HISTORY AND THE ENTERPRISE OF KNOWLEDGE

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In an often-quoted remark, Henry Ford, the great captain of industry, said, "History is more or less bunk." As a general statement about history, this is perhaps not an assessment of compelling delicacy. And yet Henry Ford would have been right to think, if that is what he meant, that history could easily become "bunk" through motivated manipulation.

This is especially so if the writing of history is manoeuvred to suit a slanted agenda in contemporary politics. There are organised attempts in our country, at this time, to do just that, with arbitrary augmentation of a narrowly sectarian view of India 's past, along with undermining its magnificently multireligious and heterodox history. Among other distortions, there is also a systematic confounding here of mythology with history. An extraordinary example of this has been the interpretation of the Ramayana, not as a great epic, but as documentary history, which can be invoked to establish property rights over places and sites possessed and owned by others.[1] The Ramayana, which Rabindranath Tagore had seen as a wonderful legend ("the story of the Ramayana" is to be interpreted, as Tagore put it, not as "a matter of historical fact" but "in the plane of ideas") and in fact as a marvellous parable of "reconciliation",[2] is now made into a legally authentic account that gives one community an alleged entitlement to particular sites and land, amounting to a licence to tear down the religious places of other communities. Thomas de Quincey has an interesting essay called "Murder Considered as One of the Fine Arts". Rewriting of history for bellicose use can also, presumably, be a very fine art.

I note the contemporary confounding of historical studies in India as the starting point of this lecture, even though I shall not be directly concerned with addressing these distortions: there are many superb historians in India to give these misconstructions their definitive due. Instead, I shall be concerned with outlining some methodological issues that relate to the subject of truth and falsehood in general history. I will also try to develop and defend a view of history as "an enterprise of knowledge". There will be occasional references to contemporary debates (because I shall illustrate the general points with examples from Indian history), but the overall focus will be on more general themes.

There will be occasions, in this context, to take a fresh look at India's persistent heterodoxy, which includes not only its tendency towards multireligious and multicultural coexistence (a point emphasised in Rabindranath Tagore's "vision of India's history"), but also its relevance for the development of science and mathematics in India. For history is not only an enterprise of knowledge in itself, it cannot but have a special involvement with the history of other enterprises of knowledge.

The view of history as an enterprise of knowledge is, of course, very old-fashioned: I am not trying to innovate anything whatsoever. However, this and related epistemic approaches to history have taken some hard knocks over the last few decades. These have come not so much from sectarian bigots (who have barely addressed issues of method), but in the hands of sophisticated methodologists who are not only sceptical of the alleged virtues of modernity and objectivity (often for understandable reasons), but have ended up being deeply suspicious also of the idea of "truth" or "falsehood" in history. They have been keen, in particular, to emphasise the relativity of perspectives and the ubiquity of different points of view.

Perspectives and points of view, I would argue, are indeed important, not just in history, but in every enterprise of knowledge. This is partly because our observations are inescapably "positional". Distant objects, for example, cannot but look smaller, and yet it is the job of analysis and scrutiny to place the different positional views in their appropriate perspectives to arrive at an integrated and coherent picture. The elementary recognition of the "positionality" of observations and perceptions do es not do away with ideas of truth and falsehood, nor with the need to exercise reasoned judgment faced with conflicting evidence and clashing perspectives. I shall not here reiterate the methodological arguments I have presented elsewhere, but will discuss their relevance to the interpretation of Indian history.[3]

Indeed, describing the past is like all other reflective judgments, which have to take note of the demands of veracity and the discipline of knowledge.[4] The discipline includes the study of knowledge formation, including the history of science (and the constructive influences that are important in the cultivation of science) and also the history of histories (where differences in perspective call for disciplined scrutiny and are of importance themselves as objects of study). I shall be concerned with each.

