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Decolonisation and the Entangled Histories
of Science and Philosophy in India*

Abstract: One of the central challenges confronting post-colonial India in its march towards decolonisation was the intellectual challenge posed by the idea of modernity. This is reflected in the work of historians of science and philosophers attempting to understand what the past of 'Indian science' or 'Indian philosophy' meant in relation to the identity of the modern Indian nation state in the making. This essay argues that in this interrogation there were common themes that were entangled in the enterprise of historians of science and philosophers. Beyond the question of the identity of Indian philosophy or Indian science was the attempt to locate the place of reason and science, and in the spirit of modernisation theory to trace the causes of their ascent or decline at the centre of Indian culture over historical time. The paper examines the entanglement of these two discourses and situates them during the decades of decolonisation.

Keywords: comparative method, Indian philosophy, institutionalisation of science, modern India, philosophical reasoning.

This paper seeks to investigate the nature of entanglement between the academic concerns of historians of science and the discipline of Indian philosophy since the commencement of the decade of decolonisation. The exploration is prefaced by a lengthy discussion about the modern scientific community in India. The problem to be discussed is the encounter, and possibly its nature, between the modernity of science and the engagement with philosophical reasoning in the 'Indian' traditions. The sociologist Niklas Luhmann perceptively pointed out that science unfurled as a frame of thinking and acting that had never to establish its modernity, unlike other fields of human culture and experience or more so even 'modern society' (Luhmann 2002: 61). But stretching the Luhmannian point a little further it could be argued that the disciplinary differentiation and speciation that characterizes the changing frontiers of knowledge in the West, has cast a cordon sanitaire that demarcates the discussion between the philosophical conceptions of knowledge and that of science (Rosenberg 1998).

Consequently, one of the outcomes of this rear guard action of philosophy that is traced back to the nineteenth and early twentieth centuries is the institutionalisation of a discipline referred to as the philosophy of science as the final realization of the Cartesian project. Thus while philosophy of science is enveloped within the

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disciplinary folds of philosophy, it distinguished itself from other sub-disciplines of philosophy inasmuch as it approached its subject-matter or object domain in terms of a dichotomous separation of fact and value, and the other Cartesian dichotomies. However, since the 1970s the emergence of the sociology of knowledge has since made deep inroads in contesting this dichotomy, but the heated battle continues, as attempts are made towards reconciliation between what appear just now as irreconcilable positions (Ziman 2000; Longino 2002).

The institutionalisation of science in modern India in the twentieth century is apparently marked by a paucity of philosophical reflection on the nature of the foundations of science within the scientific community, some notable exceptions within the scientific community not withstanding.[1] This is not an accusation nor does it suggest that there is no awareness of the philosophical foundations of the science being practised (Raina 2003). By and large within the Indian scientific community, over the last century or so, the conception of science as a cultural universal has prevailed, that in the first two decades of the twentieth century found expression in a triumphalist scientism. In fact, it is rather surprising that leading physicists like Meghnad N. Saha and Satyendra N. Bose who were closely networked with the quantum theory/quantum mechanics generation of scientists-philosophers, moulded in the German ideal of the kulturträger, did not participate or take an explicit view on the foundations of quantum mechanics. Was this on account of a lack of philosophical engagement or that they entertained a different notion/interpretation of quantum theory or theory itself?

In any case, the disenchantment that characterised the last three decades of the twentieth century, and the consequent epistemic de-privileging of science produced a number of debates on the question of scientific method, appropriate technology, ecological movements, big dams, forestry, not to mention a version of the 'culture wars.' In each of these debates, the character of the nature of science was discussed, polemicised and the public image of science somewhat eroded, without in any way denting state support for science. By and large, in these last decades, scientists were on the defensive, where old images of science were recycled in order to revive old and perhaps some new dreams. These dreams did not reflect the changing epistemology of science, or the changing character of the relationship between science and state, science and society. The idea of science as cultural universal incarnated itself in a pattern of speaking about science in the ever present tense.

