday?

Do you have to have the pill ***everyday***?

Do you ***really*** have to …

Aamake *niye katha hocche na* … Its not ***me*** we're talking of …

I am not objectified body; ***you*** are.

I am separate from you, elsewhere.

Actually, I'm the one who should be asking you the question.

The conversation

In April 2002, I attended, as a medical doctor, a training programme for 'traditional birth attendants' – *dais* – who had come from various parts of the island to attend an intensive 6-day training programme organized by a non-governmental organization. This was a group of women who had varying degrees of experience with births at which they had assisted. They had been divided into two groups, with one doctor trained in western medicine to conduct the training schedule in each of them. The group I had been assigned consisted of 46 women. The youngest member was 28,

the oldest around 60. The programme had the stated objective of imparting up-to-date and accurate scientific methods (adaptable to the field) of attending to pregnant women going into labour, that should be introduced into the village so as to help women with limited access to hospital facilities in rural areas. Local traditional practices could also be taken into account and legitimately incorporated where useful. In the event, it also sought to draw the line between right and wrong practice so that the *dai* could decide when and in which case to seek the help of the local health centre.

"To fill in gaps in manpower at village levels", as the National Population Policy draft (2000) says. The *dai*, in her own words the *mukkhu sukkhu maanush*, as yet uninitiated into 'method', has the key to a vast field of experience at births, a field waiting to be tapped usefully in development. Her know-how, which is 'practical' rather than 'propositional', means that she has no value in existing frames as epistemological agent; hers is the voice of experience that with a degree of training and modification can apparently be made useful to the task in hand.

In the time and frame within which I had inserted myself into the picture, I was able to concentrate largely on the level of the gradients of power operating, mostly at the general/macro level, between the *dai* (the "subject[s] of enunciation that subtend epistemology"), the "development expert", the NGO, the local male quack doctor. The NGO of course had targets to meet – so many women over so many villages covered this year. I was doing 'research', and this was one of the ways I could listen in. I was there, however, as the 'doctor', the authority. The *dais* knew there was something in this for them. The kits that would be distributed at the end of session, the legitimation of their knowledge by the *sarkar* – they were now trained *dais*, not just *dais* – the meanings this would hopefully carry in trying times when the local (male) quack, armed with the 'injection' and assorted other drugs, in short with a sometimes more than fair working knowledge of allopathic medicine under his belt,

had all but edged them out of their already meagre income.

Prior to introductions, the *dais* were asked to give a written test, where, with the now standard multiple choice questionnaire, they were asked to respond to problems generally faced during the delivery of a child. Later, through lectures, models, role-playing, and video films, the 'new', scientific methods were introduced and explained.

The schedule had been planned by the non-governmental organisation and the *dais* informed accordingly. We started the programme with a short discussion on the availability and advancement of scientific knowledge in the current setting, and the consequent responsibility incumbent on those responsible for health issues to avail of this knowledge. Parallely, the dangers of succumbing to uninformed traditional practices were also touched upon. A format had been prepared by the organisation for our guidance in conducting the training; further, members of staff were available around the clock to help us communicate with the *dais*, many of whom spoke local dialects completely different from urban Bengali.

Each class day started at around nine in the morning after breakfast. We generally started the day with a new topic, discussing it from both ends, that of Western Science as well as the perspective of the local traditional knowledges apparently employed by the *dais*, the problems they faced therein, their interactions with local 'quack doctors' at the time of a birth, the increasing presence and authority of this group, and so on. I would generally question them as to why they employed a particular practice, explain – in logical terms – why the scientific method was better, and then go on to demonstrate the functioning of the female body, as understood in (Western) medical literature, with a ritual of endless repetitions – I even had a wooden duster to bang the table with when the humming got too loud – for the women were hardly used to the attention spans demanded of them. In the event, it did happen that practices or understandings forwarded by the *dais* afforded me

glimpses of knowledges that did not conform to (or compare with, sometimes) the western episteme I was working with; but such difficulties I (had to) set aside for the purposes of my work. And following me, so did the *dais*.

While planning on ways to communicate with the women, both of us (health professionals working with the two groups) had come to the conclusion that visual models, role-playing etc. would be good methods, since a large number of the participants were not only non-literate in the conventional sense, but unused to conventional methods of classroom learning. The "students" indeed took to these with enthusiasm; having overcome initial inhibitions, they enthusiastically took on the roles of woman in labour, *dai*, mother-in-law, husband, doctor at the local health centre, to enact the scenes as they should from now on be played out, as I watched in satisfaction – the *dai* had come of age.

The first question that the *dais* asked me when I arrived in their midst was whether I was married. If so, how many children I had. As I realised that I was alone in a room full of mothers, I felt the beginnings of an unbridgeable gap; I might pick up the local tongue, I might sit down with them and attempt to erase authority, but I did not share what they shared with most other women, the kind of experience they valued (or considered necessary for authority). As the classes wore on, this became a little joke amongst us – every now and then, one of the older women would stop proceedings to ask – *Accha, tomaar to nei, tumi eto jano ki kore*? And I would counter sagely – *Aaro jaani*. Finally they settled for – *Aare eto rugi dekheche, ekta abhigyata hoy ni*? An experiential referent had been found, however clinical, and that was something!

The turn to experience – from consultations to conversations

I have no names (of protected confidentiality or otherwise) to offer for the women in both the episodes I report above; neither was part of an ethnographic study, and both are offered more as plausible accounts of a situation, and contexts within which feminist approaches to experience have materialized, than as specific case studies. I also try to articulate a methodology that is not entirely anthropological through this exercise.

The consultation was with a recalcitrant mother who had been put on the contraceptive pill following abortion of an unplanned pregnancy and had returned for follow-up with a continuing carelessness regarding its use. The entire consultation, as is evident from the report, lasted two sentences, leaving the female physician irritated, and the patient engaged in a certain conversational response – the kind of response that comes the way of the physician every day, but is nevertheless the kind of response that is illegitimate, aporetic. Enough has been said about power-knowledge nexuses that promote one knowledge – in this case the Western medical – as high, as singular. This is the kind of response that, through its own aporeticity – neither appropriate, nor oppositional, nor even alternate – makes visible, and bizarre, the positioning of medical knowledge as objective, unanchored to experience, and on *that count authoritative*. It is also the kind of response that does not sit well with liberal feminist approaches that would wish to mediate authority through information, choice, or consent.

Feminist politics in India, in response to this authoritative stance, initially took a 'more women-in-science' position; it asked for *increased presence of women as professionals* in the scientific enterprise, for *increased access for women* to the fruits of

science and technology, as also to information. It was hoped that changes in gender composition at the professional level would both bring in women's perspectives, and in so doing transform the disciplines through such inclusion. The entire gamut of women's right to health campaigns articulated this position. This is a route that has been taken in later state development agendas as well, where, after the World Bank clauses requiring clear commitments to gender appeared in 1987, states put in place protocols to include women's perspectives in development. This was a position that stayed with one-knowledge theories, wanting, along with one knowledge, adequate *dissemination* of the products of such knowledge.

The 90s saw a clearer shift to a politics of 'third world women's experience', a shift from authoritarianism to alternatives. This shift talked about bringing back 'low' knowledge, of re-reading marginality as a place for knowledge-making, and of making the 'third world' – geographically understood – an empirical site for the same. Eco-feminist moves like those of Vandana Shiva are a case in point. There are a couple of things that might be pointed to here. On the one hand, this shift was not so much a chronological as perhaps an ideological shift, and populated more of the rhetorical than the clear-cut theoretical articulations of the turn to experience. It was a turn that allowed a *re-making of the third world*, for post-developmentalists, from the WID (women-in-development) initiatives that exercised only inclusion rhetoric. It was also a shift that informed a politics of the time – a politics of location, a politics that allowed a community to speak for and in itself on account of being in a marginal relation to what was perceived as hegemonic, that is, the West. This was a politics of oppositional difference, a politics of resistance, a politics that was born out of and needed, for its continuation, hierarchical difference, a politics that said, "I know mine, you know yours, there can be no dialogue". But it was also a move that populated rhetoric more than theory or practice, at least in Indian contexts, not always enjoying full status alongside 'one knowledge' theories, so that "empowerment alongside

perspective" became the more acceptable motto. Such an attempt has perhaps been best articulated philosophically in the work of Martha C. Nussbaum, who talks at the same time of a uniqueness to women's perspectives *and* of the need to raise them to the common level "human". Difference – either cultural or sexual – was not the motive force in this attempt; rather, it was something that needed to be marked in order to be transcended. Finding a commonality to women's experiences and raising them therefore to the universal level was the task. Knowledge was still one and singular, but a *democratization in modes of arrival* at such knowledge was the important goal. "We all know, together" – such would seem to be the motto.

Such a democratization did not obviously require ideological buttressing, and anthropological work that began in the 90s, calling itself gender work but spurning feminist stances, drawing upon women's practices, critiquing trends in globalization but not naming capitalism, marked a new shift in the turn to experience. I will go into these in greater detail in a later section.

It is in the context of these shifts that I see the turn to experience in feminist and gender work. In using the allegory of the two reports I provide, I also wish to mark my own shift – a shift that I call a re-turn to experience. The particular relationship between the *dai* and the doctor could be and has been read as a case of "I know, you do", where the *dai*, in her own words the "*mukkhu sukkhu manush*" – the unlearned person – is brought in as experienced but non-knowledgeable, as probable representative of "indigenous health systems" that fit, makeshift, into the overcrowded field of reproductive health care, with the distinction alive at all times between Western medicine and such systems that are neither standardized nor adequately tested for efficacy and safety (NPP 2000). This is the orthodox 'high knowledge' position that works well with simple policies of inclusion. In response, both feminism and gender work have attempted to chart a politics of third world women's experience, to present an alternative picture, as I have briefly delineated. I

will, in some detail, categorize two of these moves.