I should make one more motivational remark. I address this talk primarily to non-historians, like myself, who take an interest in history. I am aware that no self-respecting historian will peacefully listen to an economist trying to tell them what their discipline is like. But history is not just for historians. It affects the lives of the public at large. We non-historians do not have to establish our entitlement to talk about history.

Rather, a good point of departure is to ask: why is history so often invoked in popular discussions? Also, what can the general public get from history? Why, we must also ask, is history such a battleground?

Knowledge and its use

Let me begin by discussing some distinct motivations that influence the public's interest in history.

1. Epistemic interest: The fact that we tend to have, for one reason or another, some interest in knowing more about what happened in the past is such a simple thought that it is somewhat embarrassing to mention this at a learned gathering. But, surely, catering to our curiosity about the past must count among the reasons for trying to learn something about historical events. An ulterior motive is not essential for taking an interest in history (even though ulterior reasons may also exist often enough).

The simplicity of the idea of historical curiosity is, however, to some extent deceptive, because the reasons for our curiosity about the past can be very diverse and sometimes quite complex. The reason can be something very practical (such as learning from a past mistake), or engagingly illuminating (such as knowing about the lives of common people in a certain period in history), or largely recreational (such as investigating the chronology and history of India's multiplicity of calendars).[5] Also, the historical questions asked need not be straightforward, and may even be highly speculative.[6] Whether or not it is easy to satisfy our curiosity (it may not always be possible to settle a debate regarding what actually happened), truth has an obvious enough role in exercises of this kind. In fact, curiosity is a demand for truth on a particular subject.

2. Practical reason: Historical connections are often invoked in the context of contemporary politics and policies. Indeed, present-day attitudes in politics and society are often strongly influenced by the reading - or misreading - of the history of past events. For example, sectarian tensions build frequently on grievances (spontaneous or cultivated) linked to past deeds (real or imagined) of one group against another. This is well illustrated, for example, by the recent massacres in Rwanda or former Yugoslavia, where history - or imagined history - were often invoked, concerning alleged past records of hostilities between Hutus and Tutsies, or between Serbs and Albanians, respectively. Since these uses of history are aimed primarily at contemporary acts and strategies, the counteracting arguments which too invoke history, though in the opposite direction, also end up being inescapably linked to current affairs. Given the dialectical context, we may be forced to take an interest in historical disputations on battlegrounds that have been chosen by others - not ourselves. For example, in defending the role of secularism in contemporary India, it is not in any way essential to make any claim whatsoever about how India's Mughal rulers behaved - whether they were sectarian or assimilative, whether they were oppressive or tolerant. Yet in the political discussions that have accompanied the activist incursions of communal politics in contemporary India (well illustrated, for example, by the rhetoric that accompanied the demolition of the Babri Masjid), a heavily carpentered characterisation of the Mughal rule as anti-Hindu was repeatedly invoked. Since this characterisation was to a great extent spurious and based on arbitrary selection, to leave that point unaddressed would have, in the context of the ongoing debate, amounted to a negligence in practical reason, and not just an epistemic abstinence. Even the plausibility or otherwise of the historical argument that some of the juridical roots of Indian secularism can be traced to Mughal jurisprudence (a thesis I have tried to present in my paper, "Reach of Reason: East and West"), even though a matter of pure history, ends up inescapably as having some relevance for contemporary politics (even though that was not a claim I made).[7]

The enterprise of knowledge links in this case with the use of that knowledge. However, this does not, in any way, reduce the relevance of truth in seeking knowledge. The fact that knowledge has its use does not, obviously, make the

enterprise of acquiringknowledge in any way redundant. In fact, quite the contrary.

3. Identity scrutiny: Underlying the political debates, there is often enough a deeper issue related to the way we construct and characterise our own identities, in which too historical knowledge - or alleged knowledge - can play an important part. Our sense of identity is strongly influenced by our understanding of our past. We do not, of course, have a personal past prior to our birth, but our self-perceptions are associated with the shared history of the members of a particular group to which we think we "belong" and with which we "identify". Our allegiances draw on the evocation of histories of our identity groups.