Nevertheless, there were some very important exceptions that included A. K. N. Reddy, Satish Dhawan and Madhav Gadgil. Their philosophies of science differed from each other but were not radical enough to overthrow the apple cart of science as cultural universal. They were certainly concerned with the question of science in society and the interests science in India served, as well as the social values and considerations scientific and technological regimes encoded. If they still operated within the terms set by the use-abuse model of science, what was more important was that the model did not offer an excuse or mode of exculpating themselves of moral

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[1] Amongst this group of scientists who bothered to question the nature of science and interrogate the relationship of science with Indian society from the post-colonial era one must count Satish Dhawan, Madhav Gadgil, Roddam Narasimha, A. K. N. Reddy, B. M. Udgaonkar, and E. C. G. Sudarshan.

or political responsibility—in fact, they pressed for scientists' involvement in issues of societal concern.

But the possibility of evading moral responsibility gave cause for concerted critique from the social sciences from the 1970s onwards. In the first instance, this criticism came from neo-Gandhians who had mounted a civilisational-national critique of the West, science and modernity (Nandy 1988; Visvanathan 1997). I shall not delve into this criticism because it has been discussed elsewhere in great detail. Irrespective of whether this neo-Gandhian critique was anti-science or not, it projected a new topos of alternatives. In other words, it challenged the path-independent stadial models of historical and social evolution (Visvanathan 1997). This it substituted with the idea of there being other possible and equally likely worlds that had be been condemned to the underground of both India as well as the modern West (Uberoi 2002). This was an important milestone in engaging with the present of the sciences and most certainly de-privileged the epistemic authority of science, even if this did not alter the trajectory of scientific or technological evolution.

Strategically, the projection of alternatives into the public imaginary triggered a number of initiatives within civil society, that could well be considered new social movements across the political spectrum and civil society initiatives. The inventiveness of these social movements played a small role in democratising the upper-caste, patriarchal culture that characterised the world of institutionalised scientific research and higher education. It also brought different ways of knowing into a more substantial engagement with that of modern science. More substantial in this new sense, or more likely new order, would mean a greater degree of reflexive engagement with other ways of knowing and possibly suspending, if only temporarily, progressivist and received ways of thinking. If these developments resonated with trends in post-modern thought, they could also be seen as an exemplification of another global trend, namely the transition from an earlier phase of the scientisation of society, to a more self-conscious one of the socialisation of science (Nowotony et. al. 2001).

Philosophically the issue manifests itself in a different form. Modern Indian philosophers have in the twentieth century constantly engaged with the status of classical Indian philosophy. The relationship between the two has been a difficult one and could be seen as a distorted by-product of late colonialism. It appears as if the very pre-requisite for the contemporary Indian philosopher's metier is to define his or her relationship with the enormous corpus of classical Indian philosophy. The problem was addressed in a paper by Peter Schreiner entitled "The Indianness of Modern Indian Philosophy as a Historical and Philosophical Problem" (Schreiner 1978). The salient concern of the paper, both historical and philosophical, is the relevance of the notion of Indianness to academic disciplines currently practised in the universities. It is suggested that the notion of Indian as an attribute of Indian philosophy "was probably introduced by Western and non-Indian authors" based on an ideal of India prevalent among British and German Orientalists. The resolution of the problem of Indianness requires confronting the construction of Orientalist images of India, characterized as philosophical, spiritual and mystical, and their subsequent distortion or modification at the hands of Indian philosophers (Schreiner 1978: 35–6).

The dilemma further manifests itself as an outcome of the translation of meaning, goals, methods and questions of the classical Indian philosophical project into the idiom of contemporary Western/modern philosophy. In this task of cultural translation of the traditional into the modern the Indian philosopher is often burdened with the task of establishing the relevance of classical Indian philosophy to contemporary philosophy; and for some reason that has been the destiny of classical Indian philosophy in its relationship to the Western philosophy in the twentieth century. This has been no different from the case of rendering the history of science in India as linking up with the trajectory of modern science.

In the case of philosophy, till the second half of the last century Western philosophers largely believed that there was no such thing as the Indian philosophical tradition in the sense that Western philosophy existed. Once we discount both the patent Eurocentrism behind the claim and the construction of the Indian philosophical tradition as either purely metaphysical or mystical we come to the question whether we should see the philosophical enterprise as a cultural universal or we proceed to reduce the underlying similarities and differences across cultures. Typically, two dichotomies that characterize debates in Western philosophy, the fact-value dichotomy and the theory-practice dichotomy, are absent in the Indian tradition. But Western categories percolate into thinking about Indian philosophical theories. The philosopher Jitendra N. Mohanty suggests that to overcome these dichotomies one needs to think from within a global perspective employing western categories and inspired by eastern examples (Mohanty 2009: 147).

