Epistemology Of Perception: Gangeśa's Tattvacintāmaņi, Jewel Of Reflection On The Truth (About Epistemology): The Perception Chapter (Pratyakṣa-khaṇḍa), Transliterated Text, Translation, And Philosophical Commentary. By STEPHEN H. PHILLIPS AND N.S. RAMANUJA TATACHARYA. Treasury of the Indic Sciences. New York: AMERICAN INSTITUTE OF BUDDHIST STUDIES, 2004. Pp. 723 + xiv. \$62.00.

This book is the first full translation of the first chapter of one of the most important and influential Sanskrit works in Indian Philosophy. The result of a collaboration between two of the world's leading experts on Gangeśa, it is a monumental and momentous achievement, one whose importance cannot be understated. Without doubt, it will add enormous impetus to the contemporary study of Navya Nyāya, the philosophical system Gangeśa established, a system which dominated the Indian philosophical world for several centuries in the middle of the last millennium.

Gangeśa's *Tattvacintāmaņi* is made up of four chapters, one for each of the four sources of knowedge (*pramāņa*) recognised in Nyāya philosophy. A great deal of both classical and modern scholarship in Navya Nyāya is dominated by the commentarial literature on the second chapter, which deals with inference. This is perhaps a pity, for the chapters on perception and on language are extremely rich and challenging works in their own right. The perception chapter, for instance, treats a host of topics in epistemology, metaphysics and the philosophy of mind as they bear upon the nature of perceptual awareness and perceptual knowledge. Prefaced with a treatment of 'auspicious performance' (*mangala*), it is divided into the following sections: knowing veridicality, production of veridical cognition, characterizing veridical awareness, perceptual presentation of something as other than what it is, characterizing perception, sensory connection, inherence, non-cognition, absence, the connection of the sense object and light, the perceptibility of air, the fiery character of gold, the mind's atomicity, apperception.

The present work contains, in addition to the text itself in transliteration (largely following the Tirupati edition, but cross-referred to the Calcutta) and a translation of the text, an extensive paragraph-by-paragraph 'philosophical commentary' and an Introduction that sets out Gangeśa's system in broad outline. It was not the intention of the authors to prepare a critical edition of the text, although it is certainly to be hoped that a critical edition of a text of such importance will, one day, be produced. They do, however, construct the text in the light of their understanding of its content, and so assert that their "transliterated text is an edition distinct from the Tirupati edition, representing how Ramanuja Tatacharya and I [Stephen Phillips] read Gangeśa" (p.6). They have made editorial decisions about how to parse the text into discourse segments – for example, in identifying $p\bar{u}rva-pakşas$ and *siddhāntas* – and they have adopted interpretative principles of intelligibility, readability, and charity, so that, in particular, they "interpret a philosopher as trying, in any particular instance, to say something true and warranted as well as coherent with his or her overall view" (p.5).

Some portions of the present text have been translated before. Jitendranath Mohanty's *Gaṅgeśa's Theory of Truth*, Santiniketan 1966, was a pioneering and extremely influential translation and philosophical study of the 'Knowing veridicality' section. In comparison with that work, the present book is distinctive in consciously making less use of the traditional commentaries: for "[i]t is commonly acknowledged ... that the classical commentators sometimes overinterpret Gaṅgeśa's questions. Much in their long discussions is *innovative* philosophically." p.73). The new translation differs from Mohanty's classic in two chief respects: it construes the term *pramā* as "veridical" rather than as "true" (or, as Karl Potter has suggested, "workable"); and it takes issue with Mohanty's understanding of the term *prathamam* as indicating a discussion of the problem of knowing *for the first time* à la Meno, rather than as of knowing *in unfamiliar circumstances* (pp. 102–5, 699). Another section of the present text, 'Absence', was translated by Bimal Krishna Matilal, forming the basis of his massively important work, *The Navya-Nyāya Doctrine of Negation*, Harvard 1968, a book which remains,

along with Daniel Ingalls' *Materials for the Study of Navya-Nyāya Logic*, Harvard 1951, indispensable to the modern study of Navya Nyāya. Matilal too makes much more use of the traditional commentaries than the present work wants to. He also makes much more use of the vocabulary of contemporary analytical philosophy, which lead him, say the authors of the work under review, to "fail to do justice to Gaṅgeśa's objectivism and realism" (p.704). It is indeed a recurring theme in the present book that contemporary interpreters of Navya Nyāya tend to understate the degree to which Gaṅgeśa's epistemology is externalist, or to 'misread' its critical terminology with an internalist bias inherited from Western epistemology.

