

II

The Emergence of Philosophical Debate

1. VEDIC SCHOLARSHIP

The attack on the Brahmanic tradition of sacrifice moved the Brahman caste to its defense, of course, since the preservation of its privileged position in society depended on the preservation of the sacrificial tradition and the old practices of *dharma* and caste. In the course of the 5th century BCE the situation became serious, for although a place had been found for the Upanishadic movement within the existing system, a number of other movements associated with a critical, proto-scientific viewpoint—Buddhism, Carvakan skepticism and materialism, Ajivika, and Jainism—resisted this sort of domestication. Buddhism, the greatest threat, rejected the Caste system, replaced the eternal *dharma* of the sacrifice and caste duties with a rationalized ethical system, and permitted, even urged, laymen of whatever caste to join the celibate Buddhist order, which was designed to replace the Brahmanic priesthood. It was worse than that. The Brahmins reserved the child-rearing years for the duty of producing and educating the next generation of Brahmin experts in the sacrifice, and permitted renunciation and withdrawal on the Upanishadic pattern only after that duty was fulfilled. The Buddhist not only permitted it early, so that one was not required to raise and train children in his inherited caste duties, but substituted the monk for the Brahmin, and allowed anyone of any caste to become a monk. Had Buddhism become universal, it would have meant the end of the Brahmanic tradition, and the end of the sacrifices—that is, for a believing Brahmin, it would have meant the breakdown of the entire world order.

One reaction to the situation was the codification of the tradition, so that one would at least have the security of understanding exactly what was to be done. Specialists in the phonetics, metrics, grammar, and etymology of Sanskrit arose, as well as specialists in astronomy (they determine the precise time when a sacrifice is to be performed) and the ritual procedures themselves. In the 4th century BCE Panini wrote his great Sanskrit grammar, which froze the language in place. The view came to be generally held that it was the precise sounds of the formulae uttered that brought about the effects of the sacrifices, so that Sanskrit was a language of magic, whose words, when uttered, produced the things they named. In the 2nd century BCE Patanjali and Katyayana, commenting on Panini, codified techniques for interpreting non-standard Sanskrit. Their procedures allowed not only for the expansion of an ellipsis into a full sentence with all the necessary

grammatical pieces in place, but also for non-literal interpretations of difficult passages. In effect they allowed for the presentation of the underlying sense of the *Vedas* in a canonical, literal, form.

But the development of the scholarship of the text was not enough, of course, if only because it raised new problems of its own, quite aside from the Upanishadic criticism of the tradition. Close attention to the *Vedas* invited historic scholarship, with the recognition that the tradition had an author, or, more likely and even more troublesome, a number of authors, and that the text had arisen through a series of revisions and compilations. This made it difficult to take the text as the infallible guide it was supposed to be, particularly in view of the variety of views, many of them contradictory to one another, that seemed to be offered in it, at least if the sacred literature was taken, as it was, to include the *Brahmanas*, *Aranyakas* and *Upanishads*. Indeed, various apparently historical persons were mentioned in the texts as the authors of various views. So, about this same time, we find Jaimini attempting to deal with this problem in his *Mimamsa* (“exegetis”) *Sutra*. Jaimini pressed the strategy of Patanjali and Katyayana to its limit, insisting that the *Vedas* consisted entirely of injunctions to act or refrain from actions, and whatever peripheral remarks are required to make these injunctions clear. Since every injunction in the *Vedas* must be carried out, and so *can* be carried out, whatever things or states of affairs are referred to in a Vedic injunction are guaranteed to exist. Thus a kind of naive realism concerning the external world in which the sacrifices are performed results. But apparent statements of plain fact were interpreted as meaningful only insofar as they contributed to the understanding of the injunctions, which all concerned the performance of the sacrifices. Jaimini was a pluralist, and took the various texts that might seem to refer to a unity lying behind the world, or the selves in it, as metaphorical constructions. There was an injunction to know oneself as the sacrificer who was maintaining the world through his sacrifice—that is the burden of the suggestion that we should come to know ourselves. Each needs to come to know himself as an agent. Jaimini’s work went far beyond the problem of scriptural interpretation, though, attempting as well to craft a response to the critical proto-scientific metaphysics and epistemology that lay behind the later *Upanishads*, as well as plain skeptical materialism, that challenged the Vedic truth. We shall examine his thought more closely later in this chapter.

The traditional Brahmanic tradition was forced to an intellectual response to the Upanishadic challenges, then, but within mainstream traditional thought, the Upanishadic claims to non-sensory perception of the self (and a good deal else besides) had to find a way of living with Vedic fundamentalism as well. The yogis argued that the *Vedas* were authoritative, but provided a lower knowledge, which may even be necessary

if one is to make progress toward the higher knowledge provided in meditation. The higher knowledge was called “Vedanta,” which emphasizes the continuity of the tradition.¹ So, in contradistinction to Jaimini, Badarayana’s *Vedanta Sūtras* took the *Upanishads* to be the key to understanding Vedic literature, and accepted a monistic view, that all things are Brahman, and we are enjoined to know him. They even rejected Jaimini’s naive realism, and insisted that the injunctions involved in the descriptions of the sacrifices need not be taken to imply the actual existence *as ultimate realities* of the implements of sacrifice and the like. A number of different schools of Vedanta arose later from his work, for the Vedantic tradition, unlike Jaimini, postulated a religiously relevant metaphysics, which was subject to modification and capable of absorbing external influences. We will examine the Vedantic schools in later chapters.

Perhaps we should observe what has been implicit in the discussion up to now quite explicitly—for a member of the orthodox tradition in India yogic practices are dispensable, as are all the forms of Bhakhti, but the Vedic sacrifices, which are older than either of these things, is not. So Dasgupta remarks that “an orthodox Brahmin can dispense with image-worship if he likes, but not so with his daily Vedic prayers and other obligatory ceremonies.”² The non-orthodox traditions are identified by their abandonment of the Vedic prayers and sacrifices, by their refusal to recognize that these practices are obligatory, not by their intellectual defenses of these abandonments or by any theoretical stance they might take. That we should continue to do our Vedic duties is the main thing, and to understand the orthodox tradition of thought we must understand this. The orthodoxy here, as it is perhaps in modern Jewish religion, is actually ‘orthopraxy,’ for it is the practice and the recognition of its necessity, and not one’s beliefs, that make one orthodox.

2. LOGIC AND ARGUMENTATION

By the period of the later *Upanishads* we find three views among the Brahmins as to the sources of saving religious knowledge. Some identify strict adherence to the Vedic tradition as the only source, others take the approach of the early *Upanishads*, relying on reasoning from premisses that seem self-evident or have empirical support, while yet others take the approach of the middle and later *Upanishads*, relying on direct non-sensory cognition of the self achieved by withdrawal from the senses in meditation.

¹So the *Mundaka Upanishad* 1.1.4-5, 3.2.6, *Svetasvatara Upanishad* 6.22. Jayatilleke (1963) 62-63.

²Dasguta, vol. 1 p. 11.

Reliance on the *Vedas* was no doubt the key to maintaining the old views, something that became clear enough after a while, but in the period of the *Upanishads* and after, many Brahmins were attracted to debate and rational argument. It seems to have begun trivially enough. Here and there in the *Rig Veda* and *Atharva-Veda*, and then fairly frequently in the *Brahmanas*, one finds a dialogue, with formal questions and answers, often of a riddling sort, or involving the explanation of some odd fact. Such performances occurred during sacrifices to enliven the otherwise dull proceedings, and perhaps to instruct the audience. Originally, it seems, these dialogues were memorized, but they developed into extempore discussions after awhile, and one would study a formally developed set of techniques so he could do well in what had become a competitive game. The *Brahmanas* include formal contests of this sort outside the context of sacrifice, and some scholars prided themselves on their ability to do well at them.³

During the Upanishadic period these techniques may have included some study of topics, and the general forms of reasoning to be found in the *Upanishads* to refute an opponent and establish one's own view. The riddle contests of earlier times had evolved, and the resulting debates had become an institution. They were held not only at sacrifices, but before kings, and some kings prided themselves on their skill and would reward successful challengers, or provide patronage for accomplished debaters. The *Brihadaranyaka Upanishad* informs us of a debate at a sacrifice in which King Janaka offered a prize to the wisest Brahmin,⁴ and in the *Mahabharata* we are told, "as the sacrifice progressed eloquent reasoners put forward many theories based on reasoning with the intention of defeating one another."⁵

In early Buddhist texts *lokyata* is said to be one of the subjects studied by the Brahmins, and is described as the "art of casuistry."⁶ In one passage two Brahmins learned in this art approach the Buddha. The doctrines advanced are, (1) that everything exists (the oldest doctrine), (2) that nothing exists, (3) that everything is a unity, and (4) that everything is a plurality. The first and third are supposed to be "eternalist"

³Jayatileke (1963) 43-44. The last known use of the word *vakovakya* is in the *Chandogya Upanishad* (Jayatileke (1963) 46).

⁴*Brihadaranyaka Upanishad* 3.1-9.

⁵Jayatileke (1963) 45. *Mahabharata*, ed. T.R. Krishacharya and T.R.Vyasacharya (Bombay 1909), Vol. 14, p. 103.

⁶Jayatileke (1963) 46-50. There is some debate over the precise meaning of the word, which later was used for the Carvaka school of materialists, who were, however, clearly very skilled debaters, as skeptics always are. Jayatileke makes a very plausible case for reading it as referring to some form of logical study.

views, the second and fourth “materialist” views.⁷ We can identify, perhaps, a number of schools of thought here. One is a Materialist school which we shall see held that material things can be known to exist through perception, though it rejects anything beyond the material world. It might be said to hold that everything is a plurality, that is, a mere collection of the four material elements, over against those who base the unity of a thing on some unitary component in it, as did the more orthodox, “eternalist” Samkhyan and Vaisesikan schools, the former making the unities Material Nature and the Person, the latter identifying Substantial Forms in particular things. The other school, which claims that nothing exists, rather than everything, perhaps represents an extreme skepticism that rejects even perception as a source of knowledge, and like the later skeptical writer, Jayasri, claims that pragmatic reasons alone justify accepting the existence of a material world.⁸ These early practitioners of debate, it seems, included an empiricist, materialist school and a school of extreme skeptics, both of which rejected the religious search for salvation from death entirely.⁹ We shall see that the empiricist bent of the materialists was shared by the founder of Buddhism, and that the earliest Buddhist theories of causation and perception seem framed in part to respond to their skepticism.¹⁰ These schools must have been in place in the Buddha’s lifetime, then, and can be dated back at least to the 5th century BCE.

If it was not clear already, after the rise of Buddhism in the 5th century BCE the drawback to dependence on argumentation rather than scripture became quite clear to the more conservative. The *Maitri Upanishad* (3rd century BCE) refers to what can only be the early Buddhist order, speaking of a sect that wears a red robe, converts their opponents by rational argument and examples, denies the doctrine of the soul, teach a *dharma* destructive of the *Vedas* and orthodox scriptures, and take as their goal the attainment of pleasure.¹¹ The *Laws of Manu* (2nd century CE) lays it down that “the Brahmin who despises the roots because of his dependence on

⁷*Samyutta Nikaya* II 76–77. The Buddha is often asked to decide between such antithetically presented views, and seems to have made a general practice of denying both and finding some third view recognizing the truth in both thesis and antithesis, a practice also followed by the Jains.

⁸ This school seems to appear again in the *Majjhima Nikaya* I 497-501, the *Dhiganakha Sutta*, which speaks of a school that denies the truth of all views. Again, in *Anguttara Nikaya* IV 428, a pair of Brahmins discuss in the same way two views directly opposed to one another, that the universe is finite, and that it is infinite.

⁹Jayatileke (1963) 91-92.

¹⁰Jayatileke (1963) 49-57. There is also a list of thirty-one *lokyata* doctrines, most of them in the form of thesis and antithesis, in the *Lankavatara Sutra*, though this is a later source, and so less useful.

¹¹*Maitri Upanishad* 7.8-9. Jayatileke (1963) 65-68.

the science of inference should be cast out by the good as a nihilist, who scorns the *Vedas*.” At this time, no doubt, the word *lokayata* came to have its later signification of “materialism,” that is, the denial that there is any good reason to engage in spiritual practices, and the identification of the highest aim as a pleasant life.¹²

3. SKEPTICISM AND MATERIALISM

Once I visited Ajita Kesakambali, and asked him about the fruits of the homeless life. Ajita Kesakambali said: “Your majesty, there is nothing given, bestowed, offered in sacrifice, there is no fruit or result of good or bad deeds, there is no mother or father, there are no spontaneously arising beings, there are in the world no ascetics or Brahmins who have attained, who have perfectly practiced, who proclaim this world and the next having realized them by their own super-knowledge. This human being is composed of the four great elements, and when one dies the earth part reverts to the earth, the water part to water, the fire part to fire, the air part to air, and faculties pass away into space. . . Fools and wise, at the breaking-up of the body, are destroyed and perish, they do not exist after death.”