By and large, modern Indian philosophers have centred the focus of Indian philosophy along three orthogonal axes. Each of these proposals has attempted to locate the central problematic of Indian philosophy. The first of these reconstructions whose vintage and public reception is rather extensive argues that the concerns of Indian philosophy are primarily spiritual or metaphysical and this is what sets out an identity for Indian philosophy that distinguishes it from other philosophical traditions. One way of understanding this reconstruction of such a diverse and complex philosophical system is to locate the reconstruction as a pathological response to the colonial project, which produced a protectionist response in terms of an external material world governed by the laws of science and an internal spiritual realm that was grasped by Indian thinkers (Chattterjee 1993, Raina and Habib 1996). The table below summarizes this response.

West	India
Mastery of the external world	Mastery over the internal world
Seeking to control the material realm	Seeking to control the spiritual realm
Inventors of modern science	Pioneers of the science of spirituality

In this sense, the agenda of Indian philosophy in the foreground is merely a spiritual response to European constructions of India during the late colonial period. Furthermore, it has been argued that the integration of Indian philosophy into the idiom of modern Western philosophy was undertaken by leading Indian philosophers

such as Radhakrishnan, who possessed a deep and close knowledge of the corpus of classical Indian philosophy in Sanskrit. The idea then that spiritualism is the essential component of Indian thought was elaborated further by many other philosophers such as R. D. Ranade, Karl Potter, T. M. P. Mahadevan, Ramachandra Gandhi.[2] In a way then, as Raghuramaraju suggests, while this view of Indian philosophy arose as a reaction to one construction of Indian philosophy it thrived upon the differences between India and the West (Raghuramaraju 2006: 13). On the other hand, the Indologist David Zilberman turned to Indian philosophy; for he felt that traditionally in Indian civilization philosophy enjoyed the status of a "system of culture." Thereby he shifted the standard essentialisation of Indian philosophy as other-worldly, in the opposite direction where it occupies the centre of culture:

…philosophical activity of thinking was organized as a specific form of the material production of meaning, and the cultural significance produced by that kind of thinking turned out to be of central importance for the reproduction of the whole system of Hinduism (Zilberman 1988: 3).

The difficulty with this approach is that Indian civilization is conflated with Hinduism at whose core are the Hindu systems of philosophy, to the exclusion of other equally significant systems such as Buddhism, Jainism, Islam, and the other heterodox systems. This conflation characterized the work of a number of other philosophers such as Radhakrishnan and Mallik (Schreiner 1978). In pointing out the difficulty with Zilberman's characterization, I run the risk of clubbing him with nineteenth century Indologists whose influence on the construction of Indianness of Indian philosophy has been substantial. But like Radhakrishnan and others argued, so does Zilberman that these philosophical systems, as different from the others, are not religious philosophies, since philosophical concerns were never coupled with the personal devotion or the lack of it of the philosophers (Zilberman 1988: 4). Thus reckoning with the differences between literary production of Western and Indian philosophical texts, the latter being more technically oriented than discursively reflective, the essential difference resided in that Indian philosophical systems "…can be understood as a constituent of objective reality, rather than as an abstract mental reflection upon it" (Zilberman 1988: 3).

While the very idea that the systems of thought in antiquity were expressions of a nation's thought and culture, would certainly raise a number of contemporary eyebrows for underlying the thesis is a philosophical ideal and approach that enfolds the unity of India as a political idea (Schreiner 1978: 34). Nevertheless, once this connection is decoupled it should be possible to look at the schools of philosophy functioning within an extended geographical cosmopolis.