The global feminist making of the Third World Woman: building capability, fostering agency

(The 'typical' breast-feeding mother as depicted in Community Health posters)

> Feminist political philosophy has frequently been sceptical of universal normative approaches. I shall argue that it is possible to describe a framework for such a feminist practice of philosophy that is strongly universalist, committed to cross-cultural norms of justice, equality, and rights, and at the same time sensitive to local particularity, and to the ways in which circumstances shape not only options but also beliefs and preferences.
>
> (Nussbaum 2000: 7)

> The first day of the typical SEWA education program for future union and bank leaders is occupied by getting each woman to look straight at the group leader and say her name. The process is videotaped, and women grow accustomed to looking at themselves. Eventually, though with considerable difficulty, they are all able to overcome norms of modesty and deference and to state their names publicly.
>
> (17, fn. 20)

> By women as a category of analysis, I am referring to the crucial assumption that all of us of the same gender, across classes and cultures, are somehow socially constituted as a homogeneous group identified prior to the process of analysis. This is an assumption which characterizes much feminist discourse. The homogeneity of women as a group is produced not on the basis of biological essentials but rather on the basis of secondary sociological and anthropological universals. Thus, for instance, in any given piece of feminist analysis,

> women are characterized as a singular group on the basis of a shared oppression. What binds women together is a sociological notion of the "sameness" of their oppression. It is at this point that an elision takes place between "women" as a discursively constructed group and "women" as material subjects of their own history.
>
> (Mohanty 1991: 56)

Vasanti and Jayamma entered the development literature when the imperative to attend to the local gained legitimacy, as quintessential representatives of poor, "illiterate" women caught up "in particular caste and regional circumstances in India" (Nussbaum 2000: 21); women situated, especially, on the lower rung of sexual hierarchies, and yet "trying to flourish" (15).

> Despite all these reversals (and others), Jayamma is tough, defiant, and healthy. She doesn't seem interested in talking, but she shows her visitors around, and makes sure that they are offered lime juice and water.
>
> (19)

Persistent take-off points, they, or their names at any rate, have gained iconic currency as the 'real' local women who can now speak of the sufferings they endured till they moved from the 'informal sector' or a place "marginal to economic activity" (15, fn. 14) to the avowedly different and more agential category of 'self-employed'. Of Vasanti it is said, "She now earns 500 rupees a month, a decent living" (17, contrasted in the text with the Rs. 180 per month allotted to destitute women under the Indian Criminal Procedure Code in 1986). In a world where "letting the women speak for themselves" (17) is the task at hand, and one that is entirely possible, they speak. They break sanctions, form political alliances, *learn to name* themselves. And it is as a first step toward making possible this movement *from the local particularity to the universal value* that Nussbaum works hard to prepare the ground for herself as

justified observer of Vasanti's and Jayamma's struggles. Such a universal will render possible for these women choice, the capability to make that choice, the right to demand political rights according to needs. For Nussbaum, detachment coupled with concern and familiarity is the ideal (and achievable) point from which this is possible.

Speaking to the local

Nussbaum, therefore, begins her discussion on development, women and social justice by stating and grounding her primary focus on "the case of India, a nation in which women suffer great inequalities despite a promising constitutional tradition" (9). It is also a country she is familiar with, and this, she says, helps her "write on the basis of personal observation and familiarity, as well as study" (9):

> … I went to India to look at women's development projects, because I wanted to write a book that would be real and concrete rather than abstract, and because I knew too little to talk about the problems of poor working women in a country other than my own. *I had to hear about the problems from them*.
>
> (ix, italics mine)

Drawing on Jawaharlal Nehru's concept of "One World that can no longer be split into isolated fragments" to host her project, she also, however, describes being "both a foreigner and a middle-class person", and thus "doubly an outsider vis-à-vis the places about which" she writes. Nonetheless, a certain mixture of "curiosity and determination" helps "surmount these hurdles – especially if one listens to what people say". As a foreigner, Nussbaum believes she possesses a "helpful type of neutrality amid the cultural, religious, and political debates" that a local scholar would not be free from. "In a situation of entrenched inequality", she feels, "being a neighbor can be an epistemological problem" (10).

Speaking of tradition, Nussbaum finds it "impossible to deny that traditions,

both Western and non-Western, perpetrate injustice against women". But though traditions – "local" or otherwise – cannot be denounced as "morally retrograde" through "hasty judgement", it is important not "[t]o avoid the whole issue" and "stand around in the vestibule" refusing to "take a definite stand on any moral or political question" (1999: 30), because "there are universal obligations to protect human functioning and its dignity, and … the dignity of women is equal to that of men." Referring to what she calls Western tradition, an example of sexual harassment at the workplace shows that "[c]learly our own society *still* appeals to tradition in its own way to justify women's unequal treatment"(1999: 30, italics mine). But although "there is no country that treats its women as well as its men … [d]eveloping countries … present *especially urgent problems*" (2-3, italics mine). In such a situation, the need for a cross-cultural universal becomes imperative. As a possibility, it is already in place.

The urgency mounts with paragraph upon paragraph listing the "uneven achievements" of developing nations with respect to areas considered necessary to women's quality of life – female employment statistics, rape statistics, workplace harassment statistics, literacy, health, nutrition. One must of course be careful, says Nussbaum, even where favourable statistics are concerned, for "local governments tend to be boastful."

And through the increased magnitude of the problems, only vestiges of which apparently "still" contaminate the West, does one glimpse the spectre of the white woman who takes on the onerous responsibility of saving the brown woman from her traditions? Of course, armed with curiosity and the determination to satisfy it, the "neutral" foreigner, the disinterested observer who is not embroiled critic, can serve, apparently, as trusted confidante for the 'innocent' subaltern – a sensitive alliance, as it were, between the concerned intellectual and the yet-to-be-capable-agent – the moment not yet *realized* in representation. The brown woman "scholar", despite her

however tenuous commonalities with Jayamma or Vasanti, might here be, by very virtue of her "enmeshed"ness, more suspect than the "unimplicated" foreigner.

It is at this secure subject who is sought to be arrived at or revived on the premise that she exists somewhere before context, and must be reinstated, or given voice, that Nussbaum's capabilities approach is directed.

Working on the local

The "capabilities approach" has been proposed by Nussbaum in basic agreement with Amartya Sen. Nussbaum talks of the capabilities approach as a "foundation for basic political principles that should underwrite constitutional guarantees" (70-1), and draws on "Aristotle's ideas of human functioning and Marx's use of them" (70). It is proposed as a universal and ethical approach that must nevertheless "focus appropriately on women's lives" (71) in order to be relevant, that is, it must "examine real lives in their material and social settings" (71). Premised on the "intuitively powerful", "core idea … of the human being as a dignified free being who shapes his or her own life in co-operation and reciprocity with others" (72), an "awe-inspiring something" that is "above the mechanical workings of nature" (73), the capabilities approach moves primarily in the direction of looking at each individual as an *end* in her own right, and endeavours towards promoting "central human functional capabilities", that is, capabilities that deliver readiness to make (certain) choices regarding functioning in 'multiply realizable' ways that are "truly human" (72), and living "a life that is shaped throughout by these human powers of practical reason and sociability" (72). These capabilities are to be promoted, and social and political institutions so structured, so that at least a threshold level, a "social minimum", of these capabilities may be attained. It is the idea of this threshold that Nussbaum concentrates on, stating that "we may reasonably defer questions about what we shall do when all citizens are above the threshold, given that this

already imposes a taxing and nowhere-*realized* standard" (12, italics mine). "On the other hand," says Nussbaum, "… [one is] not pushing individuals into the function; once the stage is set, the choice is up to them."

There is a distinction drawn, and stressed, between capability and functioning. The concept of capability is generally discussed in conjunction with rights, and the State is seen here as guarantor of these rights, not an enforcer of discipline. The presence of capability, then, is taken as reflection of a developed State, and the presence of functioning flowing from this capability as reflection of a good State that encourages citizens to express the choices they have been initiated into. Nussbaum says, "Thus, we want soldiers who will not *simply* obey, when an order is given...."

But in cases where functioning is considered important, like casting one's vote once the capability has been given, citizens might be forced into exercising their given capabilities – that is, into functioning. This argument is extended to innumerable situations, including children who need to function in a particular manner to make for capable adults, the spheres of health, maintenance of environments, literacy, nutrition, citizens' responsibilities like the paying of taxes, and others. "In general, the more crucial a function is to attaining and maintaining other capabilities, the more entitled we may be to promote actual functioning in some cases, within limits set by an appropriate respect for citizens' choices" (92). "Even compulsory voting would not be ruled out, if we were convinced that requiring functioning is the only way to ensure the presence of a particular capability" (93).

In attempting to arrive at a normative theory of social justice, Nussbaum considers state policies and principles of development in the third world as faulty not inasmuch as they do not take into account the perspectives of *women in an essential sense*, but inasmuch as they neglect women "as people who suffer pervasively from acute capability failure" (6). A focus on "women's problems … will help compensate for the earlier neglect of sex equality in development economics and in the

international human rights movement" (6-7). Her approach to development, therefore, is from the point of view of asking for recognition and inclusion in the category of the "truly human", and towards producing the ability to deserve it. Capability building and agency are, to this end, essential components, as is also the taking into account of the lived everyday experiences of women in the third world, that reflects on the absence of this capability.

Before addressing the several questions begging to be asked on universalist values endorsed by Nussbaum, I will briefly go into what implications such a position might have for a response to science. Nussbaum sees in her listing of "central human functional capabilities" the potential to suggest a normative ideal of bodily health, as well as a principle that has been applied in definitions of reproductive health:

> The 1994 International Conference on Population and Development (ICPD) adopted a definition of reproductive health that fits well with the intuitive idea of truly human functioning that guides this list: "Reproductive health is a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity, in all matters relating to the reproductive system and its processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when, and how often to do so." The definition goes on to say that it also implies information and access to family planning methods of their choice. A brief summary of the ICPD's recommendations … "1. Every sex act should be free of coercion and infection. 2. Every pregnancy should be intended. 3. Every birth should be healthy."
>
> (Nussbaum 2000: 78 n. 83)

Following from the general notion of capability, this approach has a critique of modern medicine and development with regard to inclusion, taking as neutral and commonsensical the definitions of health or illness; the key question then is one of

building the capability to make informed choices on contraception, for example. For women vis-à-vis development programmes, the question would not be about the resources available at their command, or their satisfaction with those resources (the Rawlsian account), but of what part of those resources – medical facilities – they are capable of using – "what her opportunities and liberties are" (71). The argument then is one for access and inclusion into an apparently universal(ly understood) framework.