Samannaphala Sutta, Digha Nikaya I.22-23

There is no heaven, no final liberation, nor any soul in another world, nor the actions of the four castes . . . produce any real effect. The fire sacrifice, the three Vedas, the ascetic’s three staves, and smearing oneself with ashes, where made by nature as the livelihood of those destitute of knowledge and manliness. . . While life remains let a man live happily . . . When the body turns to ashes, how can it ever return again?

Attributed to Brihaspati in the *Sarva-darsana-samgraha*, ch.1, by Madhava (14th century)¹³

At the time when Buddhism was founded there existed, then, at least two schools of thought which rejected both the *Vedas* and the typical Indian goal of salvation through meditative attainments, basing their secular world view on materialism, and arguing along skeptical and empiricist lines. These schools, lumped

¹²*Manusmṛti* II.11, cited in Jayatilleke (1963) 56-57, who also points out that the *Taittiriya Aranyaka* lists four ways of knowing: perception (*pratyaksha*), inference (*anumana*), scripture (*smṛti*), and tradition (*aitihya*), in what looks like a pretty early passage, since it does not refer to the ways of knowing as *pramanas*, and uses the older word for scripture, not *sruti*.

¹³Translation from King (1999) 16-17. Similar views are attributed to Brihaspati in the *Maitri Upanishad* 7, vv. 8-9.

together by later reporters and called the Carvaka school, enjoyed a terrible reputation, somewhat like that of the Epicureans in the Roman world, and very little survives of their literature.

The etymology of the word “Carvaka” is not known, though it may be that it derives from the word for “chew” (i.e., these are fellows that eat, drink, and are merry), or from *caru* and *vak*, perhaps “sweet talk.” It has also been proposed that one Carvaka was the legendary founder of the sect, but if this is so nothing is known of him. Carvakans were also called “*lokayatikas*,” because it was supposed that they were spawned by the logical debaters of the Brahmins in the Upanishadic period, or perhaps because those who are oriented to this world, and deny the existence of other worlds (*paraloka*). “*Lokayatika*” may also mean a commoner, and earthy fellow, as it were, and possibly reflects an association of the school with those who are not twice-born, or a distaste for the upper classes.¹⁴ We know the views of the Carvaka thinkers almost entirely from their critics, and since Carvaka denies the validity of any religious goal, their critics in India are legion, including Buddhists as much as Brahmins. Perhaps the earliest known Carvakian thinker was Brihaspati, to whom some free-thinking Vedic hymns are attributed, and who is represented espousing materialist views in the *Mahabharata* and elsewhere. A lost Sutra is attributed to him (ca. 600 BCE), but the attribution seems improbable. He is a legendary figure, a philosophical type rather than an historical individual. The references to him tell us how materialism was viewed later, not what some actual person thought early on. Our chief knowledge of the school rests on summaries of its doctrines by Shankara in his *Sarva-siddhanta-samgraha* of the 8th century CE, Madhava Acarya in his *Sarva-darsana-samgraha* in the 14th century CE, and the only extant treatise possibly from the school itself, the *Tattvopaplava-simha* of Jayarishi Bhatta, *The Lion that Devours All the Categories*, of the 8th or 9th century CE.¹⁵

Carvaka is generally called “materialism” by students of Indian philosophy. The early school embodies three separate tendencies found in the 6th and 5th centuries BCE. (1) The adherents of the school did believe that everything real is material, and in addition, that the characteristics of a whole can always be explained in terms of its material parts. They regarded the stuffs making up the whole as the reality, the whole being nothing in

¹⁴King (1999) 17.

¹⁵A manuscript of the *Tattvopaplava-simha* was discovered in 1926 and published in 1940. The relevant selections from the first two works, and Ch. 7 from the third, are available in English translation in Radhakrishnan (1957), Chapter 7, 227-249. In addition, this contains a selection from an ancient drama, the *Prabodha-candradaya*, “The rise of the moon of intellect,” presenting some dialogue between a materialist, his pupil, and the personified Passion. Further information is available in English from Jayatilleke (1963).

itself, merely a composite made out of those stuffs arranged in a certain manner. This view probably arose, just as it did in the Atomists in 5th century Greece, from the treatment of mechanistic explanation in physical science as the paradigm for all explanation, and an insistence that nothing be posited in one's theories that cannot be observed by the senses. (2) A subtly related tendency is revealed in Carvakan ethical thought, which explains what makes a man's life a good one not by relating it to a larger whole, or to an external ideal of life-style or behavior to which it is to conform, but rather by looking at its parts, and assessing, for instance, how much pleasure the man enjoys and how much pain he suffers, or what desires of his are satisfied, and what desires are frustrated. This implies very much a worldly approach to life, and a rejection of the religious aims typical of Orthodox, Vedic thought. (Of *dharma*, *artha* or worldly success (what is useful), *kama* or pleasure, and *moksha*, release from this life, only *kama* was accepted as a valid aim.) The life of the ascetic was rejected both on the ground that it involved inflicting pain and avoiding pleasure, and on the ground that its aims could only be justified, or even stated, only by reference to metaphysical views concerning an unobservable self. Only the material, observable self, the body, was admitted as real by Carvaka. (3) Carvakan epistemology is skeptical and empiricist, allowing only sense experience to provide any sure evidence for a belief, and denying that knowledge of ultimate reality, in particular, knowledge of fundamental causal laws, could be obtained. Thus it undermines any attempt to establish an a priori metaphysics.

The origins of materialism can be traced back to the *Upanishads*, in particular, the question of Yajnavalkya—when a mortal is cut down, what root remains from which he can spring up again?¹⁶ The same question is raised in the *Mahabharata*: “if the root of a tree that is cut down does not grow up again, though its seeds germinate, where is the person who having died comes back again?”¹⁷ Madhava Acarya's materialists support their position with Yajnavalkya's assertion that upon death one vanishes into the elements from which one arose, so that after death there is no consciousness.¹⁸ The *Katha Upanishad* mentions a group of people who hold that this is the world and there is no other, and deny that anything survives death.¹⁹ Also in the *Svetasvatara*

¹⁶*Bṛhadaranyaka Upanishad* 3.9.28. This paragraph's citations depends on Jayatilleke (1963) 70-71.

¹⁷*Srimanmahabharatam*, Santiparva, 184.14. Translated in Jayatilleke (1963) 70. The commentary to the *Digha Nikaya* I.120, states that some accept Materialism on the basis of such arguments as “beings are like trees and leaves, which, when they fall, do not grow up again.” Jayatilleke (1963) 71.

¹⁸*Bṛhadaranyaka Upanishad* 2.4.12, quoted in *Sarva-darsana-samgraha*, ed. V.S. Abhyankar, 2d ed. (Poona: 1951), 5.

¹⁹*Katha Upanishad* 1.2.6, 1.1.20.

Upanishad, a reference to the “doctrine of the elements” is surely a reference either to the materialist theory mentioned in Buddhist texts, which held that only the four elements, earth, wind, fire and water, were real, or that mentioned in Jain texts, which added air as a fifth element.²⁰

According to Madhava, the Carvaka argued that the body and its intelligence arise from the four elements, earth, air, fire and water, alone, and adds that this occurs “just as the inebriating power is developed from the mixture of certain ingredients.” No one supposes that the inebriating power of an alcoholic beverage is due to anything over and above the mixture of the ingredients making it up, which somehow, when they are allowed to ferment together, give rise to this power. In the same way, the power of intelligence seems at first inexplicable in physical terms, but it in fact arises from an appropriate mixture of the elements, just as the power of inebriation does in wine. Even if we cannot explain how this is so, intelligence must nonetheless be due to natural powers and arrangement of the stuff making up the body. It certainly seems to disappear when the parts are rearranged or taken apart. Thus the only self we have any right to postulate is the natural self of the body, the material self, and we can assume no non-material mind or soul, Atman, *purusha*, or Brahman that might survive the death of the body.

According to our sources, the argument that there is nothing non-physical hinges on the position that the unperceivable either does not exist, or at least ought not to be assumed to exist. Now the Carvaka did not hold that the unperceived, such as the unperceived conditions for the efficacy of a cause, which figures in their arguments concerning causation, does not exist, but only that what cannot be perceived does not. What they had in mind was what cannot be perceived in principle, due to its nature, such as the underlying self in the Samkhya school and many of the *Upanishads*.²¹

In the *Payasi Sutta* in the *Digha Nikaya* Kassapa argues with the Kshatriya Payasi, who claims that since he does not perceive the other worlds in which gods and demons live, and has carried out all sorts of experiments in order to perceive them, they do not exist. It seems he wants to argue that this world we go to

²⁰*Svetasvatara Upanishad* 1.2. *Digha Nikaya* I.34, I.55. *Sutrakrtanga* 2.1.10. Jayatilleke (1963) 71.

²¹So in the beginning of the passage on the Carvaka in Madhava Acarya’s *Sarva-siddhanta-samgraha*, “The unperceivable does not exist by reason of its never having been perceived; even the believers in the invisible never say that the invisible has been perceived.” The first clause surely cannot have it right—it must be its inability to be conceived that is responsible for the assertion of non-existence, for it is clear, and the Carvaka arguments about causation admit it, that something may exist and go unperceived. If the example of the invisible is from a Carvakian source, that suggests that it is what is imperceivable in principle that is under attack. In any case, the opponents of the school sometimes take it that what is simply unperceived is what is claimed not to exist. So Samkara, *Sarva-siddhanta-samgraha* 2.2.3, says that they hold that what has not ever been perceived does not exist.

after death cannot be perceived, else he would have managed to perceive it by now, given all his attempts along that line. Kassapa counters that a man blind from birth does not see black and white bodies, and yet they do exist. The suggestion is clearly that we might lack some sense modality that would, if we had it, reveal things to us we never suspected existed. Payasi asks Kassapa whose testimony he has for the existence of the other world, and the reply is that one can attain to “clear, paranormal, clairvoyant vision” of the world of the gods through meditation, and so one who has attained to such vision would provide the testimony. The materialist remains unimpressed, presumably since he does not believe such non-sensory perception possible, and Kassapa abandons that line of argument to try something else.²² It seems likely that the doctrine of the non-sensory perceptual powers of yogis, which appears in the later *Upanishads*, was developed in response to the empiricism of such skeptics.

Payasi’s error, in Kassapa’s view, is that he thinks that one’s acts do not produce any reward or punishment, which is tied to rebirth in heavens or hells. So Payasi argues that there is no soul that leaves the body when it dies, and Kassapa argues that there is. Now some of Payasi’s experiments involve a degree of inference, for instance, when he assumes that the soul has weight, and infers its absence from the lack of detectable change in weight when a person dies. Indeed, the line between perception and inference based on perception is rather a hard one to draw in any case. Moreover, some Buddhist texts actually say that materialists use inference based on perception as well as perception itself. One Purandara, an author of a book on materialism, distinguished between inference within the limits of sense perception, in which what is inferred is sensible, from transcendental inference to things that cannot be sensed, denying that any basis could be found for the latter.²³ So it seems that inference of the ordinary sort, by which one might infer that a child lives in a house from the toys lying about, is admitted by the Carvaka, but not inference to entities that are not otherwise perceivable.

That mental activity of which one can be aware is recognized by the Carvaka, but, though the school admits that this mental activity is real enough, they hold it arises from the body. It does not arise from (or inhere in) any unperceivable source, because, as we now see, such an unperceivable cannot exist, and we have

²²*Digha Nikaya* II.328, 330. Jayatilleke (1963) 72-73.

²³Jayatilleke (1963) 76-77. Technically, the point is that the universal principle underlying the inference cannot be established unless both its terms are in principle observable.

no reason to suppose that there is some psychic, non-physical realm merely because we cannot explain how observable matter could give rise to thought, awareness, and the like. We are often faced with inexplicable powers in a compound thing, and we usually do the reasonable thing, and simply accept that there must be some explanation for them rooted in the arrangement and the unknown natural powers of the observable constituents of the compound. But here wishful thinking and a desire for profit leads the Brahman to make up an unknowable explanation whole cloth.

Carvaka did argue, however, in a positive way for the materiality of the self, or at least for the common assumption of its materiality, by pointing out that we say, without any sense of speaking metaphorically, “I am thin” or “I am black,” not “My body is thin,” etc. This manner of speaking need not be regarded as metaphorical (and it does not feel metaphorical) if the body is in fact oneself. Indeed, to say “My body” is a metaphor, like saying “The head of Rahu” (for Rahu is *all* head).

It seems fairly clear that materialism arose from the line of thought represented by Yajnavalkya, then. Once it was accepted that death is the end of the individual’s life, the goal of release makes no sense unless it is radically reinterpreted, and though it was reinterpreted in the needed way in some of the *Upanishads* and in Buddhism, perhaps the more obvious move was simply to give over the aim of release as misguided, and turn to the consideration how to make this life as successful, that is, as full of pleasure and free from pain, as possible.