The diametrically opposed view, a marginal one though has been proposed by Debiprasad Chattopadhyaya, arguing that it is materialism that constituted the hard core of Indian philosophy, and its epistemic and socially radical possibilities were in part responsible for its being swallowed up in the maelstrom of idealism that subsequently

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[2] According to Ganeri, Radhakrishnan was in a way responsible for portraying India's intellectual past as "essentially spritual" and that it was stimulated by the problems of religion, and was "subjective, speculative and synthetic" (Ganeri 2001: 2).

swept across classical Indian philosophy (Chattopadhyaya 1959). While on the surface of it, one could have problems with this kind of an explanation there are two parts that centre the discussion on Indian materialism that warrants some elaboration. Firstly, the idea that there was a materialist tradition in Indian philosophy that constituted the diversity of classical Indian philosophy, and that this school however problematic its sources may have been, posed difficult philosophical questions for rival schools is an important insight worthy of consideration. Secondly, Chattopadhyaya very carefully in his subsequent work divulged the importance of the relationship between the schools of logic such as the Nyaya and the schools of traditional Indian medicine such as the Ayurveda (Chattopadhyaya 1979). Chattopadhyaya's inspiration could have been an early twentieth century history of science authored by B. N. Seal *The Positive Sciences of the Hindus* (Seal 1915) and he went on to argue that of all the knowledge systems of ancient India, it was only medicine that qualified to be a science in the modern/Western sense of the term. A very arguable and contested thesis.

This was a new twist to the debate, for herein resided the suggestion that in the logical traditions there was much that was germane to the practice of science. I do not wish to suggest that Chattopadhyaya was the inaugurator of a discourse that several philosophers working on classical Indian philosophy would deepen or thicken. But certainly there was an argument that several thinkers would take up independently to bring classical Indian philosophy into engagement with contemporary Western philosophy and more particularly modern science. Interestingly enough, as Western philosophy was dislodged from its pedestal as adjudicator of knowledge with the rise of the sciences, one of the ways of retaining its relevance for the practice of science was to reserve for itself the meta-theoretical enterprise of philosophy of science and the social sciences.

The third reconstruction of the classical Indian philosophy highlights the point that it is rationalism that constitutes the core of Indian philosophy. And it is along these axes we encounter a number of Indian philosophers such as Matilal, Dayakrishna and Mohanty who are in dialogue between contemporary Western philosophy and Classical Indian philosophy from a number of perspectives, logical or phenomenological or metatheoretical (Raghuramraju 2006). Consequently, this approach alongside the materialist reading, important differences notwithstanding, strives to imbue classical Indian philosophy with contemporary relevance unlike the case with the other sciences of India, where the past of science is condemned to some musee imaginaire without any contemporary relevance. This is true despite the essential difference wherein classical Indian philosophy confronts contemporary Western philosophy. Does this mean that Contemporary Indian philosophy cannot articulate itself but through the spectrum of Classical Indian philosophy and not directly confront contemporary Western philosophy.

However, most explorations of the cross-cultural dialogue between philosophical traditions have been set within the frame of the Western philosophical tradition which provides a vocabulary and a grammar within which to apprehend or translate the Indian philosophical tradition. In addition to the existing Western scholarship on Indian philosophy, there exists a large body of scholarship on Indian philosophy produced by

Indians writing in English. This raises another set of meta-theoretic questions dealing with the different modalities of dialogue between distinct philosophical traditions. In other words what is and how does the comparative method function. Naturally in posing these questions we cannot find answers to them purely within the philosophical realm and one approach that could be pursued could be labelled a sort of social epistemology.[3]

The weight of traditions, disciplines and theories, gives meaning to this central concern with what the Indian traditions consider knowledge to be. And this entails clarifying how modern scholars comprehend these traditions and how their ancient, medieval and early modern commentators have understood them. Other than the deep hermeneutic problem that plagues any such project in translation or commentary there are conceptual barriers that separate Indian philosophy from Western philosophy. But these barriers were erected by formulations that became philosophically institutionalised and portrayed not just Western philosophy but Western thought as intellectual, discursive, abstract, theoretical, axiomatic-deductive and Indian philosophy and Indian thought as intuitive, experiential, pragmatic and computational. In these binaries of the history of ideas the Indian philosophical tradition was constructed as guided by practical goals and that of transforming human existence (Mohanty 2001: 83).