I would like to use the remainder of this review to take a few tentative steps in the direction of that new and substantive engagement with Gaṅgeśa's thought which this book has made possible. My remarks will concern Tatacharya/Phillip's Gaṅgeśa rather than Gaṅgeśa himself (as philosophers might discuss the merits of Kripke's Wittgenstein without getting into the issue of its relationship with the Wittgenstein discovered by the historians of philosophy). We are told in this book that Gaṅgeśa "defends a realist view of everyday objects and a causal view of learning about them" (p. 7), one in which the so-called 'knowledge-generators' are "natural processes, part of the universe's causal web" (ibid.). We are also told that Gaṅgeśa has an externalist epistemology (p.10), and that this epistemology is also defeasibilist (p.20). We are told that Gaṅgeśa's metaphysical realism leads him to "embrace fallibilism" (p. 21; cf. p. 17). But we are also told that he is an infallibilist (p.8).

It turns that the sense in which Gangeśa is to be considered a fallibilist is quite a trivial one: he is a fallibilist about *cognitions*, meaning that cognitions can be true or false. In the sense in which the term "fallibilism" is more usually taken, that is as bearing upon the *sources* of knowledge themselves, Gangeśa, it is said, is an infallibilist: no cognition which is produced by one of the attested sources of knowledge can be false. In a similar vein, it turns out that the sense in which Gangeśa is a "defeasibilist" is not the usual one, in which to be a defeasibilist is to

admit that the warrant one has for one's thoughts can be undermined; rather, it means here that a source of knowledge can be defeated in its *attempt* to generate true cognitions.

I will ask two questions about this naturalist, externalist, infallibilist realism. First, is the infallibilism on offer compatible with naturalism? Second, is it compatible with realism?

Gangeśa's alleged infallibilism appears to emerge as a consequence of two theses. The first thesis is as follows:

[1] x is pramā if and only if x is true.

I am not sure why Phillips and Tatacharya choose the term "veridical" in preference to the simple "true" throughout this translation. They criticise Mohanty's translation for "render[ing] $pr\bar{a}m\bar{a}nya$ 'veridicality' as 'truth' infelicitously" (p.699) but do not say in what the infelicity consists. Perhaps the point is simply that to translate pramā as true will render [1] vacuous (although "*x* is veridical if and only if *x* is true" is hardly less so.) In any case, the reason [1] is controversial is that many would see *pramā* as implying more than merely being true; in particular, it would be seen as designating being known. Although every pramā is a cognition (*jñāna*) which is true, it is substantive to claim that the right-to-left conditional also holds. Tatacharya and Phillips refer to Gaṅgeśa's famous discussion (in the section entitled 'Characterizing veridical awareness' or *pramā-lakṣaṇa-vāda*), where Gaṅgeśa offers these analyses:

ucyate | yatra yad asti tatra tasya anubhavaḥ pramā | tadvati tat-prakārakânubhavo vā |

In the translation here supplied (pp. 236–7),

We answer. (The right way to characterize veridical awareness is as follows:) veridical awareness is (D^{25}) "awareness of something there where it is." Or, (D^{26}) "awareness with Φ as predication about an object that is Φ ."

A little later, Gangeśa provides a further formulation:

yad-avacchedena yatra asti iti vā vivaksitam

Or we should say (veridical cognition is D^{27}) "(awareness of) something where it is according to the relevant specification." (p. 239).

Phillips and Tatacharya comment that "Gaṅgeśa may be said to endorse a 'disquotational view' of truth … Nevertheless, a very abstract kind of correspondence view is embraced, too, as captured by his definitions." (p.241). It would not exactly be right to say that what Gaṅgeśa is doing here is to provide definitions of truth, for the concept being discussed is *pramā*, and it is a substantive issue whether that is the same concept as truth. So rather one should say that what Gaṅgeśa seems to be endorsing here is a semantic rather than an epistemic account of *pramā*. This is why, they say, the commitment is to [1] above.