Nussbaum's position runs immediately, as she is well aware, into charges of colonialist, imperialist and universalist attitudes, and this is where it might be useful, as a first step, to recall a critique like Chandra Mohanty's, on "third world women and the politics of feminism". In her innumerable pointers to the "Western eye", Mohanty has pointed to the construction of the archetypal and "average" third world woman in Western feminist work, as also in other kinds of feminist discourse sited in the universalist frame. Such an archetype, in her argument, is the constitutive difference that makes possible the image of the Western feminist herself. This archetype is constructed through a slippage between the analytic and descriptive categories "Woman" and "women" respectively. "The relationship between "Woman" – a cultural and ideological composite Other constructed through diverse representational discourses (scientific, literary, juridical, linguistic, cinematic, etc.) – and "women" – real, material subjects of their collective histories", states Mohanty, "is one of the central connections the practice of feminist scholarship seeks to address … [and is] not a relation of … correspondence or simple implication" (53). The feminist writings of the Zed Press that she analyses, Mohanty suggests, "discursively colonize the material and historical heterogeneities of the lives of women in the third world, thereby producing/ re-presenting a composite, singular "third world woman" – an image which appears arbitrarily constructed, but nevertheless carries with it the authorizing signature of Western humanist discourse." (53) As part of this effect,

Mohanty traces "the similar effects of various textual strategies used by writers which codify Others as non-Western and hence themselves as (implicitly) Western. It is in this sense", she says, "that I use the term *Western feminist*" (Mohanty 1991: 52), thus clarifying both her separation from the geographical sense, and the ways in which certain articulations, positioned alongside others, acquire a particular sedimentation of meanings that constitute Eurocentrism. Mohanty traces some of these discourses – colonial anthropological, western feminist, developmental, multinational capital – as addressed in the Zed Press publications to make her point, and following her argument, it is possible to also trace the continuities between these discourses.

Such an archetype, Mohanty points out, rests on the presumption of sexual difference as primary to the oppression that women in the third world might suffer – "that stable, ahistorical something that apparently oppresses most if not all the women in these countries" (53-4). For one, it takes as stable and before the event 'third world women' as a sociological category, an "automatic unitary group", (7) building on this then to show up their 'victimization' under "underdevelopment, oppressive traditions, high illiteracy, rural and urban poverty, religious fanaticism, and "overpopulation" of particular Asian, African, Middle Eastern, and Latin American countries" (Mohanty 1991: 5-6). In doing so, it irons out the absolute heterogeneity of the lived experiences of women in the third world.

So there is a "third world difference" too that is naturalised in and through this archetype, and thereafter, an easy connection made between "third world women" and feminism. Mohanty herself, following Dorothy Smith (1987), points to a more productive way of looking at colonialism as *processes of ruling* instead of as a fixed entity, and suggests ways in which multiple contexts for the emergence of contemporary third world feminist struggles may be traced. These include the configurations of colonialism, class and gender, the state, citizenship and racial formation, multinational production and social agency, anthropology and the third

world woman as "native", and consciousness, identity, writing. Mohanty would therefore ask for the delineation of a more complex *relation between struggles* rather than sexual difference as a primary origin for the category of third world women, if at all it can be deployed – and that deployment she is not entirely against. "What seems to constitute "women of color" or "third world women" as a viable oppositional alliance", she says, "is a *common context of struggle* rather than color or racial identifications … it is third world women's oppositional *political* relation to sexist, racist, and imperialist structures that constitutes our potential commonality" (7). The Woman-women connection, then, as she sees it, needs to be adequately historicized, set in context. And the category of Third World Woman has to be seen, in order to be useful, as a process of subject formation through these multiple conjunctures rather than as a pre-existing victim category.

In pointing to the absolute heterogeneity of the experiences of third world women, Mohanty does not, however, give up on the idea of domination or hegemony. What she suggests, instead, is that in understanding the "complex *relationality* that shapes our social and political lives … it is possible to retain the idea of multiple, fluid structures of domination which intersect to locate women differently at particular historical conjunctures, while at the same time insisting on the dynamic oppositional agency of individuals and collectives and their engagement in "daily life"" (13). The parallels with Homi Bhabha's notion of hybridity are here apparent, and indeed Mohanty herself points to the parallel (75, n. 3), both in promoting a more complex notion of hegemony than that offered by easy binaries of colonizer and colonized, and in identifying the ways in which multiple negotiations in "daily life" can constitute resistances that are intimately imbricated with the hegemonic.

Mohanty's critique of such a difference as suggested by the naming of a 'third world woman' is then, in sum, a reference to the hierarchization on which it stands; in a more useful sense, it is part of an attempt to define "context" in a conceptual

manner, and it is this attempt that I will take up in greater detail in the last section.

Let us, however, also examine Nussbaum's own account of such charges and her subsequent defence of the universal. Nussbaum considers three arguments generally offered against universalist values – "the argument from culture", the "argument from the good of diversity", and the "argument from paternalism". The argument from culture apparently presents a different set of norms as constitutive of Indian culture – norms of "female modesty, deference, obedience, and self-sacrifice that have defined women's lives for centuries" (41); norms that need not definitionally be bad, norms that work, presumably, for Indian women, and norms that may actually be preferable to Western norms that promote individualism for women. Nussbaum responds to her reading of the culture argument in several ways. For one, she talks of the cultural diversity of India, both temporal and spatial, that hardly allows for reference to such a homogeneity of norms – there are women who resist tradition, for instance. Therefore, "[c]ultures are dynamic … and [c]riticism too is profoundly indigenous … to the culture of India, that extremely argumentative nation" (48). Further, such norms would be acceptable if women had choices about adhering to or rejecting them, which women like Vasanti or Jayamma do not, in her opinion. They do not even endorse the norms they adhere to, and this strengthens her argument against simply accepting a relativist thesis on norms. After all, "[w]hy should we follow the local ideas, rather than the best ideas we can find?" (49) And a position of moral relativism also fails when one realises that a relativist position, conceptually, is not one that is tolerant of diversity or of other cultures.

Regarding the argument from the good of diversity, Nussbaum feels that cultural values that are different from the ones we know still demand a judgement of and decision-making on which ones to endorse and which to reject. "And this requires a set of values that gives us a critical purchase on cultural particulars … it does not undermine and even supports our search for a general universal framework of critical

assessment" (51).

As for the argument from paternalism, which would object to any effort at "telling people what is good for them" (51), Nussbaum responds by saying that "a commitment to respecting people's choices hardly seems incompatible with the endorsement of universal values … [specially] the value of having the opportunity to think and choose for oneself" (51). Further, she says that every law or bill does this, "telling people that they cannot behave in some way that they have traditionally behaved and want to behave" (53), which is "hardly a good argument against the rule of law" (51), particularly when it is required to protect some from the behaviour of others. Also, in order to build the "material preconditions" of choice, "in whose absence there is merely a simulacrum of choice" (51), law notwithstanding, it might indeed be necessary to "tell people what to do", something that obviously requires a universal normative account – what Nussbaum will call 'political' rather than 'comprehensive liberalism'.

Does the build-up of Nussbaum's argument for intervention in "the particularly urgent problems of developing nations" then indeed, after reading her defence, seem to constitute West-centrism? Is she, as postcolonial critics of universalism and third world feminist engagements would have it, and as I have also been tempted to flag in her text, marking an archetypal third world woman who needs rescuing? Are her 'universal values' constituted by such an archetype? Although her conversations are with women who are typically poor, tradition-bound, victimized, yet defiant and speech-worthy, for a philosopher like Nussbaum, the archetype is marked *so as to be transcended*, shed, saving the brown woman from those of her traditions that are constricting, transforming her, through an accurate application of universal principles, into ideal human and citizen. To this end, Nussbaum also needs to demonstrate that victimhood is not the essence of 'woman', just as difference in any form is not. Indeed, essence or difference will find no place in her philosophy, and her

painstaking description of cultural particularity is merely a preamble to then argue for commonality – these are features of "women's lives everywhere", where the seeming oddities are only differences in manifestation of stereotypes of women and men, rather than being signs of an "alien consciousness" (23). She also quotes 'local' scholars to endorse their views on the undeliverability of "a representative, authentic Third-world woman … [e]ven in India, there is no such thing as *the* Indian woman – there are only Indian women. And the individuals are far more interesting than any assumed stories of authenticity" (Indira Karamcheti, quoted in Nussbaum 2000: 47). However, "the body that gets beaten is in a sense the same all over the world, concrete though the circumstances of domestic violence are in each society" (23). In that sense, India, with its extent of poverty and difference, merely offers the model 'case study'.

Nussbaum sees herself, then, in a peculiar relationship with these women. Her primary interlocutor is not so much the feminist sited in the third world, who has attempted to offer an interpretative edge to the naming itself. The purported conversation is, instead, directly with the poor, tradition-bound, victimized, yet defiant and speech-worthy third world women, each different from the other, at the most mediated by a Leela Gulati, the anthropologist in the field. There is no absence of commonality between women here and women elsewhere; there is, however, a value to the 'local' that the feminist political philosopher needs to acknowledge, a specificity to the problems that, though identifiable in "women's lives everywhere", asks for the exercise of a *non-imperialist universal* recognition of the particular *before it can be represented*. It is this impulse that produces the insistent declaration that her proposals are based on and grew out of her experience of working with poor women in India. The ghost of colonialism, once it is shaken off, can produce for Nussbaum the reality of the 'third world'. It is this "defence of universal values" that can be adequately represented by her (34), and that is enacted here.

What rests on this exercise of delineating Nussbaum's position and challenges to it? I would suggest that the problem, at least in so far as current global feminist analyses identify it, lies elsewhere than economo-centrism and the non-attention to difference. For Nussbaum, the chief interlocutor is in fact the field of development economics that does take into account various non-economic indicators. Victimhood is no longer the critical discourse, if it ever was. Nor is homogeneity of experience asserted, although commonality indeed is. In fact, both Nussbaum and Mohanty are aware of and attempting to nuance binaries here – Nussbaum to challenge the 'West as evil' image and development as a totalizing discourse by pointing to the problem as one of bad practitioners, and Mohanty working on the other arm of the binary, to point to the impossibility of "third-worlding" in any simple sense. Mohanty's critique of universalism is accurate inasmuch as she points to the binariness of certain existing critiques. It fails, however, in her insistence on historical and socio-political heterogeneity as the necessary context of category formation; any category, no matter how minutely contextualized, is by definition nominalist, unintended to capture the entirety of experiences, and to that extent, presence of heterogeneity *per se* can hardly constitute a critique of category formation. Nussbaum's categories are, by her own admission, provisional, nominalist, *stable*, and hence not philosophically subject to this particular charge of rigidity.