Two contemporary Indian philosophers Matilal and Mohanty had dedicated themselves to the task of demolishing these barriers and the latter suggests that the goals of Western and Indian philosophy frequently cross each other, in the sense that Western philosophy has a practical side to it as well, just as Indian philosophy has theoretical components (Mohanty 2001: 84). To our generation this may seem, to employ a usage common among mathematicians, "intuitively obvious," but the weight of intellectual and cultural institutions had prevented earlier generations from seeing through this point. Further, an issue that needs to be addressed is that Indian philosophy itself is internally quite diverse and these large constructions of systems such as Indian philosophy collapse the internal distinctions between the different schools that comprise the Indian philosophical tradition. And the Indian philosophical tradition often collapses onto what Western philosophy has classified as Hindu, Buddhist or Jaina philosophies. In Western accounts of Eastern philosophy the term itself comes to connote either Indian or Chinese or Japanese philosophy—the one to the exclusion of the others (Mohanty 2001: 84).

The question of how colonialism and Indology shaped the ideal of Indian philosophy is central? There is a rich literature on the subject that seeks to locate knowledge and power in British India and that draws insights from the work of Foucault and Said. There are several perspectives in understanding of how colonialism transformed the coordinates of understanding Indian knowledge systems. Despite the differences Orientalism appears as a shorthand for the "imperial sociology of knowledge" (Pinch

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[3] In the introductory chapter of her book *The Fate of Knowledge*, Longino points out that Charles Sanders Peirce, John Stuart Mill in the nineteenth and Karl Popper in the twentieth centuries discussed the social dimensions of knowledge and suggests that Popper is considered to have originated social epistemology (Longino 2002: 3–7).

1999: 390–3). These differences arise from differences in the understanding of the establishment of colonial rule in India. Thus Chris Bayly (Bayly 2000) addresses the importance of the knowledge received in the making of empire; and how a new information order that is created subsequently structures commerce and politics (Pinch 1999: 395). Whereas Cohn, Inden (Inden 1999) and others elaborate how the creation of knowledge about India contributed to the furtherance of the imperial project. Colonialism as post-colonial scholarship has detailed for us, produced "complicated" forms of knowledge that Indians had constructed but were codified and transmitted by Europeans" (Cohn 1997: 16).

A number of factors shaped the encounter of seventeenth century Europeans with Indians; of these three were of prime importance. Firstly, the Europeans lived in a world of "signs and correspondences," whilst the Hindus and Muslims "operated within a substantive theory of objects and persons" (Cohn 1997: 18). The spectacles through which the English viewed the divinely created world was apprehended through the senses and comprehended empirically. In invading India, Cohn contends, Europeans had unwittingly encroached upon the native epistemological space which they believed could be grasped through translation by establishing correspondences (Cohn 1997: 53). This in turn shaped their encounter with the languages of treaties and philosophical systems of India and subsequently their reception and translation. In the eighteenth and early nineteenth century the British desire to learn Sanskrit was fuelled by a scholarly curiosity in India as it was by a desire for the more efficient governance of Bengal (Cohn 1997: 26). But the early translations of Sanskrit texts were undertaken from intermediary translations of these texts first into Persian and then into English (Cohn 1997: 27). This was to change with the foundation of the Asiatic Society of Bengal towards the last decades of the eighteenth century.

The comparative method developed out of several strains of European thought that included technologies for the textual construction of a history of Europe, these were now extrapolated to the study of India. The European preoccupation with the "origin of things" was reflected in the questions and technologies of comparative history that included the collection and classification of texts and languages in the hope of establishing original versions of texts, pure languages and of establishing a chronology (Cohn 1997: 54). In this manner the comparative method through its power of classification facilitated the control of "variety and difference" (Cohn 1997: 55). The linearity of the comparative narrative was oriented either forward as was done in the case of European history or as a hurtling down from a pristine authentic past as was done by some Europeans and Indian scholars—the discovery of the pure versions, it was contended, would reverse this degeneration (Cohn 1997: 55). Thus the colonial project that resulted in the production of dictionaries resulted in the creation and alteration of the languages of the region and thus altered radically the access of both future generations of Europeans and Indians to the past (Cohn 1997: 55).