The consequence of an endorsement of [1] is that hitting the truth by mere luck is sufficient for achieving the status of pramā. If I guess correctly that you have five shells in your palm, then, according to [1], my ensuing cognition is pramā (the example is Śrīharṣa's). So it seems that one is forced either to take it that Gaṅgeśa is providing a stipulative and revisionary definition of the term *pramā* as *true cognition* rather than *knowledge*; or say that he is using the term with its usual epistemic overtones but providing an account of knowledge in which knowledge consists simply in true cognition, warranted or accidental; or else finally deny that his discussion above does indeed prove that he regards *pramā* as co-extensive with *true cognition*. In the recent literature, B. K. Matilal has defended the second of these possibilities (in his *Perception: An Essay on Classical Indian Theories of Knowledge*, Clarendon 1986, pp. 138–40), a view which leads him to say, perhaps unfortunately, that although the lucky guesser *knows* that there are five shells, they do not know

second-order as at the first, so the guesser only cognises truly that they cognise truly that there are five shells, and the presence or absence of this additional second-order true cognition in the mind of the cogniser does not seem to have any bearing upon the deviant epistemology of the first-order one.) On the other hand, Sukharanjan Saha has given evidence in favour of the third possibility, noticing that Gaṅgeśa elsewhere says that for a cognition to be pramā in inference is a matter not merely of content but of the existence or otherwise of a fallacy in the reasoning (see his *Epistemology in Pracīna and Navya Nyāya*, Kolkata 2003, p. 95).

The second thesis from which Gangeśa's alleged infallibilism issues is this:

[2] x is pramā if x is pramāņa-generated.

That is to say, if a cognition or awareness is generated by a pramāṇa, a 'knowledge source', then it is pramā. Phillips and Tatacharya state that the conditional does not hold the other way, because there can be 'accidentally veridical' cognitions, such as that which results from misperceiving dust for smoke and then inferring the presence of fire which is, coincidentally, there (pp. 8, 218). Combining [1] and [2], we arrive at the conclusion that no awareness which is the result of a pramāṇa can be false.

Now such a picture of the sources of knowledge seems to be at variance with a naturalist account, in which they are 'natural processes' and 'part of the universe's causal web.' As natural organisms, we are certainly equipped with mechanisms and processes that put us in cognitive contact with the world we inhabit, processes that serve pretty well in a variety of circumstances, but which are by no means infallible. Philosophers who search for infallible sources of knowledge are led away from ordinary perception, inference and language, and instead towards 'the natural light of reason' or 'clear and distinct ideas' or 'authorless Vedic revelation'. So it seems to me that one of two things must be true: either; Gangeśa is not after all committed to an infallibilism about the pramāṇas; or else they are not, in fact, the ordinary

natural processes they at first sight appear to be, but rather much more recherché elements in the causal web.

One way to press the case for the first alternative would be to question his commitment to [2]. The argument for this seems to be etymological: the term *pramāņa* looks like the name for an instrumental cause (*pramā-karaņa*). But as Phillips and Tatacharya themselves note, Gaṅgeśa's discussion of cognitive *karaṇa* is rather more elusive (pp. 24, 335). Again, the definitions of the individual *pramāṇas* do not seem to make them truth-entailing (see also below). Some Navya-Naiyāyikas make use of a theory of epistemic 'faults' (*doṣa*) and 'excellences' (*guṇa*), in particular to argue that it is production by a pramāṇa together with the appropriate excellence which is sufficient for true awareness; production by a pramāṇa without such an excellence and with a fault may or may not result in an awareness which is true. So then [2] should be replaced with [3]:

[3] x is pramā if x is excellent-pramāņa-generated.