A scrutiny of this use of history cannot be independent of the philosophical question as to whether our identities are primarily matters of "discovery" (as many "communitarian" thinkers claim),[8] or whether they are to a significant extent matters of selection and choice (of course, within given constraints - as indeed all choices inescapably are).[9] Arguments that rely on the assumption of the unique centrality of one's community-based identity survive by privileging - typically implicitly - that identity over other identities (which may be connected with, say, class, or gender, or language, or political commitments, or cultural influences). In consequence, they restrict the domain of one's alleged "historical roots" in a truly dramatic way. Thus, the increasing search for a Hindu view of Indian history not only has problems with epistemic veracity (an issue I discussed earlier), but also involves the philosophical problem of categorical oversimplification.

It would, for example, have problems in coming to terms with, say, Rabindranath Tagore's description of his own background as "a confluence of three cultures, Hindu, Mohammedan and British".[10] No less importantly, it cannot but be in some tens ion with the sense of pride that an Indian may choose to have, irrespective of his or her own religious background, at the historical achievements of, say, Ashoka or Akbar, or Kalidasa or Kabir, or Aryabhata or Bhaskara. To deny the role of reasoned choice, which can draw on the knowledge of the past, can be a very serious loss indeed. Even those who want to identify with India's historical achievements and perhaps take some pride in them (a legitimate enough concern) must also examine critically what to take pride in, since it is easy to be misled into a narrow alley through incitements to ignore India's capacious heterodoxy in favour of a constricted sectarian identity.

While discovery and choice compete as the basis of identity, knowledge and choice are essentially complementary to each other. Engagement with issues of identity enriches the enterprise of knowledge and extends its reach.

Science and Intellectual Heterodoxy

Let me now move to a more active view of the enterprise of knowledge, and turn to the history of science, which is among the historical subjects of study. As has already been argued, history is not only an enterprise of knowledge, its subject matter includes other enterprises of knowledge. The issue of heterodoxy, to which reference was made earlier, is particularly important here. Indeed, I would argue that there is a general connection between intellectual heterodoxy and the pursuit of science, and that this connection deserves more attention than it tends to get.

Heterodoxy is important for scientific advance because new ideas and discoveries have to emerge initially as heterodox views, at variance with established understanding. One need reflect only on the history of the scientific contributions of, say, Galileo or Newton or Darwin, to see the role of heterodoxy in the process. The history of science is integrally linked with heterodoxy.

If this interpretation is correct, then the roots of the flowering of Indian science and mathematics that occurred in and around the Gupta period (beginning particularly with Aryabhata and Varahamihira) can be intellectually associated with persistent expressions of heterodoxies which pre-existed these contributions. In fact, Sanskrit and Pali have a larger literature in defence of atheism, agnosticism and theological scepticism than exists in any other classical language.

The origins of mathematical and scientific developments in the Gupta period are often traced to earlier works in mathematics and science in India, and this is indeed worth investigating, despite the historical mess that has been created recently by the ill-founded championing of the so-called "Vedic mathematics" and "Vedic sciences", based on very little evidence. What has, I would argue, more claim to attention as a precursor of scientific advances in the Gupta period is the tradition of scepticism tha t can be found in pre-Gupta India - going back to at least the sixth century B.C. - particularly in matters of religion and epistemic orthodoxy. Indeed, the openness of approach that allowed Indian mathematicians and scientists to learn about the state o f these professions in Babylon, Greece and Rome, which are

plentifully cited in early Indian astronomy (particularly in the Siddhantas), can also be seen as a part of this inclination towards heterodoxy.