But … the charges of the "Western eye" are not merely charges about faulty practitioners, as Nussbaum would have it, nor, surely, can proof of resistance to norms be proof of their absence? Further, the "third world" that Nussbaum names in the plural and as a non-essentialist category, yet needs delineation in a manner that pointing to *practices of bias* cannot begin to get close to. It is in the assumptions of the unimplicated foreigner, then, that Nussbaum's universalism lies, as in her complete indifference to the anchoring "sample populations" on which the ideal citizen, or the neutral definitions of reproductive health, for example, have been built. Herein lies

the validity of Mohanty's charge of "ethnocentric universality" (53). While Nussbaum's arguments actually clarify for us that universalism in its ideal description is hardly the problem, there is a double move in the delineations of the universal *and* the particular in her writing, and in other work in this frame. Vasanti and Jayamma are clearly not, in Nussbaum's lexicon, victims of the mute kind. They have been, despite the unavailability of infrastructure and mechanisms that could reverse hardship, negotiators and survivors. They are 'lacking' apparently only in the capabilities that would allow them to access legal and economic structures. And yet, embedded as they are in their "particular caste and regional circumstances", their negotiations with those circumstances are tied to their bodies in ways that seem to embody their very specificity. A putting together of body-situation-circumstance that makes up 'third-worldness' as a category of description for Nussbaum and her fellow-universalists, be it the embodied images of 'mothers of colour' breastfeeding their newborn, or the detailed physical descriptions of Vasanti and Jayamma and their surroundings, then, is not incidental to the narrative of their flourishing; *it is, singularly, the narrative of the particular*. In a frame of lack of capability, Vasanti or Jayamma can hardly be expected *not to have a body*; and they can hardly be expected to produce analytic statements. As a "political explanation", therefore, when Jayamma says that "[a]s a [domestic] servant, your alliance is with a class that is your enemy", her "use of the Marxist language of class struggle" must be taken with a pinch of bemusement – "whether one endorses it or not" [19]. It is after this particularity has been described in its entire nuance that Nussbaum can set out to draw her comparisons with "efforts common to women in many parts of the world".

A useful critique of universalism would mean, as Mohanty begins to suggest, an attention to context, a beginning of knowledge *and of categories* from enmeshment rather than outsideness, although it would require a movement from that enmeshment to a form of objectivity – the movement from perspective to story that

Lorraine Code speaks of, in her work on feminist epistemology. It would also require, and here Mohanty's and other critiques of first world feminism fall short, a recognition that *relationality* between struggles in what I continue to provisionally call the third world will also mean a space between them that is hardly ever *common* in the sense of a happy relation. It will, then, involve the recognition that such struggles are sited in different *worlds*, and will, in their cohesion, also mean a movement away from each other. It is only in the attempt to interpret this movement that a discursive space of negotiation with the 'first world' can perhaps be forged.

To such a universalist position, ecofeminists have replied with the following:

A soliloquy of the local – 'I know mine, you know yours, there can be no dialogue'

The 'third world woman' as perspective *to speak from* has perhaps not been articulated as clearly anywhere else as in Maria Mies and Vandana Shiva's writing on ecofeminism, and this work is also evidence of the ways in which development becomes a powerful organizing metaphor for 'third world feminism'. Building on the notions of organicity, wholeness, and connectedness as the primary postulates of ecofeminism, Mies and Shiva thereafter take up certain cultural characteristics associated with the Third World to offer a picture of third world women as already in convergence with nature, as upholders of the subsistence economy as against the "capitalist patriarchal" system, and as offering perspectives for resistance to such an economy of the Same. Critiquing both Western science and development, they endeavour to demonstrate the reductionist and universalist paradigms that the former occupies. For these critics, the mechanicity that Western science relies on, the ways in which it dominates nature-women-third world, treating and re-producing each of these as a dead object, are symptomatic of a subject-object dualism that is carried over into development philosophies too. Western science, says Shiva, is

philosophically embedded in dualisms of subject-object, which allow for such a possibility only vis-à-vis nature or any researched object. The neutrality that this apparently guarantees the researcher is however a false one, since the universal position from which it emanates is itself anchored in Western paradigms. Mies traces continuities here from Francis Bacon onwards – "scientists since Bacon, Descartes and Max Weber have constantly concealed the impure relationship between knowledge and violence or force (in the form of state and military power, for example) by defining science as the sphere of a pure search for truth … [thus lifting] it out of the sphere of politics … [a separation] which we feminists attack [as] based on a lie" (46). This scientific principle, constructed through "violently disrupting the organic whole called Mother Nature" (46), became then the route to knowledge, creating the "modern scientist [as] the man who presumably creates nature as well as himself out of his brain power … [after] a disruption of the symbiosis between the human being, Mother Nature, and the human mother … [and this is] the link between the new scientific method, the new capitalist economy, and the new democratic politics" (47). Similar to this, asserts Mies, is Immanuel Kant's evolution of a concept of knowledge and rationality through an extrusion of emotion.

The masculine character of Western science, constituted through such an extrusion of emotion, such a "subjection of nature and women", was also associated with a violence that is evident in all technologically advanced societies. Mies and Shiva cite the examples of military, new reproductive and biotechnologies that accompany new globalized economies, pointing out that such technology is never neutral but functions through the "principle of selection and elimination" that provides the "main method of conquest and control" over what will survive and what will not be allowed to (195).

Development, Shiva asserts, has in its overall philosophy followed the principles of Western science. It would follow that development has then always been about

'catching up' with a universal model that has apparently worked in Western countries to provide a good quality of life, freedom from poverty, hunger, illness, and so on. The socialist states were the first to set up the model, and despite strong evidence contradicting its effectiveness even in those states, it has remained the model in dominance today.

But Shiva has more than the ineffectivity of the model to offer as critique. The accumulation model, she asserts, is built on the premises of colonialism and capitalist patriarchy, that "interpret[s] difference as hierarchical and uniformity as a prerequisite for equality" (Mies and Shiva 1993: 2). "This system emerged, is built upon and maintains itself through the colonization of women, of 'foreign' peoples and their lands; and of nature, which it is gradually destroying" (2). Technology is one of the tools of such colonization. Technological advancement is accompanied by externalization of costs, so that workers in colonized peripheries are treated differently and paid less than workers in the metropole. The "colonization of women" involves the unpaid labour of women – the "free economy" of mainstream economics – that shores up the market economy. The "hidden costs generated by destructive development … [include] the new burdens created by ecological devastation, costs that are invariably heavier for women, in both the North and South" (75).

Although this ecofeminist approach, like the other kinds of gender work I have highlighted that negotiate science or development, speaks of the need for "a creative transcendence of … differences" between women the world over in order to offer resistances little or large, it is also in dissonance with them in proposing a far more fixed position – a philosophy already embedded in 'the people', here the women by virtue of *being woman*. The intensification of the local provided in Mies and Shiva's ecofeminist approach, then, separates itself somewhat from other approaches to the local as a critique of development. Such an intensification is not in the frame of stark cultural difference that would, in Mies and Shiva's opinion, produce a cultural

relativism, nor is it interested in distilled essences of the local or the "romanticization of the savage" (150) that appear in globalized market discourse, but rather in a connection between the spiritual and the material – a relation of soil-nature-subsistence that is somehow to be found in the practices, intuitions, and indeed protest movements of third world women. In so doing, ecofeminism of course exposes itself to the standard critique of essentialism. What is important for our purposes here is the need to recognize that ecofeminism is far closer to old ideological positions in the spectrum between these and the new dynamic local or hybrid, and as expected, discredited for the same reasons in the current climate. The understandings of colonialism and capitalism that animate Mies and Shiva's version of the ecofeminist project are, insofar as they are spelt out, inadequate as provisional arguments. Further, the manner in which the category of 'third world women' is activated through a reference to the organicity and wholeness of their practices, fails to give an adequate account of how this may happen; as such, it continues to fall into the trap of romanticization that it seeks to avoid. A philosophy that is intuitive and already in place, along with the interpretative ability to put it into practice through various movements of resistance, fails to provide any evidence of its assertions.

A disaggregated (third) world: women negotiating meanings

But there is another kind of scholarship now in currency that negotiates meanings of gender differently. Global gender work disdaining the universalist approach takes on the hybridization argument and works toward identifying contingent moments of resistance. This scholarship is in alignment with postcolonial approaches. Anthropological investigations into midwifery and childbirth practices exemplify this position. This is what I call the space of not-feminist gender analysis. I take up, in this section, a particular text that is fairly representative of such analysis, and that, to begin with, marks its separations from post-development positions like Escobar's, concentrating instead on the heterogeneity of experiences as well as the

disaggregated nature of institutional apparatuses that apparently make a description of hegemony difficult, and further, on the impossibility of even identifying such a hegemonic role for Western science in the Indian context. Of course, having made this argument against the hegemonic nature of Western science, in this case Western medical frameworks, this kind of global gender analysis also carries with it the imperative to separate itself from universalist positions, both in justifying the impulse of choosing subjects of research as well as in declaring an attached commitment to such research. This work also, in suggesting the difficulty of identifying Western science and its technologies as hegemonic, speaks of the multiple and measured negotiations women make with reproductive technologies, rather than being intimidated by them, completely appropriated into them, or hostile to them. The separation, then, from an earlier anti-technology position, where women are seen as a statistic, having no agency with respect to technologies and policies that perform the act of information-retrieval and include them in data bases but do not see them as agential, is clear.

On culture and the local

Cecilia Van Hollen – who is fairly representative of a body of work in anthropology (see Rozario 1998, Ram 1998, 1994, 2001, and a large number of other anthropologists working especially on reproductive health issues in India) – begins her argument at the site of a shift she identifies as useful in anthropological work, from a reading of practices as reflection of a culture, to a reading of culture as "in-the-making" through everyday practices. Using this "processural view of culture-in-the-making", she clarifies that her anthropological approach does not seek to imply "one monolithic thing that we can call "modern birth" in the contemporary world order" (5). For her, it is important "to stay within the specific ethnographic field of [her] own research and to underscore [her] point that biomedicine always takes on a unique form at the local level" (8). At the very moment of her refusal to call it monolithic or

by a common name, however, she is speaking of the re-interpretations of the global project of biomedical knowledge at the "microphysical level by individual actors, collectivities, and institutions", and it is in this re-interpretation and the possibilities of hybridisation and reconfiguring along caste, class and gender axes through it that she is interested. In her case, she finds it important to "view[ing] reproduction itself as a key site for understanding the ways in which people *re*-conceptualize and *re*-organize the world in which they live" (5). She has a similar approach to gender ideologies, hierarchies, or practices, and is at pains to demonstrate the impossibility of cross-cultural assertions that do not take into account these practices and their different sedimentation of meanings.