This brings us to the point whether we post-colonialists will ever be able to access the past as "undistorted" by the experience of colonialism or the encounter with the West. This historiographic perspective is an outcome of paradigmatic changes in recent history writing that disregards the articulation of "timeless structures and

mentalities" and focuses instead on questions of agency (Minkowski 2001). In fact, post-colonial scholarship has ignored the social history of knowledge on the eve of colonialism which in a way reinforces the perspective that colonialism certainly marked the end of the Sanskrit episteme and thereby changed the rules for the generation of knowledge on the sub-continent (Pollock 2000). I think there are two simple presuppositions at stake. Outside the cultural encounter between East and West one could as well ask in the European context what the writings of the ancient Greeks would have meant without the works of the Arab commentators on those texts (Montgomery 2000). Further, we can then ask whether even a Western philosopher can access ancient Western philosophy in terms that are unmediated by two millennia of history. The Indian philosopher Matilal rejected the objection that twentieth century attempts to articulate the ideas of the ancients were futile. On the contrary while the motivations of philosophers from different periods and cultures might differ there were important philosophical questions and puzzles that continued to be of contemporary relevance, these included "the problem of knowledge and its criteria, the problem of perception and the status of the external world' (Matilal 1986: 2–3).

In which case, how do we transit from the discussion of "knowledge" in one system to another, when there are differences in some essential conceptions? What needs to be reckoned with is that the epistemological vocabularies in the two traditions is comprised of terms considered synonymous, but actually denote different concepts. Thus we are in addition to the preceding discussion led to ask of the utility of the comparative method. A comparative historian of science, Joseph Needham for one felt that the comparative study of the science and civilization of China would enable him to rethink the presuppositions of Western civilization and social science theory.

The comparative method is then an unavoidable activity for cultural amphibians (Saïd 1985) and for those philosophers attempting to render one tradition comprehensible in the language and vocabulary of another. The task for the philosopher is to ascertain the nature of the philosophical enterprise, and the relevance of the comparison of ideas and theories to the philosophical goal of studying "things-in-themselves." One of the arguments cited by Mohanty is that comparative philosophy is an unavoidable enterprise for cultural amphibians forever rendering one tradition in terms of another or translating from one language into another.[4] But then one must ask what philosophy is—is it about things in themselves or about the comparison of ideas, concepts and theories. According to Mohanty comparative philosophy is a second order discipline as a result of which it falls short of genuine philosophy. It nevertheless serves the important role of liberating philosophers of dogmatically inhabiting their own traditions and thereby free philosophy itself (Mohanty 2001: 85). If that be the case, then comparative philosophy inasmuch as it leads to the clarification of our philosophical ideas and theories could as well be as crucial as mainstream philosophical activity even though its nature is that of a metaphilosophy.

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[4] Despite his commitment to a global philosophical perspective Mohanty has also argued that the pursuit of Indian and Western philosophy should be independent projects employing their own idioms, language and metaphors (Mohanty 2002).

The discussion on the comparative approaches of Mohanty and Matilal seeks to point out that the discourse on the character of knowledge in the Indian tradition is really a social-epistemological one, and may throw some light not merely on the philosophical enterprise but play up similarities between the conception of knowledge in the Indian tradition and the insights emerging from the sociology of scientific knowledge. Zilberman's investigations commenced with a comparative elaboration of the notion of epistemology in Indian theories of knowledge and the Western tradition(s). This examination was prompted by his understanding that analogy was a central problem in modern philosophy of science, language and phenomenon, and that Indian philosophy provided some very interesting insights (Zilberman 1988: xx). This intellectual journey is similar in spirit to that of Matilal and Mohanty, though Zilberman himself comes in from a different cultural or philosophical tradition.[5]

Zilberman was particularly disposed to the perspective of the social dimensions of knowledge though he approached the problematic differently. In his work entitled *The Birth of Meaning in Hindu Thought*, his focus was on the sociological presuppositions of Indian epistemology and formal logic (Zilberman 1988: xix). In attempting to explicate the sense in which Hindu systems of thought constitute epistemic disciplines, Zilberman was aspiring to reform the whole idea of philosophy, as the object for a new science he calls, "science of philosophies" (Zilberman 1988:1). Put it differently, Indian philosophy offered a categorical framework for meta-philosophy. The several systems of Indian philosophy were not to be viewed as different philosophical systems but part of the categorical apparatus that would be required in the making of philosophy as an object of the science of philosophy.