Observation, Experience and Scientific Methods

Indeed, the development of Indian sciences has clear methodological connections with the general epistemological doubts expressed by sceptical schools of thought that developed at an earlier period. This included the insistence on relying only on observa tional evidence (with scepticism of unobserved variables), for example in the Lokayata and Charvaka writings, not to mention Gautama Buddha's powerfully articulated agnosticism and his persistent questioning of received beliefs. The untimely death of Professor Bimal Matilal has robbed us of the chance of benefiting from his extensive programme of systematic investigation of the history of Indian epistemology, but his already published works bring out the reach of unorthodox early writings on epistemology (by both Buddhist and Hindu writers) in the period that can be linked to the flowering of Indian science and mathematics in the Gupta era.[11]

Similarly, the expression of hereticism and heterodoxy patiently - if somewhat grudgingly - recorded even in the Ramayana (for example, in the form of Javali's advice to Rama to defy his father's odd promise) presents methodological reasons to be sceptical of the orthodox position in this field.[12] Indeed, in *A Vision of India's History*, Rabindranath Tagore also notes the oddity of the central story of Rama's pious acceptance of banishment based on "the absurd reason... about the weak old king (Rama's father) yielding to a favourite wife, who took advantage of a vague promise which could fit itself to any demand of hers, however preposterous." Tagore takes it as evidence of "the later degeneracy of mind," when "some casual words uttered in a moment of infatuation could be deemed more sacred than the truth which is based upon justice and perfect knowledge."[13]

In fact, Javali's disputation goes deeply into scientific methodology and the process of acquiring of knowledge:

There is no after-world, nor any religious practice for attaining that. Follow what is within your experience and do not trouble yourself with what lies beyond the province of human experience.[14]

As it happens, the insistence that we rely only on observation and experience is indeed a central issue in the departures in astronomy - initiated by Aryabhata and others - from established theological cosmology.

The departures presented in his book Aryabhatiya, completed in 421 Saka or 499 A.D., which came to be discussed extensively by mathematicians and astronomers who followed Aryabhata (particularly Varahamihira, Brahma-gupta and Bhaskara, and were also discussed in their Arabic translations), included, among others: (1) Aryabhata's advocacy of the diurnal motion of the earth (rather than the apparent rotation of the sun around it), (2) a corresponding theory of gravity to explain why objects are not thrown out as the earth churns, (3) recognition of the parametric variability of the concept of "up" and "down" depending on where one is located on the globe, and (4) explanation of lunar and solar eclipses in terms respectively of the earth's shadow on the moon and the moon's obscuring of the sun. Observational arguments, based on what Javali calls "the province of human experience", are central to the departures initiated by Aryabhata in these and related fields (more on this presently). In the enterprise of knowledge involving the natural sciences, the intellectual connections between scepticism, heterodoxy and observational insistence, on the one hand, and manifest scientific advances, on the other, require much further exploration and scrutiny than they seem to have received so far.

History of Histories and Observational Perspectives

The observational issue is important also for the particular subject of history of histories, or metahistories (as we may call them). Given the importance of perspectives in historical writings, history of histories can tell us a great deal not only about the subject of those writings, but also about their authors and the traditions and perspectives they reflect. For example, James Mill's *The History of British India*, published in 1817, tells us probably as much about imperial Britain as about India. This three-volume history, written by Mill without visiting India (Mill seemed to think that this non-visit made his history more objective), played a major role in introducing the British governors of India (such as the influential Macaulay) to a particular characterisation of the country. There is indeed much to learn from Mill's history - not just about India, but more, in fact, about the perspective from which this history was written. This is an illustration of the general point that the presence of positionality and observational perspective need not weaken the enterprise of knowledge, and may in fact help to extend its reach.[15]