Such a disciplinary move is accompanied, perforce, by the need to challenge the clear separation of biomedical technological systems and indigenous practices of healing that has characterized earlier analyses of Western medicine and by extension, science. It is accompanied by a challenge to the notion of development as totalizing discourse philosophically anchored in the geographical West (and hence the separation from Escobar). It is accompanied by a challenge to the need to identify resistance in a straightforward rejection of Western medicine or technology. In doing this, then, it is also avowedly a move away from those feminist readings of the agency of third world women as sited in the 'natural', the 'cultural', or the 'indigenous', and of Western biomedical practices as controlling of women (15). This means a re-cognition of the 'local' as itself multiply constituted and constantly in flux. And it is accompanied by the mandatory recognition, akin to Nussbaum's, of the problem of being the Western feminist and intellectual who must constantly strain towards transparency. Here, of course, the anthropologist's new requirement of self-reflexivity has manifested as an expression of near-guilt – a moral problem.

The agency question gets taken up differently from Nussbaum in such an analysis that invokes the 'local' but at a more avowedly involved level. There is a pattern to

this kind of scholarship that affirms the burden of a feminist re-invocation of experience while needing to disavow existing feminist modes. Van Hollen has, for example, attempted to speak of the marginalization of women's labour within modern medical systems. So "ethnographic stud[ies] of how modernity was impacting the experiences of poor women during childbirth in the South Indian state of Tamil Nadu at the end of the twentieth century" become a part of the attempt to understand "how the relationship between maternity and modernity is experienced, understood, and represented" (4).

While feminist activism and scholarship has done much to point to "medicalization" in Western medicine – "the process by which medical expertise "becomes the relevant basis of decision making in more and more settings" … the process whereby the medical establishment … incorporates birth in the category of disease and requires that a medical professional oversee the birth process and determine treatment" (11), anthropology has avowedly contributed to a disaggregation of biomedicine itself as it is practised in the 'Western world', through descriptions of how it is actively redefined in the 'third world'. Van Hollen states that such disaggregations challenge "those feminist studies that view all the controlling aspects of biomedicalized births as derived from a Western historical legacy of the Enlightenment and Industrial Revolution and that present a romanticized vision of holistic "indigenous" birth, or "ethno-obstetrics", as egalitarian, "woman-centered", and non-interventionist" (15). As she proceeds to unravel the "historical and cultural specificity of the transformations in the experience of childbirth" (15), it is clear that she sees resistance as embodied in these specificities; moreover, she sites resistance in the bricoleur-like response to various biomedical allopathic procedures rather than in a soliloquous 'natural therapy' movement. And this difference between, say, the African home birth movement and the individuated responses in Tamil Nadu, signals what she calls cultural specificity.

What happens to the agency question in this exercise? Clearly, empowerment here is through frames other than the modified inclusions suggested by Nussbaum. Any use of the modern, states Van Hollen, is bound to refigure it in ways that bear back on the definition of the modern. Anthropological exercises such as Van Hollen's see themselves as different from 'postcolonial' studies that focus on rural areas and that, like feminist work, tend "to depict childbirth practices as relatively untouched by allopathic institutions" (8). By locating her own investigation in metropolitan Madras (now Chennai), for instance, Van Hollen prefers to home in on more central locations for allopathy, aiming to look at "the central role which allopathy plays in women's decisions regarding childbirth and … how women choose from among different allopathic options as well as non-allopathic practices." In other words, the hybrid, mixed bag of tradition-and-modernity, also a bag that is being negotiated in a way that avoids "falling into the trap of representing others simply as victims" (10).

With such a frame in place, Van Hollen proceeds to look at the various negotiations made by women in Tamil Nadu vis-à-vis allopathy.

After ideology

In the shift from a notion of strong hegemony to a description of disaggregated discourses – which is actually a different exercise from suggesting hybridity as a *model* – Van Hollen acts, then, as representative of a position that determinedly embeds itself in the local, in the category "women", in experience, to propose weak and diversely articulated structures of power rather than a singular monolith. Rather than express these as 'binaries', Van Hollen finds it a more fruitful exercise to concentrate on the processes of modernization that, for the purposes of her study, "impact childbirth in Tamil Nadu: 1) the professionalization and institutionalisation of obstetrics, 2) transformations in the relationship between consumption patterns and reproductive rituals, 3) the emergence of new technologies for managing the pain of birth, 4) the international mandate to reduce population in India, and 5)

development agencies' agenda to spread biomedical conceptions of reproductive health for mothers and children. These processes," she contends, "taken together, have transformed cultural constructions of reproduction and social relations of reproduction in myriad ways" (6). She is also interested in "assess[ing] how the five processes of modernity mentioned above, in relation to other factors, influence the "choices" poor women and their families make about the kind of care to seek for childbirth-related needs." In referring to choice, she clarifies that "the decision-making process is never a matter of the free will of rational, value-maximizing individuals, but, rather, it is always enacted in political-economic contexts and shaped by socio-cultural factors such as gender, class, caste, and age" (7).

How exactly does Van Hollen undertake this project? Her conversations with the women she meets in her two primary field-sites in Tamil Nadu produce for her a vast collection of words that are in common conversational usage in terms of negotiations (between modernity and *shakti*, for instance), are also part of the canon of Hinduism, and the subject of much critique. For Van Hollen, the feature to be noted is the ways in which these words travel and acquire a rich concatenation of meanings – *which* concatenation, she will contend, is what actually constitutes culture – an act of bricolage.

What, then, does such an anthropological exercise achieve? Is it, in also shifting from the earlier ethnographic impulse, talking about the bricolage that constitutes culture? Van Hollen is definitely building up a glossary of words – *vali, maruttavaci*, *shakti*, and so on, but these are words that she refers to as the *originals* in the analyses she makes. It may be that the particular word referred to in translation may travel to the reader of her text against the grain as well, as alternative interpretations of the words she has heard and put down. In the act of simply putting down vis-à-vis western concepts of pain etc., however, there is no suggestion towards such a move, and the glossary seems to act more as evidence of fidelity to the 'object of knowledge',

namely the “poor women of Tamil Nadu”; like Nussbaum, a way of “listening to what they are saying”. Reflexive anthropology, in this case, makes the claim to transparency as much as the earlier ethnographic exercise, with the difference that it wants to do this through the insertion of the researcher into the frame, as against earlier forms which unapologetically museumized the cultures being studied as exotic, other, and as object of knowledge separate from the anthropologist.

What does such a position offer in terms of furthering the understanding of hegemony, or, as Van Hollen herself puts it, of “how modernity was impacting the experiences of poor women during childbirth in the South Indian state of Tamil Nadu at the end of the twentieth century” (4)? What does the shift from a notion of strong hegemony to a description of disaggregated discourses mean for conceptual strategies to read the same? The disaggregated picture that Van Hollen describes, the hidden corners it uncovers, all mark ways in which childbirth is viewed differently, as also ways in which seeming centres of power – institutions and policies – are negotiated. In her invocation of the different relationship to labour pain or *vali* – for instance the idea that “poor women in Tamil Nadu” seem to have a relationship of attachment to, practically a summoning of, suffering as a necessary constituent of childbirth, as against standard mainstream moves and feminist calls for painless labour – she also wishes to point to different ways in which both culture and gender may be constituted as dynamic practices, rather than as an identity or reserve that is drawn upon, or as *structures* of domination and resistance. In any useful extension of her project, then, it would be necessary to say that the categories of domination and resistance are themselves difficult to define. Why? Is it because of their contradictory nature? Their ambivalence? Van Hollen, as indeed more and more anthropologists, performs the task of description with fidelity and often with ingenuity. This task of description is expected to offer a critique of macro-analyses, as also of rigid, monolithic descriptions. In what often turns out to be a misunderstanding of macro-

analyses with generalization, of structural understandings with rigidity, however, the task of description does not, as Van Hollen would have us believe, offer a model of hybridity as a framework of hegemony. The engagement I set up between Mohanty and Nussbaum shows us the same slippage.

There is something else happening here. While Van Hollen strains to clarify that she does not wish to refer to an authentic and fixed notion of a culture, or a cultural past, her use and interpretation of her glossary terms falls back on relating conversational usage to the canon in some form. Such a method might well, as postcolonial theorists have attempted, recall a notion of repetition rather than origin. Van Hollen's stress is on difference, however, and in articulating this difference, it is a stable notion of culture that she falls back on, still associating with cultural essentialisms while always disavowing them. As such, the easy transposition of dichotomies like public-private that make sense in Western intellectual contexts, to conversations Van Hollen has with these women is in itself a simulation of the local that hardly works.

In the notion of a 'gap' or a 'failure' to understand or hegemonize the local, this kind of anthropological analysis aligns with the framework of hybridity put forward by the postcolonial school. It does not, however, do the same work in even attempting a conceptual strategy, merely ranging itself alongside instead.

Bringing the economic back home

In the influential and important 1991 World Bank report on *Gender and Poverty in India*, principal author Lynn Bennett announces:

> … now, researchers, women's activists, and government departments are reaching a new consensus. … [W]omen must be seen as economic actors – actors with a particularly important role to play in efforts to reduce poverty.
>
> (John 1999: 105)

There is another difference from other anthropological work that Van Hollen asserts, and offers as a more strident critique of globalisation than isolated cultural analyses. This she does by bringing in questions of consumer practices and globalisation, and the various changes in birth practices in the light of changes in the economic scenario; in so doing, she re-configures third world women as important economic actors.

'Third world poverty' is here a significant allegory. For Nussbaum it is a condition to be resisted along with sexual hierarchies; for Van Hollen, economic disparities and changing forms of the economy create different conditions of possibility for changing cultural practices. In both, there is a sense that economy is being brought back into the discussion, after a period of much-vaunted culture as the last instance of difference. In both, then, the 'economic' becomes a metaphor for connection (Nussbaum will say that the lives of poor women are the same everywhere; Van Hollen will refer to the 'politics of globalization') as well as difference, in some sense actually regaining importance, as it were, in causal frameworks.