An interesting feature is that the three projects of Matilal, Mohanty and Zilberman coruscate at a particular conjuncture of philosophical thought, namely in the 1980s. A conjuncture produced by the linguistic turn in philosophy and the social turn in the philosophy of science. Zilberman sees his own project as an entirely novel one, the historical necessity of which was announced by the times (Zilberman 1988: 1). This conjuncture marks the end of a philosophical project through its century long attempt to become more scientific (Suppe 1977). Secondly, in the domain of the sciences, the recognition of the normative constitution of science rendered it into an object of investigation of a second order discipline such as the science of culture. Consequently, in the circumstance that philosophy is drawn towards science it itself becomes the object for a second order science (Zilberman 1988: 2). In this sense particular disciplinary moments in the philosophy of science and the sociology of knowledge occasion the sorts of projects that are being discussed.[6]

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[5] I make this remark rather tentatively, for it becomes increasingly difficult to pin down a philosopher's identity especially when discussing the work of amphibians such as Mohanty who was an authority on Western phenomenology and an important contributor to constitutive phenomenology (Mohanty et. al. 1991). Matilal dedicated his work on perception in Indian theories of knowledge to Michael Dummett and Peter Strawson, and David Zilberman tries to redefine the Western philosophical enterprise in terms of Indian philosophy himself came in from Russian philology and Russian Indology.

[6] One modality of the East-West encounter was to explicate the rationality of the knowledge systems of the East in terms of the rationality of Western thought by searching out cognitive homologies between the two and then locating the former within the conceptual architecture of the latter [Raina, 2003].

However, Zilberman went on to argue that Indian philosophy could never produce a science. Surely when taken literally, ample historical evidence would disqualify Zilberman's claim. Nevertheless, when read meta-theoretically, it could be taken to mean that a good meta-theory does not always generate a good science. And here too the recent history of logical positivism would stand out as testimony to the point being made. Debiprasad Chattopadhyaya for one arrived at the opinion quite contrary to Zilberman that the only discipline in the ancient Indian world that could be counted as a science was medicine, which benefited from the methodological interventions of the philosophical schools such as that of the Nyāya (Chattopadhyaya 1979). The fruitful possibilities within the tradition were nipped in the bud by the gradual hegemony of the idealist thought and the obstacles posed by the caste hierarchy of Indian society. Zilberman's radical thesis then is not so distant from Chattopadhyaya's thesis, but the former attempts to limit the sociological reduction of philosophical activity to the caste organization of Indian society. As pointed out earlier in the essay, Zilberman on the other hand sees Indian philosophy to be a unique system generating factor of Indian civilization. If that be the case then the structure of Indian philosophical thought contributed to the growth and development of social organization rather than the base generate the superstructure (Zilberman 1988: 5).

While recognizing that any dialogue between Western and Eastern philosophy will take place in a Western language, Western philosophical categories take precedence in the dialogue and define the terrain of the dialogue. But having said that, the two central concerns of Indian philosophy according to a modern Indian interlocutor, discussed here, is the reconstruction of classical views and critically examining modern perspectives. One such modern perspective is that of social epistemology that addresses the social dimensions of knowledge or rational belief. And this raises the first point of intersection between Western epistemology and its Indian counterpart. Social epistemology or social theory reflexively examines the conditions under which it theorizes about what counts as knowledge; it potentially is meta-theoretically oriented as well. These two dimensions, it could be summarily argued are of significance in Indian theories of knowledge and attempts have been underway to orient Indian epistemology along such meta-theoretic lines within the rubric of not merely comparative philosophy but philosophy proper.

However, the question of the identity of Indian philosophy in its relation to the practice of contemporary philosophy has continued to be an issue more than half a century after India became independent of colonial rule. This naturally has led many philosophers and sociologists to ask as to what constitutes the spirit or nature of Indian philosophy. The scholar Attipate K. Ramanujan in a much discussed paper entitled "Is there an Indian way of Thinking" set out an East-West distinction in terms of approaches that were "context sensitive" and those that were "context free" respectively (Ramanujan 1989). If that indeed be the case, we are forced to ask

This modality, a colleague and I have referred to as the methodological imperative (Raina and Habib 1993). Zilberman does not attempt to bring either Indian or western philosophy closer to the epistemic organization of science (Zilberman 1988: 2). In that sense his project is not orientated by the methodological imperative.

ourselves the question as to the "sense in which Indian philosophy exists." At least as far as the discussion in the sociology of scientific knowledge is concerned there appears to be some consensus that contextualism concerning scientific knowledge does not necessarily entail lapsing into some version of relativism. Some of the major debates on the social constructivism have centred around the issue. In which case, the dichotomy in terms of context sensitivity and context neutrality breaks down.