4. MATERIALIST ETHICAL VIEWS

The only end of man is enjoyment produced by sensual pleasures. Nor may you say that such cannot be called the end of man as they are always mixed with some kind of pain, because it is our wisdom to enjoy the pure pleasure as far as we can, and to avoid the pain which inevitably accompanies it. . . It is not therefore for us, through a fear of pain, to reject the pleasure which our nature instinctively recognizes as congenial.

From the account of the Carvakan school in
Acarya’s *Sarva-darsana-samgraha*²⁴

The chief tenets of the Carvaka, from the standpoint of its critics, are its rejection of any religious aim

²⁴Trans. E.B. Cowell and A.E. Gough

outside the present life, and of any survival after the death of the body. From these facts Carvaka is said to draw a hedonistic conclusion, that pleasure is the only reasonable aim, to be pursued as long as we live. To the commonplace argument that pleasure inevitably involves pain, it is rejoined that one must then seek pleasure as free from pain as possible, but it is a waste of time to seek some impossible state of mind in which no pain threatens. This position may not have pressed a selfish pursuit of pleasure, for the Carvakans recommended their doctrine for its kindness to living things in general, and seem to have argued for vegetarianism and pacifism (rejecting the values of the warrior caste as well as the Brahmins). It seems very likely that Carvaka accepted a kind of utilitarianism, assessing the worth of an act or policy by its effects on the happiness of all the creatures affected by it. The *Vedas* are criticized as inconsistent and incoherent, and a means of livelihood for priestly knaves, so that it makes no sense to adhere to the *Vedas*, the duties of one's caste, and the like, as though they set absolute laws that made actions right or wrong.

Often associated with this line of thought is the *Artha-Sastra* of Kautilya, a book written 321-296 BCE as a compendium of political science, though its ethics seems in fact to be quite different from the pacifistic Utilitarianism elsewhere attributed to the Carvaka. Apparently the association is due to people drawing what seemed to them the logical conclusions from Carvakan hedonism, rather than real familiarity with the system, or perhaps it reflected another type of materialism not reflected in our reports. Kautilya was the chief minister of the first Mauryan emperor. The Mauryan Empire had arisen from a prolonged period of military struggle among a multitude of states. It was the Indian equivalent of the Roman Empire, for Indian philosophy had arisen, just as Greek philosophical thought did, during a confused period of perpetual warfare and political experimentation, incident on new technology and expanded commerce and population, a period that ended with an empire dominating the entire area subject to the culture. We will find a similar pattern in China. In any case, as a practicing minister of state, Kautilya is not given to transcendental religious justifications for his polity. Rather, he points out in a perfectly this-worldly way that wealth is a prerequisite for the pursuit, not only of pleasure and security, but of any other "higher" aim, be it spiritual, artistic, scientific, or whatever, and so he examines the science of governing with a view to determining the way in which wealth can best be acquired. He argues, like some of the Greek Sophists, that the state is established by the weak as a protection against the strong, and it keeps order by imposing punishments of appropriate severity for violations of the laws laid down in the *Vedas*, that is, for not keeping to one's assigned role in life and fulfilling its duties. Only when people keep to *dharma* can wealth be attained. He favors a monarchy over a republic, but argues that the king

must set as his first aim the welfare of his subjects (that is, the wealth of the society, presupposing a very uneven distribution of that wealth in favor of the upper classes). His book is often treated as a kind of Indian Macchiavelli because of its thoroughly practical (not to say, cynical) approach to governing. It tells the would be King, for instance, that first he must establish his power, and to do that he might have to kill a lot of people, and only afterwards should he consider how he might do good. To the Orthodox practitioner of dharma, this represents unacceptable advice to violate the eternal law against murder. Of course, someone who thinks of ethics along utilitarian lines, as the Carvaka did, *might* take the matter differently. It may be good advice, for one must consider what happens in a state when a weak king is unwilling to kill his enemies, and revolution, external attacks against the weakened regime, and anarchy all result. Given that alternative, ruthlessness in the sovereign, leading to a stable and secure state, especially if the king uses that stability to further the prosperity of his people, would seem to be the best choice.²⁵

The form of government recommended by Kautilya is specified in great part by the fear of uprisings and the attacks of foreign states. He advises, in particular, the creation of spies of all sorts within the state, and continuous surveillance of possible hostile factions by the secret service, as well as the use of spies and secret interventions in other states, to strengthen parties that are favorable to oneself and undermine or destroy those that are unfavorable, and a foreign policy geared entirely to the welfare of one's own state, so that one honors treaties and alliances only as long as they are advantageous, freely intervenes in the internal affairs even of allied states when it seems useful, and so on. In brief, he recommends the policies of *realpolitik* that in fact govern a sovereign's actions in most states.

5. PROTOSCIENCE AND THE YOGIC SCHOOLS

²⁵For Kautilya's work, see Radhakrishnan and Moore (1957) 193-223, and Zimmer (1957) 87-127. Zimmer takes the work to be quite cynical, its policies not being motivated by any higher aim, the usual response of someone committed to *dharma*, that is, moral laws that are to be followed, but not for the sake of the consequences of following them. He observes that the practical maxims of Kautilya have their predecessors in the beast fables of the *Pancatantra*, and Book XII of the *Mahabharata*. For instance, the tale of the cat who was invited in by the lion to live in his den and share his food, so that he could keep at bay a mouse who liked to chew the lion's mane. The cat unwisely killed the mouse at one point, and was immediately evicted since he was no longer of use. Zimmer suggests that the life of the Secret Police is like that. One must do his job, but never so thoroughly that he is no longer needed, so the Secret Police must always be able to point to a threat unneutralized. *Mahabharata* XII contains such passages as these: "Do not fear the results of karma, rely on your strength. No one has ever seen in this world what the fruits are of a good or of an evil deed." This could have been suggested by Carvaka. "Might is above right; right proceeds from might; right has its support in might, as living beings in the soil. As smoke the wind, right must follow might. Right in itself is devoid of command; it leans on might as the creeper on a tree." "If thou art not prepared to be cruel and to kill men as the fisher kills the fish, abandon every hope of great success." (*Mahabharata* XII.134.2-3,5-7;15.14. Cited in Zimmer (1957)124-125.)

How did the orthodox defend themselves from these materialist criticisms? Rather different approaches were taken by the Upanishadic, yogic practitioners, and the Brahmins engaging in traditional sacrifices. The yogic thinkers had already gone some distance toward demythologizing their tradition, and the basis for their practice was to be found in an account of the nature of human consciousness rather than Vedic scriptures. They claimed to know that this account was true somehow through observation and experience, and they did without traditional talk about the gods. Their defense, then, relied on validation of the senses and of arguments from what can be observed to its causes, its necessary explanations. They were committed to the scientific approach.

We have little direct knowledge of the early stages of the development of science in India, but later evidence indicates that it must have followed a path similar to that in Greece. Beginning with a rational reconstruction of the mythological background, it eliminated the stories of the gods in favor of an account of the origin and structure of the cosmos from the great masses of elemental stuff. There is reason to think that the new science served ideological functions, supporting new governmental and societal structures associated with the commercial classes, as it did in Greece. The evidence for these traditions early is relatively thin, depending chiefly on the preservation of standardized, highly abbreviated, doctrinal statements for the classical “schools” of thought, Samkhya, the earliest tradition, Vaishesika, a later system which established itself in the universities, and Nyaya, an epistemological tradition associated with Vaishesika. These outlines of doctrine each spawned a large number of commentaries, which helps the situation, but nonetheless our earliest documents generally occur half a millennium or more after the views they report first developed.

The earliest non-mythological account of the world, reflected in the *Gita* and the later *Upanishads* as well as early medical theory, held that the universe consisted of an irreducible plurality of souls and a real physical world, without any supernatural source or creator, and that release from karma was to be obtained, without loss of individuality, through ascetic and meditative practice. It differed from the earlier Upanishadic tradition in that it did not read the escape from this world order as a matter of merging with a primeval god, but rather as a matter of an individual soul’s isolating itself from the natural world. Probably early scientific speculation had come to treat the primeval gods existing before this world order as nothing more than masses of elemental matter, and the gods of the present world order as simply one class of souls within it, those who

have attained to the heavens.²⁶ Souls were viewed in this tradition as non-material, immutable, eternal subjects of experience, and certainly not portions of some primal divine world-stuff. The soul as subject of experience replaces the breath-soul entirely, so the tradition seems rooted in one form of Upanishadic speculation concerning the ultimate self. The Samkhya tradition, which reports arguments in detail in support of these views, provides the clearest window to this nascent scientific tradition.

This scientific tradition took a rather different direction of development than did the Greek. In Greece, early successes in mathematics and astronomy established these disciplines as models of successful science, with medicine, biology and natural history taking a place in the background of the movement. In India the Greek breakthrough in mathematical reasoning and astronomical theory never occurred. Moreover, the notion that the soul travels to different worlds, as we have seen, corresponding to what it can in fact perceive under different conditions, whether in the natural waking body, a dream state, or one of the heavens, seems to have moved the question how the world arose to a question how *consciousness* of this world arose, that is, how the self came to be trapped in this natural world. As a result, the scientific tradition takes the development of a conscious human being as the central story in the development of the world, and we have seen that the materialists took it that explaining the development of consciousness was the chief difficulty they had to face. What is explained then, in this science, is how the world became a residence of biological organisms with sensory powers and consciousness, and, since this seems to have little bearing on the issue, little interest is taken in physical science, astronomy and mathematics. Derailed by a premature obsession with the mind-body problem and other metaphysical issues, theoretical science never got a proper start in India. In particular, it never took on problems that might be solved with the means available, and never developed theories accounting in detail for the phenomena where that could be done. Nor was there the fruitful interaction of the theorist and the craftsman that lies behind so many Greek developments, in mechanics, for instance. The Greek thinker was generally also a man of practical affairs, a merchant, perhaps, who was interested in things like navigation and machinery. The Indian thinker was almost always a priest or religious practitioner, who would not have mixed with craftsmen, or placed much stock in their knowledge. So, the groundwork was never laid for the sort of scientific revolution that occurred in the 16th century in the West, and science, as opposed to

²⁶Later, Samkhya was associated with theistic views arising in connection with the Yogic practice of meditating on the Lord, but early on, it seems to have been as atheistic as Jainism or Buddhism. So argues, especially, Zimmer (1957). Shankara refers to the Samkhya system as semi-nihilistic, and implies that it was not always recognized as an orthodox system accepting the authority of the *Vedas*.

metaphysics, did not become a proper object of study for its own sake. Philosophy in India established itself in relation to the religious world view and religious aims, and not even after the 4th century CE, when a real scientific tradition began to establish itself, stimulated by contact with Greek and Islamic work, did it ever come to be associated with a philosophy of science or a metaphysics responsive to scientific discoveries. It attained a considerable level of sophistication, but Indian philosophy remained tied to religious concerns, or else, like the materialists, tried to work out what way of life could be justified from a common sense, empiricist and above all, skeptical view of the world, or, like Vaishesika, it pursued a naturalistic metaphysics to provide an account of the world unfettered by empirical constraints. Samkhya, in particular, centers on epistemology and the psychology of meditation. Despite a profession to give a general theory of the world, no attempt at all is made to derive from it an understanding of anything other than the human organism and its consciousness, with an eye to anything other than the attainment of release from suffering.

According to tradition, Samkhya was founded by Kapila, a half-mythical holy man. Our direct sources for the school are late. (1) Above all, we depend on the *Samkhya-karika* of Ishvarakrishna, which dates to the 4 or 5th century CE. This is a work of seventy stanzas that was translated into Chinese by one Paramartha, a Brahmin who immigrated to China in the 6th century.²⁷ This provides a clear summary of the system, with basic arguments in support of it, but makes no reference to other schools, or to internal divisions within Samkhya. There are several commentaries on this work, including one about 980 CE by Vacaspati Mishra,²⁸ and in the 6th century, the *Gaudapada Bhasya*, attributed to Gaudapada (presumably *not* the Vedantic thinker), but they add little to our understanding. The *Yukti-dipika* (Light on the Arguments), a commentary from about the 700 CE by Rajan, developed from an earlier text contained within it, the *Raja Varttika*, is a different matter, discussing different positions within the Samkhya school, and debates with other schools, focusing on epistemology. (2) The *Tattva-samasa* is a very brief summary of doctrine, providing little more than headings, but it seems to contain some old material, and its topics are often rather different from those of the *Samkhya-karika*. There is a commentary on it, the *Krama-dipika*. (3) The *Samkhya-sutras*, despite their ascription to Kapila and their status as the defining document of the school, date to 1380–1450 CE, and were clearly written to substantiate the school as the equal of the other five “Orthodox” schools, which each had a *sutra* defining its

²⁷*The Samkhya-karika of Ishvara Krishna*, ed. and tr. By S.S. Suryanarayana Sastri (Madras: University of Madras, 1935).