The World Bank report itself drew entirely on the findings of the 1988 *Shramshakti* report on the condition of women in the informal sector, compiled after extensive field surveys in different parts of the country. The *Shramshakti* report, states Mary E. John, "was intended to show women's extremely vulnerable working conditions across diverse occupations under high levels of discrimination, as well as the range of health hazards women were exposed to on an everyday basis. The recommendations of the report addressed to various ministries … included enlarging the definition of work to encompass all women engaged in production and reproduction, recognizing women's position as major rather than supplementary wage earners, and finding strategies to enhance women's control over and ownership of resources" (John 1999: 112). This is a finding that is set up, in the World Bank report, to actually say that these are women who are more efficient resource

managers, and therefore better negotiators of poverty, *than their men*. In that turn, in the shift from *exploitation to efficiency* (as John points out), in the shift in focus from the *formal to the informal sector*, and in the *examination* of poor third world women in this space as a given rather than as a problem (94% of the informal sector is constituted by women, but this is not considered the problem, as is not the conditions of employment that prevail in this sector), a fresh image of the "third world woman" is constituted – enmeshed but not mired in her cultural practices, poor but a survivor, and an important economic actor, as a glance at the literature on social capital or New Communitarianism will also show.

What does a moment when such a report was appearing alongside a vast literature on the micro-politics of negotiation by women of third world countries, ask to be read as? Clearly, negotiation as a strategy of power and economic resources, encouraging a re-inscription of the 'third world' as agential, sits in a not uncomfortable alignment with a concentration on the problem of development as a 'third world problem' – something mainstream development language has always done. Further, the move from ideological critique to description, finds another parallel, in an apparent move from politics to self-help.

And after feminism

We have seen, in Van Hollen's text, the impulse to move away from feminist articulations. Feminism here is, of course, seen as the ideological stance that is both epistemically unreliable in its monolithic description of social conditions, and vanguardist in not taking into account women's spontaneous consciousness/ negotiations. Given such an understanding of feminism, the only alternative would be to move away from feminism to women, sometimes positioning women as ex-officio knowers, sometimes as learning through living, never as a coherent community, and never as subjects of feminism. Apart from being the new and acceptable micro-politics in the new globalised economy, this could also be read as a response to rigid

ideological stances in feminism that read *both women and science* in homogenous frames. It is also, in other words, a movement from 'difference' – both the hierarchical difference that was promoted in Marxist perspectives on gender and the feminist call to a different perspective to break free of Marxist methodologies – to differences. We would do well, I believe, not to simply label this the backlash against feminism, for it has not merely resulted in an antagonistic positioning of feminist and other kinds of gender work vis-à-vis development; there are significant overlaps, too, in the two movements. The turn to autobiographical/ ethnographic narrative as experience, for example, has driven much feminist analysis that struggled to shed rigid ideologies, as we have seen at least in part above. The most significant overlap here with non-feminist gender work would be the need to build a *narrative of experience* against that of Reason, or Culture, or the concomitantly named hegemonic entity. In this sense, the task in both later feminism and gender analysis has been to turn to experience, as it were, and describe it faithfully, in its diversity and heterogeneity.

How does this exploration of feminist and gender work offer an understanding of technology or its critiques? In previous chapters we have seen the framework of negotiations with the hegemonic set up in postcolonial scholarship; we have also seen the ways in which Marxist metaphors of revolution get recuperated into this work. Both feminist and gender work, embedded as they are in these contexts, also present a critical response to science, often science as technology, and these critical responses move from the ideological to the everyday, from the structural to the microcosm, from the neutral to the situated and experiential, while continuing to look at Western science as a powerful institutional apparatus, an apparatus of which technology is a visible manifestation. I will say that the contexts of 'women's lives' provide perhaps the most powerful site for the playing out of these critiques. The point is to show how these responses continue to retain the same notions of technology, as discrete, as separate, as instrument, and I suggest that such a notion of 'powerful technology' is

what shores up the possibility of politics – in the shape of 'isms' *or* as individual negotiations – as a critique of hegemonic knowledge systems, the Western scientific among them. Such an understanding of the political serves not to unpack the philosophy of these systems, concentrating only on the hierarchies and exclusions evident in their institutional manifestations. To unpack the conventional understanding of the hegemonic, in this case the technological, requires a form of critique that might well begin from experience, as feminist and gender work has done, but inserts that experience into the hegemonic to change that picture, rather than valorizing experience per se as always already resistant to technology. Such an inversion of the dialectic might well constitute revolution – a revolution in understandings of technology, and to make a primary suggestion in this direction has been the task of this project.

The next chapter will examine a set of possibilities for feminist responses to science that contain such a suggestion.

chapter six

Making experience critical: a vantage point for our times

The previous chapter explored, in detail, responses to science and technology in feminist and gender work in India. The idea was, more than anything else, to present an 'attitude' to technology, whether manifested in dams or obstetric technologies, which sees technology as a handmaiden of development, as instrument - good or evil, and as discrete from 'man'. Feminist and gender work in India has thereafter articulated approximately four responses to technology across state and civil society positions - presence, access, inclusion, resistance. The demand for **presence** of women as agents of technological change, the demand for improved **access** for women to the fruits of technology, the demand for **inclusion** of women as a constituency that must be specially provided for by technological amendments, and a need for recognition of technology's ills particularly for women, and the consequent need for **resistance** to technology on the same count. Bearing in mind that women's lived experiences have served as the vantage point for all four of the responses to technology in the Indian context, I will now suggest the need to revisit the idea of such experience itself, and the ways in which it might be made critical, rather than valorizing it as an official counterpoint to scientific knowledge, and by extension to technology. This chapter, while not addressing the 'technology question' in any direct sense, is an effort to begin that exploration.

> One should expect control strategies to concentrate on boundary conditions and interfaces, on rates of flow across boundaries – and not on the integrity of natural objects.
>
> (Haraway 1991: 163)

First, the question of experience. This one statement subsumes several questions, on politics, on knowledge, that I have been trying to raise in this investigation. What I have been calling the old ideological model of critique – the possibility of critique from the vantage point

of a coherent set of material interests – was also tied to a model of knowledge, a model that said – *I know, you do*. This constituted the rationale for the vanguard, this constituted the knowledge of oppression. For a feminism having drawn from Marxist legacies of politics, this then was the model to be adopted, and the politics around women's lives that gave birth to this entity, feminism, and has nurtured it ever since, definitionally became that benevolent umbrella, that liberatory tool, that protects those lives and inserts itself into them (the personal must be politicized). Having identified the problems of vanguardism during the post-nationalist, subaltern turn, however, a portion of the rethinking Left *and* a global, universalist feminism may consider that what remains for us to do or think is a turn to experience. The slogan changed; it became – *we all know, together*. Both these moves were, however, hyphenated in the premise of 'one knowledge'.

There were several moves critical of 'one knowledge'. Those that took the 'Third World' route either proposed a 'different reason', a different canon, an alternative system (as postcolonial scholars sometimes did), or articulated a politics of complete heterogeneity that held knowledge as necessarily provisional and separate from a rationale for politics (as did those that took on the name 'third world feminism'). A third position here was of *I know mine, you know yours, there can be no dialogue*. For this school of knowledge, the experience of oppression was necessary, and sufficient. The consciousness of oppression, which was ex-officio, offered knowledge. The community of knowers here was a closed community. Asserting that the 'one knowledge' claim rested on the active exclusion of other knowledges, it suggested a remaking of 'low knowledge' through the *experience of oppression*. This is the impulse that starts, and ends, with the embodied insider, speaking with[in] and for itself, a complete closed community. This impulse we have seen with respect to sexual minorities, women, the subaltern – an impulse also tied to the organic or pastoral as opposed to the technological, an impulse sometimes tracing direct connections with a cultural past, and often offering a choice *between systems of knowledge*. The above mentioned third worldist positions sometimes tied up with this third position, proposing a politics of coalition while keeping knowledge bases separate (as in third world feminisms), or realizing implicit connections between 'low knowledge' practices and a different system.

While I have made no attempt here to directly examine the complex of phenomena often

referred to by the short-hand 'globalization', I will now refer back to my first mention of development as a practice and to the gender work that involves itself with disaggregated description as part of this phenomenon. The reaction to the ideological has meant, in this frame, a shift from politics to self-help, from the ideological to the intuitive, where the intuitive is taken as a flat description of immediate reality as experience. While it might be tempting to read this immediate everyday reality as organic, whole, feminine, and often able to escape an overdetermination by patriarchal norms, the new gender analyses do not necessarily rely on organicity. Rather, politics, or the politics of representation, have shifted, as Haraway notes with deadly precision, to a game of simulation in what she calls the "informatics of domination", and the new gender analyses are as much part of it as any other (recall Van Hollen's terms – culture-in-the-making, "processural", etc). While none of this new critical scholarship addressing development or technology actually denies domination or power, it has contributed to making it so increasingly difficult to define or identify, as to make counter-hegemonic attempts appear very nearly anachronistic.

What, then, of alternatives? After a rejection of those feminist strands that seek to build a common, sometimes homogenous *narrative of feminine experience*, and of gender analysis that thrives on the heterogeneity of *women's experiences*, but yet agreeing with the need to "speak from somewhere", as against older models of one knowledge that offered a "view from nowhere", a neutral view, what could be the nature of this critique?

I would suggest that it will have to be a *re-turn to experience,* a re-cognition, *rather than a turn*. That we pay attention not only, or not even so much, to the fractured narrative offered by the wide variety or heterogeneity of experience, as to its possible *aporeticity* in dominant frames, so as to enact such a re-turn treating the perspective of the excluded, aporetic experience as momentary resource – not authentic, fixed, or originary, but appropriate. Drawing on Haraway's suggestion of a gift of vision, of situation as a visual tool, this would mean a momentary cognizance, a momentary gift of ab-normal vision – abnormal by way of not making sense in dominant frames – that could describe the dominant in terms different than its own, as also point to other possibilities. This would mean, most importantly for a notion of the political, a shift from marginality to aporeticity as a vantage point for critique.

Perspective, here, would therefore take on the third of three meanings, as the fantastic spur within the dominant, as a moment of seeing, of 'possession', that can be lost in the looking. In this sense, it is also not possible to map perspective onto identity or individual taste. Perspective as that moment of possession not only gives a completely different picture of things, it also gives a picture not available from anywhere else – that makes visible the dominant as such, as that which had rendered invalid other possibilities. This invalidation, this exclusion, could then be understood differently from a removal from circulation of that which is disobedient – "At my heel, or outside", as Le Doueff puts it; it is better understood as a constitutive or primary exclusion with an entry later on the dominant's terms. As Le Doueff puts it again, "Outside, or at my heel." Here I find useful, as a beginning, the model of the excluded available within feminist standpoint theory, of the woman as 'outsider within'. While this formulation evokes a degree of unease about whether this social location can be enough as a starting point (whether women then always have to be the outsiders within to be able to speak from this space), it offers, I think, valuable clues for working toward a possible model of feminist critique. To understand this, we need to understand, also, that the issue here is not only that of recognizing hierarchies, nor is it about building a stand-alone alternative system of knowledge that may be called feminist. The example I gave in the previous chapter, of the clinical consultation that turned into a conversation, tries to demonstrate this.