The distinguished contemporary Naiyāyika Sibajiban Bhattacharyya is one recent commentator who has taken issue with [2] on such grounds (see his "Some remarks on the definition of knowledge," in *Concepts of Knowledge East and West*, Kolkata 2000, pp. 74–82). Another of equal distinction is Sukharanjan Saha (in his articles "Gaṅgeśa's reactions to some Gettier-like problems" and "A note on the definition of pramā", reprinted in his 2003 cited above). Gaṅgeśa's own use of the theory of faults and excellences (e.g. pp. 141ff., 218, 314) is interpreted by Phillips and Tatacharya as revealing an *internalist* element in his thought (pp. 11–2), although they agree that the excellences and faults are "externally described." So they take the idea of an excellence or fault to be that of something that helps the cogniser recognise whether their awareness is true or false, rather than as a causal factor determining truth and falsity. I find it surprising, however, that an internalist interpretation of the excellences and faults is endorsed, given the overwhelmingly externalist nature of Gaṅgeśa's discussion (the relevant distinction is made within Nyāya in terms of whether it is the mere presence of the excellence itself or rather the *cognition* of the excellence that is the appropriate causal condition.) This in particular because Phillips, in his review of Saha, criticises him for his rejection of [2] on the grounds that Saha has adopted "a wrong-headed internalist reading of Nyāya" (see Phillips' review of Saha in the *Journal of the Indian Academy of Philosophy*).

In fact, the point of disagreement has nothing to do with internalist or externalist mis-readings; what Saha argues for is a reliabilist (and so externalist) interpretation of Gaṅgeśa – he says, "[W]e are of the opinion that *pramāṇa* is to be understood here only as a truth-conducive and not as a truth-ensuring factor" (p.61). Phillips reads Gaṅgeśa as an infallibilist externalist; Saha and Bhattacharyya read him as a fallibilist externalist. Perhaps it is only with reference to the remainder of Gaṅgeśa's text that this issue will be resolved (and I am delighted that Phillips and Tatacharya are presently completing a translation of and commentary on the challenging Inference chapter).

A way to argue for the second alternative mentioned above would be to look in more detail at the analyses Gangeśa seeks to provide for the pramāņas. Consider what he says about pratyakṣa 'perception'. In order to make room for the idea of divine pratyakṣa, Gangeśa distances himself from the *Nyāyasūtra* reference to production by a sense organ. Instead, he offers this:

ucyate | pratyakṣasya sākṣātkāritvaṃ lakṣaṇam | We answer. (D⁵) "Cognitive immediacy" does define perception. (p. 330).

And again, this:

jñānâ-karaṇakaṃ jñānam iti tu vayam |

But we (endorse the following definition of perception, D^{11}): "cognition that does not have a cognition as its chief instrumental cause (*karaṇa*, "trigger")." (pp. 334–5).

It is clear that these statements make the notion of *pratyakṣa* refer in the first place to mental episodes whose manner of production is itself non-cognitive and immediate. What is not so clear is how it follows from either idea that perceptions are true and so, by [1], pramā. Gaṅgeśa's forerunner, Udayana, as Phillips and Tatacharya observe, included the clause 'being pramā' as an additional qualifier in his account (cf. pp. 335–6, referring to the *Lakṣaṇamālā*); but if the thesis [2] is correct, this ought indeed be superfluous. But what now needs to be clarified is whether there is anything more than a contingent relationship between Gaṅgeśa's pratyakṣa-states and states of ordinary perceptual experience.

It seems difficult to imagine how an inspection of the aetiology of subjects' ordinary perceptual experiences, across a range of subjects and in a wide variety of experimental conditions, would lead to the discover of a single *type* of causal factor sufficient for truth, that anything in the aetiology of ordinary perception could satisfy [2]. I should stress that the 'inspection' I refer to is one envisaged as being carried out by a third-party – the issue is not the internalist one of the subjects' own access to a method for determining the contents and causes of their cognitions. On the other hand, a long list of token sufficient causes, one for each token of a true perception, could hardly be of theoretical interest. In other words, if there are infallible natural causal processes which generate only true awarenesses, and if these processes can be typed in any significant way and so made subject to causal laws and generalisations, then they must be very different in character from ordinary perception, inference and language. I doubt that there are any naturally infallible causal cognitive processes; but even if there are, they will not be discovered by the philosophical methods Gangesa employs in his work, nor will they have anything much to do with the sources of human knowledge he describes.