²⁸*The Tattva-kaumudi*, tr. by Ganganatha Jha (Poona: The Oriental Book Agency, 2nd rev. ed. 1934).

doctrines.²⁹ The *Samkhya-sutras* have six chapters, four laying out the doctrine, one criticizing rival systems, and one providing parables to illustrate the points made. Vijnana Bhikshu produced a commentary on this work in the 16th century, *Samkhya-pravacana-bhasya*, and a briefer item, *Samkhya-sara* (The essence of Samkhya). The *sutras* follow the *karikas* closely, but Vijnana diverges in some respects, particularly in postulating an indefinite number of *gunas* rather than only three³⁰ (4) Associated with the Samkhya school, the *Yoga-sutras* of Patanjali may go back to the 3rd century CE, if its author is the grammarian named Patanjali known to have lived then, though the fourth and last book refers to late Buddhist thought, and must be dated to the 5th century CE. It consists of four chapters on the nature of *samadhi*, that is, the state of perfect bliss, the path to it, the supernormal powers gained through it, and the final goal, the isolation of the self from the material world. The classic commentary on Patanjali's work is the *Yoga-Bhashya*, attributed to the legendary Vyasa, a figure in the *Mahabharata*, which interprets it in terms of Samkhya.³¹ It is likely, but not certain, that the association of Yoga with Samkhya doctrine was present from the beginning, given its role in the *Upanishads*. The *Katha Upanishad* [1.3.10-11] sets up a hierarchy with *purusha* at the top and the senses and their objects at the bottom, and the *Bhhadaranyaka Upanishad* [4.5.12] and the *Svetasvatara Upanishad* likewise report Samkhya ideas. So we can identify an early period of proto-Samkhyan thought associated with the *Upanishads*, say, 900 BCE – 300 CE, a period of flourishing represented in the *Karika* and its commentaries, extending to about 1000, and a late period after that in which Samkhya had little prominence.

6. THE WORLD ACCORDING TO SAMKHYA

Two birds, inseparable companions, have found refuge in the same sheltering

²⁹The *Sutras* of a school defined its doctrine, but in very brief, easily memorized phrases that require commentary if one is to understand them at all. A *Shashtra* will provide an elaboration and justification for doctrines stated in the *Sutras*, and a *Bhashya* is a commentary on the *Sutra*, explaining the meaning of the text, its various references and allusions, and providing extensive argumentation in its support. In practice the *Sutras* are vague enough to allow different interpretations and schools to arise within a tradition, as we find, in particular in the *Bhashyas* on the *Brahma Sutra* by Shankara, Ramanuja, and Madhva, establishing the three chief schools of Vedanta.

³⁰Translation of (2) and (3) in *The Samkhya Philosophy*, tr. By Nandalal Sinha, Sacred Books of the Hindus XI (Allahabad: The Panini Office, 1915).

³¹Hiriyanna (1932) 269–270. Other commentaries include one by the Advaita Vedantin, Vacaspati Misra, on Vyasa's commentary, and one from the 11th century CE by King Boja, the *Rajamartanda* or *Boja-vrtti*. Vedantic commentaries include the 8th-century *Yoga Bhasya Vivarana*, on Vyasa's commentary, and the *Yoga Varttika* of Vijnanabhiksu.

tree. One incessantly eats from the peepal tree; the other, not eating, just looks on.

Rig Veda I 24.7³²

Since the *Samkhya-karika* of Ishvarakrishna was followed closely in the subsequent accounts until after the rise of Advaita Vedanta, I shall discuss the system as it appears there, departing from its notions only now and again to indicate later departures from it as they become relevant.

Samkhya postulated a single underlying material stuff, *prakriti*, from which was made everything that is in the natural world, and an indefinite number of immaterial, individual souls, *purusha*. A person in the natural world is made up, then, of various forms of stuff, each with its own nature, but it is an individual, a particular thing, because of the presence of a *purusha*. The *purusha* is intrinsically particular, as a locus of action and awareness, a point of view, as it were. It is in reaction to the presence of the *purusha* that the underlying matter differentiates into different sorts of matter, and these different sorts are structured into a particular being, an instrument through which there occurs awareness of the natural material world, and the activity of the individual arising from this awareness. The identification of the true self with the *purusha* departs decisively from the Vedic notion that the true self is the underlying stuff from which the world arises. Unlike the Vedas, Samkhya takes it that the activity of the underlying stuff, eternal as it may be, is in itself unproductive either of individuals, or of consciousness. Particular things receive their particularity from the purely particular, a *purusha*, just as different sorts of material stuff receive their materiality from the purely material, *prakriti*. A particular object that interacts with others and is aware of something other than itself alone arises only when these two come together. It is difficult to understand how this happens. It will not do to say that the *purusha* and the matter making up an individual occupy the same place, for it is only the matter that is in a place. Moreover, no natural process joining two things will account for the union of *purusha* and *prakriti*, since natural things first arise from this union. Even different sorts of matter only arise due to the influence of *purusha*, for as long as *prakriti* remains alone in itself, its various opposed tendencies and operations, found in the three *gunas* discussed below, are all perfectly balanced so that none can make itself felt anywhere to produce any differentiation.

It is supposed that *prakriti* is driven to become an object of awareness by the attractive presence of the *purusha*, as a dancer might wish to perform before a gathered audience. The *purusha* enjoys pure awareness.

³²Cited by Dan Lusthaus in his article, "Saokhya," in the *Routledge Encyclopedia of Philosophy*.

Prakriti considered as such is not some quantity of *prakriti* defined by the particular of which it is the matter, but simply that stuff, without specification which piece of it is meant. *Prakriti* as such desires that there be awareness of itself, and so there arises the universal *Bodddhi*, an awareness of *prakriti* as such, through a change in *prakriti*, the assumption of dominance by the brightness-strand. The subject of this awareness is the subject of all awareness, *purusha*.

At the beginning of a world-cycle *prakriti* was supposed to contain three continuously active forces or qualities of equal power, the *gunas*. It contained the *gunas* in the sense that the *gunas* were located in the same place that *prakriti* was. The activity of these *gunas* eventually became unbalanced, due to the presence of *purusha*, so that one or another predominates in a given parcel of matter (though all three are present in every part of *prakriti*). Before the imbalance the three were so intermixed and so equal that the only result of their activity is the reproduction of nature by itself, so that it continues to exist. (If activity actually ceased, then it could not resume again, for it would have no cause. Activity only arises from activity.) With the imbalance the brightness-strand (*sattva-guna*), the force-strand (*rajas-guna*), and the mass-strand (*tamas-guna*) became evident in the three different sorts of matter. (The analogy here is to the three strands twisted together to make a rope, which are imagined as of three different colors, yellow or blue or white for *sattva*, red for *rajas*, and black for *tamas*.) The brightness-strand is lucid, and adapts to other things. It is the basis of mind and awareness, and it provides form to a thing, as the Stoic *tonos* or fire does in Greek thought. The force-strand is the source of energy for natural transactions, and, in its psychological manifestation, is attachment and aversion. The mass-strand is dull and heavy, non-adaptive to other things, the opposite of the brightness-strand, and forms the substance of heavy material objects, and the stuff of ignorance and inactivity for the mind. These three only occur together—form must be in matter, matter requires form to be anything actual, and both require force to be active, while force can only act within matter and form. Each produces its characteristic effect only in dependence on the other two. The traditional Indian medical theory of human temperament makes use of these three strands, which seem to be the common property of those interested in physical phenomena around 600 BCE.

In the 16th century Vijnana Bhikshu in his commentary on the *Samkhya-Sutra* held that each of the strands consists of an indefinite number of different sorts of stuff, which moves the doctrine closer to the Vaishesika notion of an indefinite number of kinds of atoms qualitatively distinct from one another. No doubt under the pressure of Vaishesika criticism, the later thinkers gave up the expectation that they could account

for all the variations in material qualities and mental states with three principles alone. According to this view, any difference in quality at all makes for a difference in species. It was not allowed that a single kind of stuff could take on different qualities, but only different levels of activity.³³

The initial imbalance occurred when the brightness—strand became dominant throughout nature, so that awareness arose in *prakriti*, this due to the mere presence of *purusha*, as we have noted.³⁴ *Purusha* does not causally interact with things. That is, it does not affect *prakriti* through the operation of causal laws (physical laws) that govern the natural world, but perhaps it may nonetheless influence *prakriti* in some metaphysical way, as it were. The possibility of such a “non-causal” influence is illustrated by a magnet’s influence on iron, its mere presence causing the iron to move. Vaisheshikan thinkers questioned if this could make any sense, and pointed out that the case of iron should move us to postulate a special kind of cause there, not to decide that no causation was operative at all.³⁵ The author of the *Yukti-dipika* also has trouble understanding how *purusha* influences *prakriti* as well. Vacaspati Mishra, and then Vijnana Bhikshu, advanced an analogy to the reflection in a mirror to deal with it. So, the formation of a mirror image has no effect on the scene it is an image of, nor any effect on the mirror itself. But the image might be seen, and this might lead something of which it is the

³³One might see a parallel here to the thought of Anaxagoras in Greece, but there is at least one important failure of correspondence—in Samkhya the dominance of the various strands is at least as much a matter of how they affect other things and interact with one another as it is a matter whether they are detected by mind or not. Indeed, one of the strands detects the others, imitating in the physical world the witnessing of things by *purusha*.

³⁴This arising of awareness in *purusha* is supposed to be an event in time, and the fact that it apparently happens over and over again, at the start of each new world-cycle, only underscores its temporal status. Still, we have to note that the event does not account for the particular events of this world-cycle, for those can only be traced back to the *kharma* that is left over from the previous world-cycle, and establishes which individuals with what characteristics will initially appear. *Prakriti*’s presentation of itself to *purusha* and its withdrawal from *purusha* does not affect the sequence of natural events, but only produces a temporary suspension of activities. Moreover, there is no explanation presented why this suspension occurs when it does, or ends when it does, beyond the decision of *prakriti* once more to present itself to *purusha*. It is as if this suspension is not part of the natural causal sequence at all, but rather part of a second, independent, cycle which is left unexplained and inexplicable in natural terms. The end of the suspension apparently explains why there should have been any natural sequence, any collection of particular things causally interacting with one another, at all, not why this particular sequence that we observe is in place. This peculiar status is shared by creation in theistic accounts of the origins of things, which likewise seems to have no triggering event, no place in the *natural* order of things, despite the temptation to say that it comes *first* in time.

³⁵The critics seem to have the right of it. Surely the connection between *prakriti* and *purusha* is not to be understood in terms of any causal analogy. If this means it cannot be understood at all, since we sneak a causal analogy in by the back door when we conceived of it in terms of awareness, then, in the end, that is probably right, and the doctrine is actually without meaning or content, at least until we can make sense of appropriate metaphysical relations and connections outside the ambit of causality. As for magnets, we can note that a change in the distance of the magnet from the iron explains the sudden presence of the attraction. *Prakriti*’s presentation of itself must lead to the beginning of the world-cycle. But what is this presentation? What changes in the relation of *prakriti* and *purusha*? Of course, it is not *distance*, even if that is what changes in the case of a dancer presenting herself to her audience!

image to behave differently if it sees itself. In the same way an unchanging *purusha* reflects the natural world or some portion of it, and the material soul, *boddhi* and *manas* (and perhaps *ahamkara*, the illusory sense of a self, if it is present), can react to this reflection.³⁶ This solution seems to abandon the outlook of the *Karika*, however, for now the mirror of *purushi* is not what is aware, it seems, but rather is what produces the image of which the material soul is aware. A representation of the world is produced by the senses in this material soul through natural causal activity, and surely the representation of oneself should be produced by similar causal activity by the *ahamkara*.

Perhaps we are to apply the simile to a mirror another way then. Imagine that these representations are reflected in the *purusha*, which thereby becomes aware of them, but is not changed or affected in any way, and this reflection then reflects back to the perceiving body, so that it does not merely form a representation of the world and itself, but *responds* to that representation, treating it as a representation. (Thus intentionality is introduced by *purusha*.) Thus, as the later tradition has it, *purusha* illuminates *prakriti*, reflecting its image back to it, so that *prakriti* reflects, that is, forms a second image itself, what is reflected back to it from the *purusha*. This would be a physical analogue of the awareness of *purusha*, but not awareness, strictly speaking, though it is only present when *purusha* is aware. Indeed, *purusha* is supposed to be the agent as well as the subject of awareness. So even if *purusha* is not active and is unaffected by what is reflected in it, perhaps our emotions, which reside in *boddhi*, occur there because of the influence of what is reflected in its *purusha*.