The very notion of a feminist standpoint would be then the act of interpretation that puts this positioning, this transient possession, to work, not a place already defined, as earlier understandings of standpoint would have; this process involves the production of an attached model of knowledge that begins from perspective, one that requires a speaking from somewhere.

Such a speaking from somewhere obviously requires a conceptualization of this 'somewhere'; in other words, a fidelity to context. Here context, I would suggest, is not (only) about date-time-place, such that a concept of 'one knowledge' can be critiqued from a situation. It is most importantly about relationality, the space between you and me, both intra-community and inter-community. Once we take cognizance of this, we realize that that space does many things – it induces a porosity of boundaries (body, community), it creates attachment, it also creates separation. With this in mind, we then have to talk of building a

story from perspective, where it is the *turning from within outward* (from attachment to separation) that does the work of building the story. Such a standpoint 'is' only in the *constant interrogation* of both dominant discourse – masculinist Marxist discourse, *and of the category of resistance* – feminism – within which it may be named.

What we may have to gain from an attention to either consultations or conversations, then, is not so much the shift in form that we have made in moving from one to another, but the recognition of the fantastic perspective as a visual tool. Perspectives are made fantastic by their positioning in an imbrication of power *and* meaning; and unless the position is required to be static through any counter-hegemonic exercise, they cannot be the source of a permanent identity, nor an alternative system. I present my report on the *dai* training programme, then, in a different detail and from a different perspective than as a look at indigenous systems of health or as a lesson to be learnt from women's experiences, or indeed as an essentially feminine perspective. What I call the allegory of women's lived experience serves, for me, as a test case, an example of the fantastic perspective that both helps provide a different picture of the dominant, and a glimpse of other possible worlds. I will attempt to delineate this in more detail now, but would like to put in a statutory warning prior to the attempt.

Min(d)ing the turn

Does this re-turn to experience that I have talked about show up in individual *dai* experience? Is this a concrete turn, something that can be applied in straightforward ways? We turn to the Bengali Marxist who tried to find a subaltern Lenin –

> The concept of the outside as a theoretical category is rooted in the concept of abstract labour as opposed to concrete labour. Concrete labour, located within particular industries, is within the sphere of production; abstract labour is not. … It is situated where, as Lenin puts it, all classes meet – outside the sphere of production.
>
> (Chaudhury 1987: 248)

Chaudhury is using the concept to gently remind the Subaltern School of the difficulty of positing a 'subaltern consciousness' as a separate domain, or the equal difficulty of speaking

of inversion, in other words revolution, from this vantage point. For my purposes, the turn from within outward faces the same difficulty. It is a turn that has to be mined for its possibility, not one that offers, straightforwardly, the description of a different world.

Marking the turn: returning to the conversation

In what might perhaps be an unwarranted dissection of events, but one useful for our purposes nonetheless, let us go back to the *dai* training programme, mapping onto my narrative of it the paleonymies and possible difficulties of such a narrative. I have refrained from relating to this exercise as either participant observation (in anthropological mode) or as case study (the qualitative approach in medical parlance). Both of these, positioned at the same end of the methodological spectrum, were efforts that came up to serve a need for 'qualitative' analysis – the latter from within the scientific establishment, the former from within the social sciences. In its acting out, however, there is an effort to capture the microcosm that is a stepping away from earlier structural analyses; and a meshing of 'observer' and 'observed', a moving away from complete objectivity, that all self-respecting qualitative analyses undertake. These analyses are also an attempt to either expand or critique complete objectivity. This is what I have in mind when I refer to that time as 'conversation' rather than 'consultation'. What I am attempting here is a further *bracketing of that effort*, a bringing to bear, on the conversations, the weight of my identification of the problems with existing frames of critique that I have identified in the thesis. This is so that what I have been laying down as a different contour of critique, finds its possibility. To perform such a bracketing, I use the narrative of my experience with the *dais* as a template within which I identify moments of the anthropological narrative, and from which I move towards a different possibility.

This exercise will involve, therefore, as I have stated, through a re-turn to experience, a re-examination both of dominant discourse and of the category of resistance within which it has been named. Such a re-turn will mean an attention to experience – not as narrative, resistant or otherwise, nor as fractured and unpredictable, but as aporetic – as affording a fantastic perspective on the dominant that had hitherto appeared as normal. An attention to the fantastic perspective will result in a turn from within (a community) outward – a different notion of the political from that of either organizational, organic, or individual responses. It is,

however, a notion that is hardly structural, a notion of the political as interpretation, but one that will have to be done each time. With these telegraphic steps in order, let us proceed. We had started the classes from the *dais'* voices – what they had written or what they had to say regarding their experiences with the births they had attended. The attendant presumption on both sides was that these voices were constituted by experience, the only prerogative of those uninitiated into *method* – *mukkhu sukkhu manush* (the unlearned people). I then set about introducing a gentle reworking of the boundaries of this category "experience" – till its quarrels with "method" had diminished to negligible levels.

How did I rework these boundaries? What were the contexts in which this was made possible? What were the terms of reference for the exchange between "experience" and "scientific method" that placed each, firmly, on a particular side of the divide between the untrained *dai* and the development expert, the body and the mind, the sensible and the transcendental? Several notions of the feminist political are at work here, working vis-à-vis dominant and other responses to the experience question. The responses may be charted in the following way. In the turn to experience as narrative, feminism has addressed the representation of the female body. The "female body", we have seen, is the site for the understandings as well as operations of science (with its invisible qualifier Western). In its project of defining the form and delineating the workings of the female body, this body of knowledge enjoys the status of a value-neutral, objective method that purportedly bases itself on solid empirical evidence to produce impartial knowledge. In the case of the female body, it would then appear that science has *found* it exclusively and powerfully fashioned by *nature* to bear and nourish children; in the event, all it is doing is putting the facts before us. Feminist engagements have sought to detect several disclaimers to the purported value-neutrality of science. For one, the standard body is that of the male, by which the female body is judged small, inferior, or deviant; and through this a subtle process of othering or exclusion of the woman is instituted *within science*. Further, accounts of the workings of the body, its organs, its reproductive processes, are strewn with gendered metaphors that privilege the male as decisive, strong, productive, and the female, as complementarily passive, wasteful, unreasoning. In the event, this part of the feminist project has been to make explicit the hidden cultural weight of scientific knowledge. Further, in addressing the methods of science

itself, feminism has pointed to the homogenization inherent in the manner in which the scientific concept of the "female body" is derived. It is somewhat against this authoritative, homogenising strain that women's bodily experiences are posited in feminism – as something that is not only missed in science's project of objectivity but something that is excluded from or unable to articulate itself in and through science's abstractions. In the event, the experience of the "woman" within science is seen as that which, through the explicit introduction of an apparently inassimilable, pre-discursive subjectivity, questions the *explanatory* potential of science, while also offering possibilities for agency.

There are certain collusions in the goals of these two projects, however, that bear looking at. Both are moving toward a single truth, whether derived from scientific theory or subjective experience, which they alone can represent. To this end, both homogenize and both declare the undisputed presence of this 'reality out there' that can be represented without mediations. And from here also flows a claim to objectivity. If science posits a naturalized universal female body, experience would posit the "woman" universalized through socialization. No experience can exist here outside narrative history, unless as aporia – the seemingly insoluble logical difficulty. One would then derive that if scientific theories are built on exclusions, so is the category "experience". If science claims value-neutrality, a simple valorization of experience ignores the "historical processes that, through discourse, position subjects and produce their experience". In the process, both science and experience in turn achieve status as categories, homogenous and uniform in themselves. Both become discourses that have the right to regulate entry, so that what counts as science or experience becomes the qualifying question.

If we then conclude that there is in this separation a certain essentializing of categories that ignores their very constitutions by the other, as also their constructions through cultural intelligibility, several questions arise. Can experience be that essential outside of Science that can grant agency? Or would it be also explicable as reflective of hegemonic norms that grant the sensible body as "women's generic identity in the symbolic" while retaining a masculine topology for Science? This brings us to another feminist cognition of experience as constituted by history, circumstance, and *as* circumscribed by the norm as outside it.

But, caught as I was between the conventional registers of science and feminism, I kept falling backwards into the question of results, and their reflection on validity. Experience, it would seem, was faulty by virtue of its very constitutivity, while science continued to look rigorous and unbiased. As critical courier of scientific knowledge, I thought I was trying to weave myself into the discourse of the *dais* with minimum damage to their framework, and to that end I had decided to keep the question marks alive throughout, directing them towards science as well. But as I sat down to look at the assessment sheets on the afternoon of the first day's session, 'I' was fairly stunned. Of the ten questions put to the dais, one was worded as follows –

If the child does not cry soon after birth, we must –

a] say prayers over the baby

b] perform mouth-to-mouth resuscitation

c] rush the baby to the nearest health centre

d] warm the placenta in a separate vessel.

Almost all 46 of the dais had affirmed the last answer. I remembered the asphyxiated babies that used to be rushed to the nursery in Medical College from the labour room that was on another floor. I remembered the bitter debates as to why the nursery was not stationed nearer the labour ward so that we could lose less time in resuscitating them. I decided this could not be allowed to pass. And I conducted the classes accordingly. When we repeated the written examination at the end, none had ticked the last answer, and I was both relieved and vindicated. Until I had come away, still thinking, and then I realised that I had succeeded only because I had adopted a more positivist, authoritarian approach – right and wrong – to get across. And why had I done that? I realized, again, that with all my criticality, I was very much a scientific subject, and not merely because of my disciplinary training. I had retained reflexivity and criticality for as long as there was non-contradiction. Beyond that, I stayed put – well within Science. I too had my experiences – I could look at them as inseparably constituted by my production as scientific subject. But I had been trained to look otherwise – at experience as empirical evidence of theory. And there I was.