James Mill disputed and rejected practically every claim ever made on behalf of Indian culture and intellectual traditions, but paid particular attention to dismissing Indian scientific works. Mill rebuked early British administrators (particularly, Sir William Jones) for having taken the natives "to be a people of high civilization, while they have in reality made but a few of the earliest steps in the progress to civilization."[16] Indeed, since colonialism need not be especially biased against any particular colony compared with any other subjugated community, Mill had no great difficulty in coming to the conclusion that the Indian civilisation was at par with other inferior ones known to Mill: "very nearly the same with that of the Chinese , the Persians, and the Arabians", and also the other "subordinate nations, the Japanese, Cochin-chinese, Siamese, Burmans, and even Malays and Tibetans" (p. 248). Mill was particularly dismissive of the alleged scientific and mathematical works in India. He denied the generally accepted belief that the decimal system (with place values and the placed use of zero) had emerged in India, and refused to accept that Aryabhata and his followers could have had anything interesting to say on the diurnal motion of the earth and the principles of gravitation. Writing his own history of histories, Mill chastised Sir William Jones for believing in these "stories", and concluded that it was "extremely natural that Sir William Jones, whose pundits had become acquainted with the ideas of European philosophers respecting the system of the universe, should hear from them that those ideas were contained in their own books." [17]

A Contrast of Perspectives

It is, in fact, interesting to compare Mill's History with another history of India, called Ta'rikh al-hind (written in Arabic eight hundred years earlier, in the 11th century) by the Iranian mathematician Alberuni.[18] Alberuni, who was born in Central Asia in A.D. 973, and mastered Sanskrit after coming to India, studied Indian texts on mathematics, natural sciences, literature, philosophy, and religion. Alberuni writes clearly on the invention of the decimal system in India (as do other Arab authors) and also about Aryabhata's theories on earth's rotation, gravitation, and related subjects. These writings contrast sharply with Mill's history from a dominant colonial perspective, well established by the beginning of the 19th ce ntury. The interest in Mill's dismissive history in imperial Britain (Macaulay described Mill's *History of British India* to be "on the whole the greatest historical work which has appeared in our language since that of Gibbon"[19]) contra sts with extensive constructive interest in these Indian works among Islamic mathematicians and scientists in Iran and in the Arab world.

In fact, Brahmagupta's pioneering Sanskrit treatise on astronomy had been first translated into Arabic in the 8th century by Muhammad ibn Ibrahim al-Fazari, and again by Alberuni three hundred years later in the 11th century (since Alberuni had certain c riticisms of the previous translation). Several Indian works on medicine, science and philosophy had Arabic rendering by the 9th century, and so on. It was through the Arabs that the Indian decimal system and numerals reached Europe, as did Indian writings in mathematics, science and literature, in general.

Indeed, history of histories, particularly about science, can tell us a great deal about the nature of political and social relations between the different countries (such as Iran and Gupta India, on the one hand, Britain and colonial India, on the other). As it happens, Alberuni's history also provides interesting illumination on scientific discussions within India, and particularly on the constructive role of heterodoxy in this context. Even though Alberuni himself tended to reject Aryabhata's theory regarding the diurnal motion of the earth, he describes patiently the Indian arguments in defence of the plausibility of Aryabhata's theory, including the related theory of gravity.

Conservatism, Courage and Science

It is, in this context, particularly interesting to examine Alberuni's discussion of Brahmagupta's conservative rejection of the exciting departures proposed by Aryabhata and his followers on the subject of lunar and solar eclipses. Alberuni quotes Brahmagupta's criticism of Aryabhata and his followers, in defence of the orthodox religious theory, involving Rahu and the so-called "head" that is supposed to devour the sun and the moon, and finds it clearly unpersuasive and reactionary. He quotes Brahmagupta's supplication to religious orthodoxy, in Brahmasiddhanta:

Some people think that the eclipse is not caused by the Head. This, however, is a foolish idea, for it is he in fact who eclipses, and the generality of the inhabitants of the world say that it is the Head that eclipses. The Veda, which is the word of Go d from the mouth of Brahman, says that the Head eclipses... On the contrary. Varahamihira, Shrishena, Aryabhata and Vishnuchandra maintain that the eclipse is not caused by the Head, but by the moon and the shadow of the earth, in direct opposition to all (to the generality of men), and from the enmity against the just-mentioned dogma.[20]