To return to the *Karika*, the initial dominance of the brightness-strand in a new world cycle leads first to the differentiation of the infinite number of intellects, belonging to the various souls that remained in a state of bondage at the end of the previous world cycle. Each intellect has within it the basic character and all the possibilities acquired by it in its beginningless series of previous lives. This differentiation of the intellects, and the return of just those intellects that remained at the end of the previous world cycle, attached to their souls, is a natural activity from which nature was hindered, due to the lack of awareness, before the brightness-strand became dominant. The period between world-cycles is a period of inactivity, but things pick up again where they left off, and all the information about the final phase of the last world-cycle is somehow preserved until activity resumes. The differentiation of the brightness-strand releases the force-strand's energy (awareness gives rise to desire and the inclination to action), and this energy by its nature gives a boost to the natural tendencies of the other strands, thereby furthering the differentiation of intellect (*boddhi*), but also activating the

³⁶See Shiv Kumar (1983) 39–43, 102–109, 250–253 and Shikan Murakami in *Asiatische Studien* 53, 645–665.

mass-strand, so that a physical universe differentiates itself (one acquires a body and its place in the natural order so one can act to satisfy desire). As a result, the intellects become “aware of themselves,” that is, awareness of the intellect arises, and this awareness is mistaken for the true self, the subject of awareness, and so there arises ego-consciousness, *Ahankara*.³⁷ *Ahankara* is dominated by the force-strand, being essentially involved with action and emotional states leading to action (that is, *karma*), but the action of the force-strand here is prepared by the brightness-strand, since the emotional states leading to action are engendered by awareness of various sorts. After acquiring ego, the intellects gain the five senses, or receptive faculties, the mind organ (*manas*), which is atomic, apparently because it serves as a common or inner sense, receiving images from the five senses, as well as an agent, acquiring the five faculties of action, namely speech, manipulation, locomotion, waste ejection, and generation. If it is to provide unity of consciousness and agency, it must be as unified as possible in itself, and so cannot be divisible, at least by natural processes.³⁸ The mind-organ (*manas*), ego-consciousness and intellect form the “inner organ”, the central processor that receives information from the senses, and issues orders to the active faculties.³⁹ The ten outer faculties are made of subtle matter, and cannot be perceived, but only inferred, though they have their seats in gross matter that is perceptible. The faculties of perception are dominated by the brightness-strand, those of action by the force-strand. From the inner organ, there proceeds five vital breath souls (of special interest to the yogic practitioner of breath control). It is these breaths that organize and maintain the body.

The mass-strand possesses quantitative properties and is divisible, but has no other properties, qualities being associated with the other two *gunas*. The action of the force-strand brings five types of matter out of this substrate, corresponding to the five senses, but they are only potentially perceptible until they have become combined into indivisible particles, atoms. It seems that they cannot act naturally until they acquire the status of particulars, not merely kinds of stuff, so that they can act on other particulars. To acquire the status of a particular they must be perfectly one, so indivisible. The potentials for perception arise in order, starting with

³⁷*Ahankara* seems to explain the rise of particular individuals from the *bodhi* endowed *prakriti*. No doubt it, like the *Bodhi*, is incorporated from earlier beliefs that did not originally involve the *purusha* in the form that it is conceived in Samkhya. Individual existence is illusory, only the *Bodhi* being real, so the developmental step that leads to the consolidation of individuals from the primal stuff must involve the rise of illusory self-consciousness.

³⁸Aristotle supposes something similar, and so insists that the senses must all report to a common sense found in a single place, the heart.

³⁹The early view is that the intellect is responsible for action and will, the later view makes the mind responsible for this.

sound, which has space (or aether) as its medium, and proceeding through touch, color, taste, and smell, which have as mediums air, fire, water, and earth. Each of these potentials arises through combination with a quantum of the mass—strand with the previous potential. Thus whatever can influence touch is pervaded by sound, whatever has color can be touched, and so on. The burning of incense probably suggested that smoke, the earthy element, conveys smell. Thus space is sensible to the hearing, but not to any of the other senses, whereas air can be felt and conveys sound, but is not visible, and has no taste or odor, fire is visible in addition, but has no taste or odor, water has taste, but no odor, and earth affects all the senses. It is apparent, of course, that a close parallel is maintained between the psychic and physical evolution of nature, and it seems to be intended that sense qualities are directly perceived as they really are. Once the atoms have been accounted for, all material entities are built up from them.

Everything that emerges from it, it is supposed, is already contained in undifferentiated *prakriti* in the beginning. Before its development it is ‘unmanifest,’ and in becoming actual it becomes ‘manifest.’ The *purusha*, which only perceives and is not perceived itself, remains outside the scheme of manifest and not yet manifest things. *Prakriti* no doubt goes back to a mythological antecedent, the original deep of water from which all arose, and the notion that nothing actually new is created through causation, but what comes to be was concealed there in the waters from the start, was present in original myth. This is what is later identified as the “identity” theory of causation, holding that the effect is either the cause transformed, or something that had a real potential existence in the cause all along, a potential with a natural tendency to self—actualization.⁴⁰ Natural laws simply specify the conditions under which the natural development of these potentials are fostered or hindered.

Manifest, as opposed to unmanifest things, have causes, are particulars, and are finite (limited by actual boundaries), not mere undifferentiated *prakriti*, nor mere undefined particulars numerically distinct from other particulars but with no further relations to any other existing thing. This is because their causes stand outside themselves, since a cause necessarily stands outside its effect. They are part of the natural world, which consists in interacting particulars, not, like *prakriti* and *purusha*, uncaused and eternal beings prior to it. The universe as a whole is *not* part of the causal order, and has no cause. *Buddhi*, the closest thing to nature as a whole in the system, arises through *prakriti*’s desire to reveal itself to *purusha*, and it acts in the world, though it only does

⁴⁰The Buddhists and Atomists held to a non—identity theory, and took this to imply that there was no necessary connection between cause and effect. One might compare Ockham’s or Hume’s view of causation in the West.

so, like the different sense potentialities, inasmuch as it is embodied in particular things with boundaries. Considered as the “soul of the world” it does nothing. Manifest, naturally existing things do not pervade all things, that is, they are not found in the same places as all things, as does the uncaused *prakṛiti*. Indeed, manifest things are not present even in all the places where a suitable cause for them is present, since they are only present when the conditions enabling their production by their cause are also present. Unmanifest things other than *prakṛiti* pervade every suitable cause. Manifest things are not only caused, but also able to cause other things. Indeed, only what is manifest can cause other things. This means that primordial nature, *prakṛti*, cannot itself cause other things. In fact, that we can explain why the things actual at this time exist, and not other things, is only because for any time at all there is always a past further back, in which various actual things other than *prakṛti* existed. From the assumption of *prakṛiti* alone we can never explain why the things that are actual are in fact actual, though, of course, there must be *prakṛiti* if any actual things are to exist—it is, like *puruṣa*, a condition necessary for the arising of a natural particular, not a cause of its arising. Actual things are plural because they are limited by other actual things, and so there is more than one of a given kind, each occurring in its own differently delimited chunk of similar material. Manifest things are supported, that is, they continue to exist because of their supporting causes, including the material from which they are made, are present. They are also mergent, that is, capable of mixing with other things, since they are necessarily material, and material things can be mixed. For the same reason, they are composite, with parts, since, having a material basis, they occupy space. Finally, they are dependent, that is, dependent on their causes for their actual existence (and even potential existence, for that matter), of course.

The Structure of the Conscious Natural Being

Mahat (“Great one,” cosmic) = **Buddhi** (individual will or intellect—connected to the universe)

Sattva guṇa — virtue, knowledge, non-attachment, power

Tamas guṇa — vice, ignorance, attachment, weakness

Ahamkara⁴¹ (self-awareness) = *Abhimana* (self-conceit)

Introduces particular bodies as centers of awareness

Bhutadi (aware of body-self)

Tajasa (aware of action-self)

Vaikrta (aware of conscious-self)

Tamas Guna (matter)

Rajas Guna (force)

Sattva Guna (form)

Five subtle elements⁴² **The Eleven (Sattva elements)**

Five senses Eye, ear, nose, tongue, skin

Mind (*manas*) (processes sense awareness)

Function is awareness

Five gross elements

the perceptible elements of the particular body, do not transmigrate.

Caused by parents.

Five organs of action

Function = speech, grasping, walking, excretion, orgasm

Double underscored are the elements of **The thirteenfold instrument**, which presents being to *purusha*).

The subtle elements, which support the thirteenfold instrument, transmigrate, due to its dispositions (*bhavas*). Virtue leads it upwards in the scale of beings, vice downward. Knowledge, non-attachment and power lead it toward release from bondage, while ignorance, attachment and inability to overcome obstacles leads it toward further transmigration.

These characteristics do not any of them belong to the unmanifest, to *prakriti* or whatever is merely a potential being hidden in its cause. In particular, mere potential beings are not plural, for there is not some definite number of them, though there is an indefinite number, as it were, since there is certainly more than one.

The system seems designed to provide a resolution of some version of the mind-body problem. The mass-strand and brightness-strand, after all, are aspects of a single thing, *prakriti*, and the force-strand seems

⁴¹*Chandogya Upanishad* 7.25.1 uses the word *ahamkara* for *atman*. So it seems Samkhya has borrowed an old, uncommon, word for self here, to indicate what is not truly the Self. The true Self would be *purusha*, and no Self can be found in the natural world. This last opinion would coincide with Buddhism.

⁴²In the *Chandogya Upanishad* 6.3 the Gross elements are impure, fire being only most fire, with an admixture of the other elements, and so on. The subtle elements are pure. (Keith (1918) 10). Perhaps the pure elements are the basis for sensation, for they are needed in a pure form in each sense organ for there to be awareness of the one type of sensation picked up by that sense. Perhaps their purity enables them to persist and transmigrate. It seems that awareness here is of like by like.

to represent a common natural law that brings about parallel developments in the physical and mental worlds, and guarantees the possibility of knowledge of the physical world. Just as the five sensible potentialities are progressively added to one another to make up the five elements, beginning with space and ending with earth, so the awareness engendered by *prakriti*'s reaction to *purusha* comes in various sorts, layered one over the other to produce, finally, a human being. First there is the awareness of *Boddhi* considered as such, before anything becomes manifest. Then there is the awareness of *Ahamkara*, the awareness *Boddhi* has of its own awareness of *prakriti*, mistaking its awareness, itself, for the self, the thing that is aware, which is, of course, always *purusha*. Layered over this awareness are those involved in the various sense potentialities, and then the mind-awareness which is awareness of the sensory awareness, which results in action, and an awareness of these actions. There is no action without mind-awareness, though mind-awareness might occur without action, and there is no mind-awareness without the senses, though the senses could occur without resulting in thought or reflection on what is sensed (and perhaps this does happen in some animals), the sense awareness cannot occur without *Ahamkara*, which cannot occur without *Boddhi*. At each stage, then, as a new natural element is produced, a new form of awareness occurs in tandem with it.

The coherence of the system seems to depend on making sense how it is that *prakriti* becomes conscious, even though it is always the *purusha* which is aware. The issue seems to be the same as is faced by some present-day mind-body theorists who hold that consciousness cannot be accounted for by the operation of natural material causes. It is granted that those causes can account for the transfer of information to the brain through the senses, for instance, and that the operations of the brain may account for discursive thought, but this physical transfer of information is not, itself, a matter of consciousness, it is held, but only accompanied by it. In the same way, it seems, *Boddhi*, *Ahamkara*, and the whole structure of a sentient being, insofar as it is structured and interactive, is to be accounted for by the operations of *Prakriti*, and so informational transfer and analysis, all the sort of thing that a computer hooked up to sensors might be able to do, can be accounted for in this way. But awareness or consciousness, it is proposed, has not yet been accounted for when all this work is done. A certain simple reflexivity, the self-awareness that is always present in awareness, is perhaps at issue here, or the intentional structures involved in meaning, appearance, and interpretation. Some modern philosophers think that this position, which would hold something to be an unconscious "zombie" even if it carried out all the physically describable information transfers and processing that people do, but without consciousness, is untenable, while others think it is unavoidable, and involves ignoring the "hard problem" of

consciousness, going beyond the mere understanding of physical transfer and manipulation of information. The Samkhya position, then, is allied to this position. Since it allows that the *purusha* can subsist without awareness of anything in nature, so that it is not associated with any natural being, it seems to be committed to a substance-dualism.

The whole scheme strongly suggests that nature has the welfare of the *purusha* as its aim. *Purusha* becomes associated with matter through the individualized intellects (*buddhi*), even though *purusha* are “all-pervading,” that is, have no location. They are individuated, not through location, but because different experiences happen to different souls. They are distinct viewpoints. They learn through natural processes that the natural life is sorrowful. Thus they begin on the road to release from Karma, eventually become detached from nature, and exist in a satisfactory but unconscious state thereafter, free from both pleasure and pain, sorrow and bliss, and from all particular experiences. This state of release is described as self-sufficiency, a self-sufficiency which isolates the *purusha* from the empirical personality and every other manifestation of *prakriti*. *Prakriti*, it seems, provides the means for attaining release, by providing the means to knowledge. Later theistic schools argued that Samkhya (and Vaishesika) had no business assigning such good planning to an unconscious nature, and insisted that it should postulate a God.