In the same vein, Ganeri circumvents the entire issue of the identity of the Indian philosophy by rejecting the East-West dichotomy of the norms of reason, arguing that paradigms of reason that include among others instrumentalism and the epistemic conception of reason are to be found across both cultures (Ganeri 2001a: 3). But then how does one address the problematic of concepts in translation? Are we not reading the extension of epistemic concepts from the Western tradition into the Indian philosophical tradition? Ganeri denies combing the Indian philosophical tradition with a Western concept of rationality, for if this were indeed the case, then inter-systemic understanding would be impossible because the same could be said of concepts such as "perception, thought, language or morality." But, it is pointed out, that any of these concepts are not internal to a philosophical theory but are concepts about which there can be many theories (Ganeri 2001a: 4). The central problematic for Ganeri arises from the diametrically opposed goals of the history of philosophy and philosophy proper. Ostensibly, the history of philosophy has for its goal the recontextualization of ideas, and situating an author in an intellectual milieu. On the other hand the avowed goal of philosophy is to decontextualize ideas, separating it from the contingent conditions of its formulation. As result the philosopher engaging with Indian philosophical theories is justified in working with "the modern philosophical idiom as a generally shared and convenient vehicle in which to frame his discussion" (Ganeri 2001a: 4). One could wonder then how epistemological contextualism operates within philosophical discourse, or is this contextualism only limited to the history of philosophy.

I wish to conclude this reflection having argued that the history of sciences in India commenced in historical narratives premised on science as a cultural universal. In the 1950s, the first decade of decolonisation, though these concerns prefigured half a century earlier, the instrumentalisation of the historiography of science promoted a "me-too" variety of history, seeking to counter a Eurocentric history of science by establishing precedents or genealogies of contemporary theories of science in the past of science in India. This research orientation attempted to accomplish two things. On the one hand it represented the struggle for cognitive justice, a precious and central concern of the newly independent nation. Secondly, it legitimated the state's investment in science, both as a new knowledge form, but more importantly in the programme of nation building.

In the domain of Indian philosophy too, there have been several attempts to engage with its diversity and variegated nature, in an attempt to emphasise its continued relevance. Philosophers have over the past century emphasised different aspects as part of its central concerns. If in the early half of the twentieth century greater emphasis was placed on its spiritual preoccupations, with the passage of time attention has

shifted to linguistics, logic and in the more recent past its relevance to the philosophy of sciences. As a result it could well be conjectured as the presence of modern science became more visible within Indian society, and science moved if not to the centre, then to one of the epicentres of contemporary culture in India, the turn to Indian philosophy's resources of rational thinking and meta-theoretic deliberations became more pronounced. This conjuncture constituted the locus of concerns around which the two discourses revolved over the last three decades.

The important feature to be noted in this discussion is that homologous concerns arise both in the sciences and philosophy. These concerns are prompted from the problematic assertion that modern science and reason were the prerogatives of the Western intellect. In the entangled narratives we have been discussing the effective keywords are "science" and "reason," which have been construed as the two epicentres of the discourse of the modernity of the Indian nation. The history of science drew upon the philosophical idea of reason to foreground the antiquity of a version of science in India. Philosophy would emphasise the central place of reason and rationality in the Indian tradition, and the modern incarnations of these epistemic faculties were manifest in logic, mathematics and the sciences of ancient India.[7] The rise and decline of the sciences was consequentially a sign of the eclipse of reason, and the ascent or descent of reason was concurrent with the rise or eclipse of the sciences. In the twentieth century where science had risen to the position of the grand legitimator (Pels 2003), the decontextualization of reason and science could be seen as a move to go beyond the dichotomies we have inherited. On the other hand, the attempt to contextualize reason and science could be seen as the flip side of efforts to integrate different knowledge forms within mainstream discourse on science and philosophy.

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[7] This could also be seen as a response to what Serres has called "science's bid to take over the totality of reason," that was historically schematized as "reason later, unreason before" [Serres with Latour 1995, p. 51].

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