Alberuni, who is quite excited about Aryabhata's scientific theories of eclipses, then accuses Brahmagupta (a great

mathematician himself) for lacking the moral courage of Aryabhata in dissenting from the established orthodoxy. He points out that, in practice, Brahmagupta too follows Aryabhata's methods in predicting the eclipses, but this does not prevent Brahmagupta from sharply criticising - from an essentially theological perspective - Aryabhata and his followers for being heretical and heterodox. A lberuni puts it thus:

...we shall not argue with him [Brahmagupta], but only whisper into his ear:... Why do you, after having spoken such [harsh] words [against Aryabhata and his followers], then begin to calculate the diameter of the moon in order to explain the eclipsing o f the sun, and the diameter of the shadow of the earth in order to explain its eclipsing the moon? Why do you compute both eclipses in agreement with the theory of those heretics, and not according to the views of those with whom you think it is proper to agree?[21]

The connection between heterodoxy and scientific advance is indeed close, and big departures in science require methodological independence as well as analytical and constructive skill. Even though Aryabhata, Varahamihira and Brahmagupta were all dead fo r many hundred years before Alberuni was writing on their controversies and their implications, nevertheless Alberuni's carefully critical scientific history helps to bring out the main issues involved, and in particular the need for heterodoxy as well a s moral courage in pursuit of science.

To conclude, I have tried to illustrate the different ways in which history has relevance for non-historians - indeed the general public.

First, there are diverse grounds for the public's involvement with history, which include (1) the apparently simple attractions of epistemic interest, (2) the contentious correlates of practical reason, and (3) the scrutiny of identity-based thinking. All of them - directly or indirectly - involve and draw on the enterprise of knowledge.

Second, history is not only itself an enterprise of knowledge, its domain of study incorporates all other enterprises of knowledge, including the history of science. In this context, it is easy to see the role of heterodoxy and methodological independenc e in scientific advance. The intellectual connections between heterodoxy (especially theological scepticism) and scientific pursuits (especially big scientific departures) deserve more attention in the history of sciences in India.

Third, metahistories - or histories of histories - also bring out the relevance of an appropriate climate for the enterprise of knowledge. The pursuit of knowledge not only requires an open mind (the contrast between Alberuni's scientific interest and Mill's colonial predispositions radically differentiate their treatments of the same subject matter), it also requires an inclination to accept heterodoxy and the courage to stand up against orthodoxy (Alberuni's critique of Brahmagupta's criticism of Arya bhata relates to this issue). The plurality of perspectives extends the domain of the enterprise of knowledge rather than undermining the possibility of that enterprise.[22]

Since the rewriting of Indian history from the slanted perspective of sectarian orthodoxy not only undermines historical objectivity, but also militates against the spirit of scientific scepticism and intellectual heterodoxy, it is important to emphasise the centrality of scepticism and heterodoxy in the pursuit of scientific knowledge. The incursion of sectarian orthodoxy in Indian history involves two distinct problems, to wit, (1) narrow sectarianism, and (2) unreasoned orthodoxy. The enterprise of knowledge is threatened by both.

Endnotes

[1]. The confusing story of a recent statement by a Director of the Indian Council of Historical Research (ICHR) announcing exact knowledge where Rama, the avatar, was born (not surprisingly precisely where the Babri Masjid stood - from which the property rights for building a temple exactly there is meant to follow!), combined with the assertion that the Masjid itself had no religious significance (followed by an embarrassed dissociation of the ICHR itself from these remarkable pronouncements), illustrates the confounding of myth and history.

[2]. Rabindranath Tagore, "A Vision of India's History" (Calcutta: Visva-Bharati, 1951), p. 10; this essay was first published in Visva-Bharati Quarterly, 1923.