Purusha, though distinct from nature, have always been trapped in it, and are free from the experience of an individual life only in the periods between world cycles when the three strands are temporarily in balance. *Purusha* are necessary for consciousness, despite the existence of the brightness-strand. The intellect is only the medium of consciousness, consciousness being a kind of light arising from association with *purusha*, and the most refined form of the material. The dilemma of the individual *purusha* is that it mistakes the body and *buddhi*, the intellect, the consciousness of things in the world, for itself, and one attains release from the natural world by coming to be aware of the distinctness of *purusha* from both matter and mind. The performance of Yogic practices of the sort encountered in the *Upanishads*, brings about the necessary realization in the end.

Prakriti and natural things are distinguished from *purusha* because they are characterized by the three *gunas*, and not discriminable from *buddhi*. They are objective, that is, possible objects of perception or inference, so the material natural world is really there, and there is only one correct account of it, which is correct because that is the way it is, not because that is the way we inevitably imagine it. They are common to the different persons who experience it, so that we all experience the *same* world. Finally, they are not conscious, and are productive, though, of course, *prakriti* does not produce things through causation, but by

underlying them as a material cause.

The *purusha* have none of these characteristics. They are pure inactive centers of awareness, without any distinction between themselves other than being numerically different centers of awareness. They are implicit in the experiencer of the world, since the experiencer must be aware, but are not the experiencer as it occurs within experience or as it experiences particular things due to its interaction with them. So the *purusha* is not, for instance, male or female, nor is it to be characterized as subject to a given experience, sensing the apple, say. That belongs to *buddhi*. Rather, it is pure subjective awareness. So *purusha* are not characterized by the three *gunas*, being immaterial, and are discriminable from the intellect. They are not perceivable, and do not intercommunicate, as it were, so that one *purusha* is not aware of the others through any kind of perception. They are conscious, but produce nothing. So what we have here is a recognition of the reality of the subjective side of experience, and the identification of a *thing* which is pure subject.

Indeed, anything that is particular can be so only if it is somehow subjective. A particular is identified, as it were, with a point of view, and so something must be available to take that point of view. All action on other particulars is taken from that point of view, and so it also presupposes something to take it. If there is nothing to take the point of view of each particular that segregates out from *prakriti* when the world of particulars arises, then no such segregation can occur. This is the underlying reason why *purushas* are needed if the natural world is to arise. If a natural world is to arise, *Prakriti* must take on characteristics, or rather, become the material basis of things that have characteristics, that can only be understood in terms of things aware, each from a particular point of view, of the other things in the world.

Purusha, like the merely unmanifest, is also uncaused. Note in particular that the *purusha* is plural, but not limited by (spatially bounded by) other things, nor plural in the way that such things with boundaries are. Indeed, it seems that no number can be assigned to number the *purusha*—their number is indefinite. So subjectivity is assigned as the underlying source of particularity, and of knowable activity. Of course, activity also has a necessary source in *prakriti*, and it is interesting that *prakriti* is said to possess the *gunas* and be active even when the natural world has not arisen, but its activity is not perceived, nor, the *gunas* being equally balanced, is it even perceivable. The natural world is identified with the knowable world, then, and *prakriti* and *purusha* are rather like Kant's notion of the thing-in-itself and the noumenal self. They must exist, but they cannot in any way be known or understood, or described, nor, in themselves, can they be objects of awareness. *Prakriti* only becomes an object of awareness when the brightness-strand becomes dominant, and so *Bodddhi*

arises.

The three *gunas* do not form the elements of a chemical theory here, but rather first principles in a metaphysical system. They have to be present if things are to be understood at all, perhaps, but they do not account for any particular observations, except of the most general sort. Nor can the system be elaborated in any natural way to make it begin to do the work of chemistry. The *gunas* can be inferred because the operation of causation is necessary to explain the experienced world. In particular, there must be the same causal operations present everywhere, and they involve interacting opposites, that is, causal powers which are opposed sometimes and so sometimes do not produce their typical effects because other causal powers interfere.⁴³ The force-strand and mass-strand, then, meet this requirement, and the mass-strand and brightness-strand meet the requirement that things be made of stuff located in space,⁴⁴ and that the properties of things, the ways in which they act through the force-strand, hang on their internal structure or form.

The *purusha* can be inferred because the natural world exists *for* something not part of the natural world. More specifically, any aggregation or collection of things, it is claimed, exists only “for another.” What seems intended is that no given collection of things is a feature of reality over and above the things in the collection. Rather, the collection arises because something aware of the various things in the world puts them together into a collection for itself. It will be a feature of reality as such, perhaps, that it *can* be gathered into various different collections and aggregates by an observing mind, at least one of the right sort, with the right sensory equipment and the like. But this is a feature reality has in relation to a mind, and which it would not have were it not standing in relation to a mind. Perhaps we could say that the natural world of causally interacting individuals only exists for an observer, and so there must be observers, who stand entirely outside the natural world, since they must constitute the world in their observation, and so cannot be *part* of it. Nonetheless, this natural world is also objective, for the observers do not create it by themselves, even if they are necessary for it to have something to present itself to. Moreover, the presentation has no effect on the

⁴³If we had a deterministic system such as Newton’s, in which causal laws do not admit of exceptions and are not *prima facie*, then there would be no “opposed” forces in the sense requisite here. Of course, within Newton’s system it is quite natural to generate *prima facie* causal laws from the hard and fast ones. “If one exerts a force observable motion will occur.” Sometimes, of course, none does, though I suppose somehow the strain is taken up through microscopic adjustments to provide an exactly counter-balancing force. So we say there is an opposing force preventing the natural action of this force we imposed. But, in strict Newtonian terms, that is absurd, of course. The force we impose has its natural effect, and nothing *could* prevent this in the natural world.

⁴⁴There seems to be some empirical restraint here, though modern physics suggests that space can be much more complex than our immediate experience suggests.

intrinsic nature of the observer, and so the Samkhyaans say *prakriti* presents itself, and then, modestly, withdraws, satisfied to have been seen, and requiring nothing further.

Thus, there are things we can know about, can infer causally, that cannot be explained in the naturalistic terms of this materialist account of things. First of all, the world is experienced (it exists for the sake of being experienced, and is satisfied once it has been experienced), and the requisite subjectivity cannot be accounted for materially. So *purusha* is witness to the world. This experiencer is somehow responsible for consciousness, it seems, though it is not a cause in the material way, and is isolated from the causal nexus of the natural world. It enjoys things, that is, values its experience. Value is a subjective phenomena, not to be accounted for within the purely natural scheme of *prakriti*. This experiencer seeks an aim, moreover, which is non-natural, namely freedom from involvement in the material world. Although *purusha* is supposedly uninvolved in causation, except for its activation of the brightness-strand, it seems to be viewed as active in its own way, and free in its actions, so that it is not driven by natural causes (natural occurring desires or preferences), and can control the animal to which it is attached by its knowledge, that is, by attending to things, calling *buddhi* to see things, which lead the natural creature to behave in a new way. It is not merely a witness, but a spectator, that takes an interest in what it witnesses, and directs by calling attention to one thing or another. Thus it is active, if you will, by being inactive. It does not do anything, it merely observes. Perhaps we should identify it as something like Platonic Reason, which has an intrinsic desire for knowledge that may shape the character and actions of the rest of the soul if it dominates the soul and is earnestly pursued. The pursuit of knowledge by the *purusha*, or, we should no doubt say, the pursuit of knowledge somehow produced in the *bodhi* by the *purusha*, brings a person eventually to see through *Ahamkara*, and to be liberated from the world, much as Platonic Reason, if it dominates, leads one eventually to the vision of the world of Forms.

The greatest difficulty here is putting the apparent activity of *purusha* together with its actual metaphysical inactivity. The desire of *prakriti* to be experienced seems to do this work. *Prakriti* presents itself to *purusha*, as it were, and in doing so, the imbalance is created in favor of the *sattva guna*, which leads to the evolution of things (form becomes active in matter, so that it shapes it). The *sattva guna* is, at its most primitive, the ability to one portion of *prakriti* to take note of what is going on adjacent to it, and to act or react to what it perceives. (Sometimes physicists speak of an electron “seeing” a field, which it can only do when a field that is generated, traveling at the speed of light, gets to it, and then responding with suitable acceleration to it. This is only a natural metaphor, perhaps, but the Samkhya would take it literally.) The *purusha* did not, however,

come to be associated with *prakriti* at some time. Each *purusha* was always associated with a subtle body, without beginning. Every new incarnation must have its cause in the natural world, either in gross bodies, or, if the end of a period of equilibrium of the three *gunas* between world-epochs is at issue, then in subtle bodies which retain their dispositions even in a period of equilibrium.

It can be inferred that there are several *purushas* because there are several loci of action, that is, several *buddhi* or intellects. Apparently we know of other viewpoints than our own not by experiencing them (for then they would be our own), but by observing that other things in the world act from a different point of view, opposing us.

The great problem, then, is the *prakriti-purusha* interaction problem, a version of the mind-body problem. The solution given seems inadequate. It is argued that the two are in the same place, as it were, so that each appears to have the characteristics of the other. Perhaps the idea is that the *purusha*, being aware of the world (always was aware, always did suffer from the illusion that it was identical to the subtle body), does not notice itself. It can know itself only through causal inference, after all, and so may fail to make the inferences. So it identifies the subtle body, or even the gross body, as itself, and so thinks of the body as having awareness, though it is only itself aware of the body and the world through it, and thinks of the body as having free will, and enjoying the world, not having figured out that these characteristics cannot belong to a material body. In any case, the requirement that it be in the same place as *prakriti* if it is to 'interact' is parallel to the requirement that the different *gunas* be in one place if they are to interact. In general, the Indian view seems to have been that the possibility of interaction, whether it be causal alteration or a matter of simple awareness of a thing, is possible only when two things are in the same place.

There are two great purposes in the world-system: *prakriti* and the natural world wish to be known (so that natural causal functions can occur), and *purusha* wishes to be free of the world. Although it seems that knowing the world leads to the bondage of *purusha*, the view is taken that it is through knowledge of the world that we eventually learn we are not any natural thing, and so achieve freedom. The world, by making itself known to itself with *purusha's* help, cooperates with the goal of *purusha*. When it is asserted that the purpose of the world is to make itself known, the idea is not that *purusha* wishes to know it, or that any third party wishes it to be known, or that *prakriti* and *purusha* somehow arise for the sake of knowledge. Rather, there is something in the natural world that responds to *purusha*, and tends to make the natural world known to *purusha*, by producing intellect and the thirteen-fold instrument of knowledge. One might be tempted to assimilate this

to Plato, suggesting that *purusha* is somehow imitated in its awareness by *prakriti*, but the analogy is a poor one, in fact. For one thing, *prakriti* may seek to become known, but *purusha* is *not* known by itself, so this is not in imitation of *purusha*. Indeed, *prakriti* seeks to be known by *purusha*, not by itself, and the notion that it is known by itself is simply mistaken, giving rise to a false sense of self. So *prakriti* seeks to become known by *purusha*, but not in imitation of *purusha*. It may therefore seek order and intelligibility, but again, not in imitation of the intelligible, but rather in response to the presence of something that might know it. Rather than a world of Forms, it is a world of knowers that lies behind the order and intelligibility of the world.

The business of the natural world in fact does not involve *purusha*, for all that it might be carried out in an attempt to be known by *purusha*, and the notion that oneself transmigrates is false. It seems that the activity of *prakriti* that ceases when realization occurs is the activity of the mind that produces the illusion that one's self is this naturally occurring being. Apparently *ahamkara*, ego-consciousness, is this illusion, and it seems that the mind can continue without it, though there is no further transmigration, and once the gross elements cease to exist, the subtle elements disperse as well. Moreover, since only *bodhi* is now left, it seems that individuality, of the sort that involves a particular attachment to a particular body and place, is also lost here. Something like merging with the Brahman, or entering the Brahman world, occurs. It seems to be an important issue whether natural existence of a person can occur entirely free of illusion, or if this must wait upon one's death, and the answer seems to be that it can. *Ahankara*, having resulted in the establishment of the individual being, does not need to be present for it to continue for a while, but once it runs down, it will not be started again in a new birth if *Ahankara* has been removed. A comparison is made here to a potter's wheel, which may continue spinning a while after the potter stops pumping the treadle, but will run down once its momentum is spent. Just so, the individual that no longer has *Ahankara* no longer accumulate *karma*, and ceases once its existing *karma* is exhausted.

In all of this, note the many close parallels to Buddhism. Buddhism dispenses with the *purusha*, that is, the supernatural, as well as *buddhi*, and takes a belief in a supernatural self arising within the individual, whether identified with the natural self or not, to be the real problem, the source of ego consciousness. Buddhism makes consciousness and other psychological items elements of the natural world, blocking the Samkhya road to the *purusha*. But it still takes ego-consciousness, a form of illusion (the illusion that there is a self at all rather than misidentification of the self) as the source of the trouble. Moreover, it takes it that realization can occur in this life without the immediate destruction of the conscious organism, but that once it has occurred, rebirth no

longer takes place. It seems clear that one source of the Buddha's thought is Samkhya, reworked without the *purusha*.