In current development policy, though, there is not so much the suppression of

subaltern voice as its making visible in extensions of scientific discourse. It has become part of development policy to include women's voices in their own development; the 'third world woman' is no longer considered to have no voice. On the contrary, she has a *specific* voice that is apparently being heard now in development projects in the third world. In order to articulate this voice, however, she must have the capability to streamline it, make it universally understood as well as reasonable, and this is the cornerstone of the 'capabilities approach'. Here the *dai,* once named as dependable repository of traditional knowledge, can now be appropriated by notions of development flowing from liberal theories, for she also represents, in this frame, the rigid face of patriarchal traditions that have not given the woman voice. Development here is taken to mean empowerment – a granting, or rather restoration, of voice to the woman hitherto suffocated by tradition – and it is to this end that the efficient model of scientific method may be adopted. The old order will indeed change, for the *dais* … *Aage ek rakam chhilo* … *ebar anya rakam korte hobe*… but that is hardly an exchange of tradition for modernity, or of experience for science; it is an accommodation of one by the other. In the pluralism of current development discourse, the *dai* is a figure who exists before context, occupies an underprivileged class position, and has a voice that may be heard or streamlined into the mainstream.

And in feminism, despite, or after, the recognition of 'women's experience' as constitutive of hegemonic norms, there is a renewed positing of experience as resistant, as the natural habitat, perhaps, of the woman …

This is of course clearly in evidence in what I have called the global feminist undertaking, which is most well argued for philosophically in Nussbaum's work, and most tellingly represented in her examination and insertion of 'Jayamma-the-brick-kiln-worker' – who *cannot not* have a body that speaks – into the lexicon of development literature. As 'third world women's practices' that contribute to culture-in-the-making, it is visible in the gender work that I have talked about.

What of my 'conversations' with the *dai*? As medical-professional-feminist-addressing-gendered-subaltern, I recognized and tried to steer clear of the various precipitations of such a binary; I ended, however, looking for a connection *through experience* between the 'professional'

and the 'unlearned'; for an essence to the feminine, perhaps, or to woman in the Symbolic. The earlier legacy of experience, then, inheres here; in asking questions of an epistemic status for experience, in the anxiety of not being able to accord it equal validity, in looking for a separation between feminist critical projects and dominant discourse through a recourse to a feminine difference which will be different from the place accorded to women in the patriarchal Symbolic. Most telling, perhaps, it inheres in the anxiety over the similarity or otherwise of perspective between the (feminist) professional and the (woman) *dai* … one that presumed that the origins of an organic connectedness was to be found in the unspoilt *dai* who talked of *meyeder meyeder katha.* So the first attempt that the *dais* made to connect with me was through *abhigyata* – experience. And the overwhelming feeling at the end of those 6 days amongst the *dais*, and in me, was of a solidarity that had perhaps been established. A solidarity across boundaries of authority (though not disruptive of it in any way), across science, across different experiences. But … where then are feminist projects going to differ from development initiatives? What do third world women want, if one may ask the blasphemous question, a question that gathers momentum, nevertheless, in the context of first world vanguardism. Can the solution be that we must give up on capability altogether as a universal? While accessing a connectedness that would not mean the place accorded to women in the patriarchal Symbolic would definitely be a move, where would this connectedness be situated? If not in family or traditional community, would it be in some other sense of being together? Will we seek to continue its residence in women? Will we travel from an erasure of experience, the feminine, the subjective, to an essentialising of the same? Will women be the "embodied others, who are not allowed *not* to have a body, a finite point of view"? If so, are we still going to stay with the biological body as pre-discursive resource of experience? And if science is to remain the ultimate arbiter, is experiential agency then to be only the aporia, showing up as resistances through gaps in policy, that must let be, or can there be a feminist policy-framing that can work on the aporeticity of experience?

What of collaboration? Caught between the conventional registers of science and feminism, where science is about knowledge and feminism about politics, not only is the *dai's* experience waiting to be rehabilitated within science but also within feminism. While the mainstream policy dialogues with science remain at the level of "filling in gaps in manpower",

the philosophies of science attempt to talk about whether "midwives' tales" might be justified – questions of validity. The politics of inclusion have operated to bring 'low knowledges' into circulation, and feminism must be the natural host to these politics in a frame where feminism is about politics and about women. Hence the whole debate about representation – institutional science versus the *dai*, the *dai* as gendered subaltern versus the third world feminist, that populate the space of critique of knowledge by politics, of science by feminism. The questions therefore continue to be – In frames where the *dai* as "gendered subaltern" has been appropriated into governmental apparatuses, and *made to speak* that language, are conscious tools of collaboration with the master's discourse available to her? Or is this the tool lying there for the *feminist* to pick up, to create a discursive space of negotiation for 'third world feminisms'? Is this, then, yet a battle for representation, a vanguardism, a speaking for that continues to slip into a speaking of, where third world feminists freeze their examinations of their own enmeshedness or location in their negotiations with global feminism and global development? Is such a freezing inevitable? Or is the *dai* as gendered subaltern as much outside third world-first world feminist negotiations as outside empire-nation exchanges?

But there is also a question here of the continuing separation of experience and knowledge. If these attempts to rehabilitate experience seem to be at the level of according it equivalent status to knowledge, thus actually keeping alive the binaries feminism has been straining to step out of, what of experience as condition of knowledge-making? The aporeticity of experience I speak of might be a beginning.

Having identified these existing trajectories for feminist critiques of science in the Indian context, therefore, I pick up on the gaps in the quintessentially anthropological narrative, to bring back the question of aporeticity. We have spoken extensively of the fractured narrative – in anthropology, in feminism. Rather than the fractured *narrative*, however, it might be the *fracture* we need to speak of now. And rather than look at women as being essentially capable of *mimetisme*, and therefore as the essential content of fracture, it might be useful to access the moment of fracture, using as allegory, not narrative resource, the responses of the *dais* to the reproductive health apparatus, or the bizarre consultation between the recalcitrant mother and the female physician. It might not be the connectedness between me and the *dai* as women, then, that will serve as my resource, but our very asymmetry of

dialogue, our seeming separation. This might be the fantastic perspective that must be worked on, in feminism, to create the discursive space required to articulate the inversion – an overturning of the dialectic of one knowledge – that Chaudhury (2000) speaks of. Such a concentration on momentary fractures, disallowing as it does a final and fixed concentration on 'woman', or a continuing separation of registers between politics and knowledge on account of the 'fantastic' perspective opening up a fresh vantage point both of knowing and critique of possible worlds, I submit, would constitute a useful feminist standpoint epistemology.

The relevance of such a re-cognition of experience for our purposes? I started this chapter, and this exploration, with Haraway's exploration of the 'informatics of domination', which today relies on simulation strategies rather than older representative networks. If technology, and its problems, needs to be addressed, my suggestion is that this needs to be understood as a first step. Technology needs to be understood not as a discrete and inadequate extension of 'man', but as existing in an inalienable relation with the category we are calling 'human'. Consciously or otherwise, such an understanding has already permeated all methodologies of research in the natural sciences, with fieldwork being replaced with codes, so that science is no longer an explanation of nature 'out there', but a simulator. In such a condition, women's experience of technology is a part of the technology itself, rather than being empirically outside of it. Any theory of exclusion, therefore, of such experience, will have to re-cognized if the 'problems of technology' are to be made sense of, and it is the groundwork for this that I hope to have laid in this project.

by way of a conclusion:

methodological possibilities in a digital world

In this exercise of tracing a genealogy of responses to technology in the Indian context, digitization and its many manifestations have not been dealt with explicitly. It must be said, however, to also reiterate a point made in the first chapter, that the visible character of digital technologies has forced on the imagination of technology in general a re-visioning, as also a re-articulation of its relationships to various constituencies of users. Such a re-visioning,

carried to its logical limits in this exercise, has helped strengthen the hypothesis that technology per se needs to be understood differently from its classical definitions as instrument, means of production, or product of science. Each of these understandings has been at the centre of various philosophies including classical economics and Marxism in their theories of technology's relationships. Both policies on technology and critiques have built on these theories.

What, then, might be the contours of an alternative imagination? I mentioned, in the last chapter, that methodologies of research in the natural sciences have already shifted from fieldwork to simulating systems in the laboratory. Despite the philosophy of representation being adhered to, at least the form has been altered, so that the task of explaining what is 'natural' or 'out there' is no longer the simple task of science. What of technology? Have things changed, to repeat the cliché, in technology too with the arrival of digital technologies that seem to be enveloping, un-ending, and at the same time precise? An initial examination of two kinds of digital technologies, or rather two kinds of uses that digital technologies are visibly put to, might help unravel this question. Data bases, in use in medical institutions, in governance, in outreach programmes, are seen to categorize to the last digit, and in doing so, attempt to account for every natural phenomenon as it were, as statistic, as factor, as category. In doing so, they are the new dream for policy makers; and more so for critiques, who find in their attempts at categorization fodder for fresh critique. This attempt at information-retrieval, say the critiques, or this attempt at inclusion through categories, is doomed from the start. But what of imaging technologies? Such technologies, that by their very nature need to reveal themselves in form to the end-user, seem to function not in hostility with, or through a panoptican-like gaze on, the patient/ client/ user. While absolute surveillance can be read into the precision of their 'results', and cold metal detected in their arms-held-out-to the user, there is yet a something, an association, or a lack of separation between one and the other that suggests an interdependence, an absence of result without association. Is this different from earlier, other, technologies? Or is such a reading of other technologies possible, and possibly more accurate? Is the digital a different world or does it allow for a different reading of the world? These are questions this investigation has helped pose to the critical analyses of technology.

Some of the detours through feminist and gender work this investigation has undertaken have been exemplars for the different methodology of 'seeing' that helped pose these questions. I have gone into this in some detail in the first chapter. Such a different methodology adopts a meaning of perspective that is not 'limited', local, or partial, in the senses in which we have understood it so far, but as bizarre, or fantastic, with respect to the given picture of the world – what I have been calling aporetic. My return to the engagements with traditional midwives, or *dais*, in the sixth chapter, was also an attempt to re-examine methodologies that seek to invoke excluded perspectives – like ethnography, for instance. In an attempt to find what would facilitate such a sense of perspective as aporetic (not aporetic perspectives which give a sense of empirical fixity), I also therefore attempt a reworking of classical ethnographic methods.

There are at least a couple of questions that this investigation has not been able to address in their fullness. One is the relationship between science and technology. It has been variously stated that technology is the problem with science, owing to its aloofness or its power; that technology is an extension of models science as a western knowledge formation. Terms like techno-science have been coined to explain these connections. This investigation treats technology as not apart from western science, but does not accept a notion of technology as the villainous element in an otherwise innocent scientific enterprise.

The other is the relationship between technology and bodies. I have suggested that this is the more obvious relationship upon which the formulations of human-technology relationships are built. Notions of embodiment and touch, however, have tried to address questions of this relationship through porosity, lack of separation, and so on, and deserve greater attention than this investigation has been able to pay, in order to arrive at better understandings of the relationship.