[3]. See "Positional Objectivity," Philosophy and Public Affairs, 1993. I have also illustrated the methodological issues involved in the context of Indian history in On Interpreting India's Past (Calcutta: Asiatic Society, 1996), also included in Sugata Bose and Ayesha Jalal, eds., *Nationalism, Democracy and Development: Reappraising South Asian State and Politics* (Delhi: Oxford University Press, 1996).

[4]. I have discussed the demands of descriptive discipline in "Accounts, Actions and Values: Objectivity of Social Science," in C. Lloyd, ed., *Social Theory and Political Practice* (Oxford: Clarendon Press, 1983).

[5]. I have tried to argue elsewhere that the history of Indian calendars also provides some insights on the lives of the people and particularly on the state of science and mathematics at different times, and can even illuminate the political ideals that may be indirectly reflected in devising new calendars. The last is well

illustrated, for example, by Emperor Akbar's initiation of a synthetic solar calendar in the form of Tarikh-ilahi, in 1584, and its continuing influence on the Bengali san (on these issues, see my "India through Its Calendars," *The Little Magazine*, 1, 1, May 2000).

[6]. A good example of an interesting but rather bold speculation is Rabindranath Tagore's conjecture about a story in the epics that "the mythical version of King Janamejaya's ruthless serpent sacrifice" may quite possibly stand for an actual historical event involving an "attempted extermination of the entire Naga race" by the dominant powers in ancient India (Tagore, *A Vision of India's History*, p. 9).

[7]. Amartya Sen, "Reach of Reason: East and West," The New York Review of Books, July 20, 2000.

[8]. See Michael Sandel, *Liberalism and the Limits of Justice* (Cambridge: Cambridge University Press, 2nd edition, 1998), for a fine presentation of the "discovery" view of identity, and in particular of the thesis (among others) that "community describes not just what they have as fellow citizens but also what they are, not a relationship they choose (as in a voluntary association) but an attachment they discover, not merely an attribute but a constituent of their identity" (pp. 150- 2).

[9]. I have discussed the role of choice in the selection of identities and in the determination of priorities in my Romanes Lecture at Oxford, *Reason before Identity* (Oxford: Oxford University Press, 1999), and in my Annual British Academy Lecture (to be published by the British Academy): for a shorter version, see "Other People," *The New Republic*, September 25, 2000.

[10]. See Rabindranath Tagore, *The Religion of Man* (London: Unwin, 1931, 2nd edition, 1961), p. 105.

[11]. See particularly Bimal Matilal, *Perceptions* (Oxford: Clarendon Press, 1986).

[12]. Even though I shall not discuss in this paper the role and reach of Arjuna's disagreements with Krishna's high deontology in the Mahabharata, and in particular in the Bhagavad-Geeta, that too is philosophically an important departure; on this see my "Consequential Evaluation and Practical Reason," *The Journal of Philosophy*, 97 (September 2000).

[13]. Tagore, *A Vision of India's History*, p. 22.

[14]. The translation is taken from Makhanlal Sen, *Valmiki Ramayana* (Calcutta: Rupa, 1989), pp. 174-5.

[15]. On this general subject, see my "Positional Objectivity" (1993), and also "Accounts, Actions and Values: Objectivity of Social Science" (1983).

[16]. James Mill, *The History of British India* (London, 1817; republished, Chicago: University of Chicago Press, 1975), pp. 225-6.

[17]. Mill, The History of British India,pp. 223-4.

[18]. For an English translation, see Alberuni's *India*, translated by E.C. Sachau, edited by A.T. Embree (New York: Norton, 1971).

[19]. Quoted in John Clive's introduction to Mill, *The History of British India* (republished, 1975), p. viii.

[20]. Alberuni's *India*, pp. 110-1.

[21]. Alberuni's *India*, p. 111.

[22]. On this see also my "Accounts, Actions and Values: Objectivity of Social Science" (1983) and "Positional Objectivity" (1993). ■

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