7. KNOWLEDGE AND CAUSATION IN SAMKHYA

In their consideration of knowledge the Samkhya thinkers advanced that there are three foundational sources of cognition, three *pramanas*—perception, inference arising from whatever else is known in other ways, and authority. Inference, in the commentaries, is divided into three forms: (a) a priori, (b) a posteriori and (c) inference based on general observation.

Perception is *prima facie* reliable. It gets reality right as long as nothing gets in the way of its doing so. It is by nature accurate. So in the analysis of arguments referring to perception, a list of things that can get in the way is presented. There is no absolutely certain source of knowledge, but only sources of knowledge that are reliable, as long as nothing gets in the way. One can always be mistaken if something gets in the way. Now it may be that nothing does get in the way, and in that case one has reliable knowledge, even if one has not established that nothing gets in the way. Knowledge is a matter of reliably formed belief, and does not necessarily require that we be justified in believing that we cannot possibly be wrong. This very plausible view is associated with the notion that perception, for instance, naturally produces knowledge, because it is an agent with knowledge as its natural product, just as, say, fire is an agent that produces heat in adjacent things if nothing gets in the way of its doing so. A causal product is intrinsic to a given sort of thing, and all causation has this sort of conditioned agency behind it.

How do we know anything about things that are not directly perceived in experience? Through inference, and here reference is made to inference by analogy. That is, what is not known through experience must be analogous enough to what we do experience directly so that we can at least conceive it. The usual inference will turn out to be rooted in cause and effect. We know the effects through perception, and infer the causes. And so, how do we know that primordial nature, *prakriti*, exists? Not through perception, for it is too subtle to have an easily identified effect on the sense organs. But inference can deduce its existence from its effect, namely *buddhi*, intellect, which is similar enough to its cause so that we can conceive its cause as well as understanding that it must be the cause.

A discussion of causation provides a metaphysical underpinning to inference, by showing that the cause

must always be similar enough to its effect so that we can conceive it, and argue to it, from its effect. The effect must exist even before its cause makes it manifest, for a number of reasons. First, because from what is not, nothing is caused. But if the effect is utterly different from the cause, and not implicitly contained within it, as a potential thing, so that it has no existence of any kind at all before it is actually produced, then it arises, *de facto*, from nothing, since nothing in the purported cause has any relevance to it. First this exists, and then this other, utterly different thing exists. There must be something in the nature of the cause which already contains the effect, so that the effect is drawn out of the cause in the way that something might be drawn out of a bag and made evident to the sight, being “unmanifest” before this is done. This is more plausible if we take it, as Samkhya does, in terms of material causes. One cannot get something out of milk, curds, say, that was not somehow already in there. By stirring the milk one cannot cause some new stuff to come into existence out of nothing. One only transforms the old stuff. Since the milk was transformed, then we might say that the curds were *potentially* there all along, for the milk was potential curds, and not just anything can be transformed to curds.

In the second place, whatever is caused can only occur in the presence of an appropriate material from which it arises. There is nothing in the natural world that is not based in some material, and its material, in another form or arrangement, perhaps, must always have existed beforehand. That means that it is potentially the same as some materials, and not potentially the same as others, and this potentiality is a real fact about the world.

In the third place, if something is caused by what is in no way like it, and in no way preexists this causal activity, then it would seem that anything could bring forth anything. There must be some explanation why not just anything causes anything, and the only possible explanation is that the effect is somehow (potentially) present even before it is caused, when a suitable cause for it is present. Remove the hindrances to its production and it appears. There must be a real difference from the situation in which the effect is potentially present, and the situation in which it is not.

Fourth, the only way to explain why a given thing cannot produce all things is to recognize that some things are potentially present when this given thing is, and others are not.

Fifth, there must be something about the cause which *is* its being a cause. This characteristic *can only be* the potentiality of its causal behavior, but then something about it must provide that potentiality, and that *must* be the potential being of the effect in it.

One conclusion drawn from all this is that there must be some material substratum of things which is always present, so that all things are the same as this substrate in one or another of its transformations. This substrate is *prakṛti*.

The point for the epistemologist is that the cause contains the effect and so is similar to it, that is, an understanding of the real nature of the cause seems to require an understanding of the effects it produces, and an understanding of these effects will therefore provide a guide for conceiving their cause. So we have the Rationalist supposition, that we can know causal laws from our understanding of the concepts entering into them. This will be a part of what goes on in Inference, and so Inference is not just a matter of deductive reasoning, but also of grasping causal connections through an understanding of the real natures of things.

8. YOGA AND SAMKHYA DOCTRINE

From the *Gita*:

“The five basic elements, the "I" consciousness or ego, the intellect, the unmanifest Prakṛiti, the ten senses [i.e. gross and subtle], the mind, and the five sense objects; Desire and hatred, pleasure and pain, the physical body, consciousness, and resolve. Thus the field (the creation or body) has been briefly described with its transformations.” (*Gita* 13.5-6.)

“The mind, intellect, ego, ether, air, fire, water, and earth are the eightfold transformation of My Prakṛiti. This Prakṛiti is My lower energy. My other higher energy is the Puruṣa by which this entire universe is sustained, O Arjuna. Know that all creatures have evolved from this twofold energy, and Brahman is the origin as well as the dissolution of the entire universe.” (*Gita* 7.4-6) [[Prakṛiti and Puruṣa here are not two independent identities but the two aspects of Brahman, the Absolute Reality.]]

'Prakṛiti is said to be cause of the generation of causes and agents; puruṣa is said to be cause in the experience of pleasure and pain.' (*Gita* 13.20) [Perhaps disagrees with later Samkhya views inasmuch as Prakṛiti is aware, puruṣa a cause. . .]

“Later Samkhya texts offer divergent opinions on how unmanifest *prakriti* generates the remaining components. For instance, for some the order of transformation seems to follow the numerical sequence. Others, perhaps thinking that gross elements or at least subtle elements would be required for there to be the five sense capacities and five activity capacities, held the subtle and/or gross elements to be prior. Others, perhaps more idealistically, asserted that it is the intent to hear that produces the physical ear, not the other way around, so that the capacities produced the elements, effectively treating the elements as constructions or projections of the sense and activity capacities. There are also differing opinions on whether it is *buddhi*, the 'I'-maker, mind, or some combination between them that produces the rest of lower *prakriti*, and even which part of lower *prakriti* each might produce. *Samkhya-karika* claims that the 'I'-maker is pivotal: with *sattva* it produces the ten sense and activity capacities, with *tamas* it produces the subtle and gross elements.

While orthodox Samkhya always considers *purusha* a single entity (though there are a multiplicity of *purusha* since each individual has its own), the Gita posits three *purusha* per individual: a perishable *purusha*, an imperishable *purusha*, and a highest *purusha* also called ultimate self.”

Image is: we take an interest in the sight of the world, invest ourselves in it, as someone might become interested and invested in a play or movie. If we can once see that we are not the actor on the screen, and that in the end this is of no interest to us at all, then we can escape becoming over-excited and distressed by the events we witness in the movie. It seems to depend on the insight that we look for something to project the status of self onto, so that a self is not a self because of the situation in the natural world, but because we see it as a self, or perhaps it is natural that we should do so.

The purpose of the Samkhya account of reality is to find an *abiding* end to suffering arising in the world. This is accomplished, of course, by its providing us with knowledge who we really are, namely the *purusha* rather than any natural thing with *prakriti* at its base. But quite early on Samkhya became associated with Yoga, which brings us to this same realization through other means. The aim of Yogic practice is to achieve a living release, the state in which one is creating no new karma, but nonetheless continues to play out the old, like a potter's wheel which is left spinning for a bit even after the potter leaves the job. Upon death, the adept's physical being and intellect are extinguished, leaving his self unattached to matter. This is accomplished in part indirectly, through meditation designed to train the emotions, and through the practice of non-injury (*ahimsa*)

to others, truthfulness, honesty about property, sexual continence, and the repudiation of unnecessary possessions and enjoyments, along with benevolence toward living beings. (These practices constitute the morality of the Jains and Buddhists, as well.) It also requires the development of inner control, approached through moral, mental and physical purity, contentment, ascetic practice, and self-understanding. Ascetic practice includes control of the breath, and difficult physical postures aimed at easing the flow of the breath through the body. The aim here is to gain mastery over the body, to still physiological processes as an aid to attaining the quiet of contemplation. Contemplation itself progresses through three stages. The first is one-pointed awareness (*dharana*), gained by learning to hold the mind to an object of meditation, a *yantra* (a figure as of a god), *mandala* (a diagram, often representing the world), or *mantra* (a verbal expression). Next is meditation (*dhyana*), which involves a state of consciousness in which one has insight into the nature of the object of one's awareness. Last is *samadhi*, which can involve an object of consciousness, or can be entirely non-conceptual. Here one briefly attains separation, but *samskara*, latent karmic influences, brings it to an end. With practice one gradually lengthens the experience, and undermines the power of karmic influences, until one attains a perfect knowledge of oneself as an isolated pure consciousness. Thus one meditates successively on more and more refined objects, blocking all else from the mind as one does so. Once the intellect has been quieted (like a great restless sea whose waves have quieted down), so that it no longer provides anything as an object to the pure awareness belonging to the self, that awareness is all that is left, and one (that is, the brightness-strand or intellect) can come to a realization that this awareness is all that truly is the self. "When the purity of contemplation (*sattva*, the brightness-strand or intellect) equals the purity of the life-monad (*purusha*, the self) there is isolation (*kaivalya*, the release that is the aim)."⁴⁵ Note that the isolation is not attributed to the intellect, nor is self-awareness attributed to anything at all. Presumably, if the knowledge that one's self is the purely aware beyond all appearances were to be expressed in some form in the mind, that form would not be the self, but only a modification of the intellect. Could the self be said to know that it is the self? Could it be said to be mistaken and deluded when suffering from the illusion? The answers here have to be "yes," it is just that the self is not the same thing as its knowledge or illusion, nor the same thing as the intellect that produces and suffers the consequences of this knowledge or illusion. Nonetheless, it is the self that is the aware, in every case. Once the intellect is gone entirely and the self is in its state of isolation or self-sufficiency, presumably it no longer knows that it is the self (its awareness is without objects for the intellect is no longer

⁴⁵*Yoga Sutras* 3.55.

present to provide it with objects), nor, of course, is it deluded about anything, since it has no experience to give rise to such a delusion. It also has no natural, psychological self within which its knowledge could be expressed, for instance, in language. It enjoys pure awareness without object, or perhaps no awareness at all, but only the potentiality of awareness.⁴⁶ In later Yoga, meditations upon the Lord were common, the Lord being a soul that had never become involved in ignorance and the round of rebirth. The point of such meditation was to inspire the practitioner to greater efforts, and did not imply a theistic belief, though it is likely the notion was introduced to parallel and disarm the sort of theism found in the *Gita*.

Experience is regarded by Samkhya as a series of subtle material events, so that external happenings imprint themselves, through the senses and the mind–organ, on the intellect. The soul then illumines and actively views these images.⁴⁷ Sensory images and the like, then, are copies of what they image, and the stuff of the intellect is in a state of continual change, always adapting itself to reflecting what goes on beyond it. The soul itself cannot be an object of experience, since it produces no material image, and it is known only by causal inference. The realization of the soul in Yogic meditation is not experience of the soul, but attainment to the state of objectless consciousness. The activities of the intellect include: (1) Right notions derived from correct perceptions (which naturally tend to produce the false opinion that they are one's self), correct inference, and correct testimony, (2) erroneous notions, (3) fantasy, (4) sleep which involves pleasure even when there is not dreaming, and (5) memory, the activation of a latent impression of some former experience.

The soul in Samkhya, unlike the life–monad of the Jains, is purely a center of consciousness, and is never involved in action at all. Action, and all the contents of consciousness, arise from the intellect and its physical correlates, due to the conditioning attributes (*upadhis*) that arise in the course of its life, and the *purusha* provides nothing more than consciousness to this mix, though consciousness is an activating factor, and when the soul withdraws its consciousness in Yogic meditation, the life of the intellect and its body comes to a standstill. So the aim of Yogic practice is the destruction of the intellect and its physical correlates. It is not, for instance, the attainment of the heavens in which the gods dwell. If the intellect is not destroyed, its karmic

⁴⁶It is easy to imagine finding these consequences absurd. Surely the self does nothing to aid us in understanding how awareness is really possible or how it occurs if all this is right. The real story and all the real explanations seem to go on in the account of the adventures of *prakriti*, the three *gunas* and *bodhi* (intellect). As an apostle of the Western Analytic tradition it seems to me that this talk of the *purusha* or self is metaphysical speculation without any use or content, and is not to be mistaken for knowledge about anything at all, certainly not for some kind of knowledge about awareness. I expect the *Carvakan* school would agree, and the Buddhist as well.