My second question has to do with the relationship between Gangesa's epistemology and his metaphysics. The former is, we are told, 'externalist' and 'defeasibilist'; that latter is 'realist'. The worry I have is easy to state: how can a

metaphysical realist, someone for whom what there is is not a matter in any way determined by or dependent upon what we know or can know, nevertheless maintain that there are exactly four knowledge-sources (one for each chapter of the *Tattvacintāmani*)? A scientific naturalist will be open to the possibility of discovering new ways of learning about the world, in response to new discoveries about what there is. It would seem that if one is committed in advance, and apparently as the result of a priori philosophical reasoning, to the number and scope of the sources of knowledge, then one must also think of the objects as knowledge as subject to epistemic constraints. Phillips and Tatacharya tell us that "a fundamental concern of Gangeśa's throughout the Tattvacintāmaņi is defense of Nyāya's thesis that veridical cognitions fall into groups as results of perception and other sources considered as types" (p.9); but also that "Gangeśa is ontologically 'realist' in the sense of being committed to entities whose existence is independent of consciousness" (p.21). But if it is a priori that everything which exists is in principle knowable by way of one of a small number of already designated 'knowledgesources', then that seems to amount to an epistemic constraint on what there is. Philosophical projects that begin by describing privileged sources of knowledge and then declaring that what there is is what can be known by way of them have a familiar habit of collapsing into idealism. (I am told by Mark Siderits that Jitendra Mohanty has long been troubled by the sort of concern I am here raising about 'Nyāya realism'.) Reading the commentary to Gangeśa's text in this book, it sometimes feels as if, in order to correct the perceived internalist 'mis-reading' of Gangeśa, we are offered instead a portrait of him as an early modern cognitive scientist. But for all his causal idiom, isn't Gangeśa is the inheritor of too much philosophy for that?

Another problem arises because of Gangeśa's purported method of dealing with "accidentally veridical" cognitions, such as the inference that there is fire on the mountain based on mistaking dust for smoke, or the lucky guess. Why should we not say that the processes involved in such a case are indeed *pramāņa*, since they do after all generate true awarenesses which are, by [1], pramā? Gangeśa, on the

Phillips-Tatacharya reading, wants to solve this problem not by offering a criterion, such as reliability, proper functioning, or virtuousness, for discriminating between putative knowledge-sources, but rather by designating or stipulating certain sources of true awareness as *pramāņa* but not others. That stipulation, however, is not grounded in a naturalistic investigation but rather seems to constitute for them a 'foundation' in Gaṅgeśa's epistemology. This is what permits Phillips and Tatacharya to assert that they would

"render 'knowledge' by Nyāya's lights as a *jñāna*, 'cognition,' that is *pramāņa-ja*, 'source-generated,' i.e., as a 'veridical cognition,' *pramā*, that is so in virtue of being *pramāņa*-generated" (p.10).

The whole epistemology is now made to rest upon the selection of designated pramāṇa, a selection restricted to a class narrower than mere causes of true awareness, but not grounded in considerations of reliability or natural functioning. On the Phillips-Tatacharya reading, it seems to be just *basic*, i.e. foundational. But what assurance can there be that just these stipulated sources are sufficient for knowledge of an independently determinate world? It will not do to take "infallibility" to be the relevant second-order criterion, for that would make [2] into a vacous tautology, and would also license such ad hoc bogus sources as 'guessing truly'. The trouble with such gerrymandered sources as "guessing truly" or even "seeing veridically" is not merely, to repeat, that they fail to provide the cogniser with an applicable criterion, but rather that they have no coherently delineated natural causal realisation. It is not only an internalist who can have no truck with them; they are of no use to an externalist either.

I am deeply impressed by the work under review, a work so good that it makes possible the sort of detailed philosophical engagement I have just provisionally entered into. I hope that it will put the philosophy of Navya Nyāya firmly on the curriculum of Indian philosophical studies. Indeed, I would say that this work makes it possible to put Navya Nyāya into *any* philosophical curriculum. It helps us to see how distinctive and original is Gaṅgeśa's epistemology. I hope very much that the book is noticed by philosophers as well as by orientalists. I was once asked in an interview for a job in a philosophy department whether I *really* believed that there were Indian philosophers of the same stature as Kant and Wittgenstein. I answered "yes" and mentioned Gangeśa. Needless to say, none of them had ever heard of him (and I didn't get the job). Now at last it will be possible literally to 'throw the book' at philosophers who want to see proof.

Jonardon Ganeri