⁴⁷One might compare the Augustinian tradition in the West. This is a form of Rationalism.

existence will continue through an infinite number of lives, never coming to an end. It is not so much its existence that is a problem as the mistake of supposing that we are it and are involved in its activity, a mistake which arises from the fact that the soul is trapped by it into a consciousness of its history. Thus Yogic practice is motivated by a desire to stop the activity of what is not the soul, so that the soul might be freed from the illusion of being an active, karma-bound, thing.

The hindrances (*klesa*) which prevent one from the destruction of this illusion are five: (1) ignorance (*avidya*), the root of our conscious thought, (2) the sense that this experienced thing is myself, (3) attachment to experienced things, (4) aversion from experienced things, and (5) the will to go on living. With Yogic practice the intellect's involvement with the mass-strand can be terminated, so that darkness is removed from the intellect, that is, ignorance and the sense of empirical selfhood, and the involvement with the force-strand, so that the waters of the intellect, having been rendered clear, can also be stilled, and the jewel of the soul beneath them can become evident. With the freeing of the intellect, its innate powers reveal themselves, and various supernormal powers are gained. If the hindrances are not removed, and release from karma is not obtained, then upon death the inner subtle body of the intellect and its various faculties passes on to a new body, carrying its inherited character with it. The perfumes or subtle residues of its earlier karma cause impressions (*samskara*) that stay with the intellect from life to life.

It is not clear how it is that the series of incarnations is ended when the illusion is once destroyed. It must be that the soul is somehow withdrawn from the process, and without its cooperation new karma cannot be created, and thus the intellect withers away at death. Probably we could take it that the ego-sense does not arise in the intellect again, since it is rooted in illusion, and so nothing subsequent to that ego sense, including new karma arising from one's actions and desires, can arise. But surely the intellect precedes that ego-sense in the evolution of the organism, so would not the intellect continue, anyway? It will help to recall that the series of incarnations had no beginning, so that there never was a time when the intellect concerned did not have the seeds implanted by karma in it, destined to ripen in later lives. Moreover, it must be born in mind that these seeds remain somehow present even between world cycles, so that the universal stuff (*prakriti*) between world cycles includes within it the seeds left from the previous world cycle, destined to recreate the old intellects and egos once more. The whole process is driven by karma, and the presence of the karmic residues (*samskara*) that carry on from one life to the next is essential to the continuation of the reincarnated intellect, and there never has been a time when such residues were not there. What the release from karma

must accomplish, then, is the cessation of new karma, leading to the cessation of the perfuming of the present empirical self, and to the cessation of karmic residues carried over into the next life. The cessation of the illusion that one's self is the ego leads to the cessation of karmic residues, then, and that explains why the reincarnations come to an end. But why does the end of illusion lead to the end of karmic residues? It must be that the illusion somehow provides a channel by which the processes giving rise to karma can be activated. The soul does not act, but its awareness, pervading matter, activates matter, and presumably the shape of that awareness determines the shape of matter's activation. Awareness, *as it were*, of a true self (something that is strictly speaking impossible) activates the brightness-strand, then, and brings about ego-consciousness in it. When that sort of awareness is removed, the link between matter and soul is broken, and the soul lives on self-sufficient and isolated within itself.

Perhaps in the 9th century CE, Hatha Yoga was founded by Goraksanatha. His works have been lost, and the most noted Hatha Yoga text now is the *Hatha Yoga Pradipika (Light on the Yoga Force)*, from the 14th century. This practice is advanced for those who are not up to the Raja Yoga of the *Yoga Sutras*. Its aim is to concentrate the vital breath in the middle channel of the body, thus awakening the 'serpent force' (*kundalini*) that is located at the bottom of the spine. The aim is to transform the subtle body that transmigrates, and with it the consciousness of the practitioner. The practice is supposed by many to be fruitless altogether, and even its proponents claim it is so that without knowledge of Raja-yoga, for which it prepares the way. In the Tantric tradition of Hatha Yoga there is a focus on unifying the male and female aspects of practitioner (*ha* is the sun, or male force, *tha* the moon, or female force).

9. SKEPTICAL ARGUMENTATION: THE EARLIER SCHOOL

A large part of the defense of Materialist, Carvakan views relied on a skeptical rejection of metaphysical arguments for the Brahmanic or Upanishadic view of reality. There are two different schools here: the first accepted perception as a reliable source of knowledge, and a limited form of inference while relying chiefly on perception, while the second denied all possibility of any knowledge at all.⁴⁸

⁴⁸Jayatilleke (1963) 71-72, argues that there are three schools, since he takes it that one early school admitted only perception, and no form of inference at all as a means to knowledge. It seems to me that this early school is an illusion thrown up by later critics who, probably due to lack of perspicacity rather than malevolence, understand the Carvaka thesis in as damaging a way as possible.

Madhava's *Sarva-darsana-samgraha* provides a clear statement of the developed position of the first school. Its skepticism goes very deep. In particular, it is denied that "inference," that is inference from a known effect to the unknown cause in the school, can be a source of knowledge. For how can the inference from effect to cause be established as valid? There must be an invariable connection, so that the effect is only present when the cause is. But more than this, such a connection must be *known* if we are to establish an inference. (The point seems to be that it will not do for us say that as a matter of fact elephants are present whenever they seem present to us, so that our judgments about elephants are reliable. We have to be able to justify a claim to reliability if we are to know, and so we must know about this connection.) How can we know that such a connection holds?

The argument as it is presented by Madhava follows the same pattern as Hume's discussion of our knowledge of causation. The author sees that all our reasoning about the world is causal at bottom, and suggests that causal reasoning rests on a knowledge of invariable causal laws. The question, then, is how we arrive at knowledge of such laws? In reply, it is argued that we cannot arrive at such knowledge, because any procedure that might lead us to knowledge of a causal law presupposes knowledge of other causal laws already. Thus, though there may be a number of valid ways to achieve knowledge of one causal law based on prior knowledge of another, there is nowhere to get a foothold to establish our *first* causal law. How, then, can we establish a causal connection?

Not (1) by the senses, since one can never sense what is in the past or future, and the invariable connection between the effect and the cause necessarily involves past and future things. (I suppose we can at best have one of the two items, cause and effect, present, the other necessarily being past or future.) So the senses can only tell us about the presence, say, of the effect, never about the presence of the cause, and cannot establish the necessary general connection between the two. A criticism of the use of memory, and of anticipation, in this context would have to be added to drive the point home. The second is easy, for one cannot give any reason why a causal connection observed to hold at present should continue to hold in future cases, unless one already knows the causal law, presumably not through the senses; nor can one claim to know that the effect will come now that the cause is present to the senses, unless one, again, knows the causal law already. The criticism of memory's usefulness here is likewise clear enough, if we take the skeptical point of Russell, that my present sense of remembering must be a reliable sign of the past, and *known* to be so, if memory is to be justified as reliable. Clearly this means that some causal law must be known already before

the senses can tell us anything about the past, and so about causal laws.

Nor (2) can we base our knowledge on the knowledge of some universal object, as the later scientific school of Nyaya tries to do, on the class of X's, X-hood, or the like. For what one needs to know in a particular case of an X is the cause of this particular X, not the cause of the class of X's. Presumably we would need some supplementary knowledge about the (causal?) connection between the situation with the universal and the particular falling under it. The criticism is reminiscent of Aristotle's critique of the possibility of natural knowledge arising from a knowledge of Platonic Forms, given that the Forms are separated from the substances of individual sensibles. (Of course, if knowledge of the class of X's is just knowledge of each and every X, taken separately, we can ask how it is acquired. Is it by experience of the particular cases? Then we can return to argument (1). If otherwise, that is, we learn the truth about the universal in some special way, and then apply it to particulars, the point just made in argument (2) remains effective.)

Nor (3) will some internal sense provide the needed causal connections, for the mind can only know an external object (and this is what it needs to know here) if that object acts on it. It does not itself act independently of the object's causal power, so as to gather in knowledge of it, as it were. (So an Augustinian theory of active perception is postulated and rejected.) But the object can only act on the mind through the senses, and so we are driven back to one or the other of the first two cases.

Nor (4) can we base knowledge of the causal connection on inference from some prior connection, since this drives us into an infinite regress, or else the basic causal laws from which we derive all the rest must be known in some other way, which is as yet unexplained.

Nor (5) can we rely on testimony, since, first, we must know causal connections to infer that a given testimony has in fact been given. What is the cause of such an utterance? Such a belief, reliably acquired, we should hope, but how do we know that without prior causal knowledge? In the second place, we must inquire how the authority knows what he knows, and, unless we accept an infinite regress of authorities, some other way of knowing causal laws must be postulated.

Nor (6) do we pick up causal connections in learning the language, for in learning a language we only learn the connection of names to the named, and nothing else. That is to say, causal laws are not analytic truths.

Moreover, (7), the absence of a cooperative condition necessary for the cause to produce the effect cannot be known, so that the connection cannot be known to be invariable, for it is impossible to establish that all such cooperative conditions must be perceivable (and perception is, at this stage, the only source of

knowledge). The problem here is that we may identify the cause wrongly if some necessary condition for the effect is invariably present in all the observed cases, but is not itself observable. In such a case we will identify a proper subset of the actual set of sufficient conditions as in itself sufficient, and so identify an incomplete, *prima facie* cause as the whole cause, sufficient in itself to produce the effect. This is developed into an accusation of circular reasoning: So we assert, on the basis of observation, that A necessarily always produces B. We cannot know that there is no third item C, itself unobservable, which has always been present whenever we observed A, and which is necessary to produce B. So it may be that we think heat and fuel sufficient to produce fire, unaware that oxygen, which has been present in every case we observed, is also needed. In order to rule out oxygen as a necessary condition for fire and establish firmly that heat and fuel are sufficient, we have to know something about oxygen, so that we can tell when it is present and establish that fire occurs even when it is not present, as long as heat and fuel are. But in order to know anything about oxygen, since it is unobservable, we must rely on knowledge of invariable causal laws that are sufficient for us to say just what the invariable (observable) causes of its presence are. That means we would have to know that there is no such a causal law, for instance, that establishes that oxygen is present wherever fire is. Thus we are caught in an impasse, and must reason in a circle to establish that fuel and heat are sufficient to produce fire, for we must assume them sufficient in order to rule out the possibility that oxygen too is necessary.

It is noteworthy that there is a way out of this last argument, which seems to be the master argument behind the Carvaka position. It is a way adopted by Buddhism. We could take it that there is no cause (or at least no cause ever discussed by us) that is more than *prima facie* (that is, that is not asserted to hold only under certain unspecified further conditions, the “usual” conditions.) The hidden condition required for the cause to operate will then no longer spoil our claim of a causal connection, and we can assert that heat and fuel cause fire, since the connection is only *prima facie* to start with. We only mean to assert that heat and fuel cause fire under the usual conditions, without necessarily even knowing what conditions usually hold. Again, the Jains might have this argument in mind when they suggest that every statement is true *in some way*, and that no statement is true without qualification, so that all opposed statements are ruled out. Applied to causation, this would suggest the Buddhist position. It seems, then, that the Buddhists and Jains responded to the epistemological problems posed here by the Carvaka school, and our texts, despite their late date, may report a set of arguments characteristic of the Carvakan school around the fifth century BCE.

At this point our text asks why we do make the causal inferences we do, and argues that this is easily

explained as an effect of custom, and might well lead us into error. (A position like Hume’s seems intended.) That the inference is justified by the result may happen often enough so that we get in the habit of making it, but not because the inference is justified before the event. Rather this may result accidentally, or for reasons of which we are not aware. For instance, the inference may be justified only under certain imperceivable conditions that are usually satisfied in our environment. A set of beliefs may be a reliable guide to practise in the conditions in which we live (many of those conditions being unknown to us), without being true.

If it is argued that a deterministic natural law, Brahman, and so on, must exist, for otherwise things have no cause, in accord with the Vaisesikas, it is objected that everything might be produced spontaneously from the inherent nature of things. The idea here seems to be that nothing external to the natures of individual objects need be presupposed, in particular, no natural law standing outside things and governing them, as long as we can suppose that the things in the world act spontaneously out of their own natures. The Buddhists were to point out that there is still a reliance on a kind of absolute here, some positive and “unconditioned” essence present in each thing, which follows certain specifiable, invariable patterns of action and response. Buddhism preferred not to postulate such an unconditioned essence, and to insist that every causal regularity allows of exceptions. Again, it looks as if the Buddha was familiar with this stage of Carvakan thought, and developed his own theory of causality in response to it.

10. THE CONSERVATIVE DEFENSE—PURVA MIMAMSA

Mimamsa⁴⁹ originally held close to the *Vedas*, interpreting them in terms of the *Brahmanas* and ignoring the *Upanishads*. The school rejected the new notions of Karma and release from Karma, seeking instead the Heaven of the Fathers, to which one may attain through sacrifices. Like the *Brahmanas*, Mimamsa views ritual as effective on its own, rather than dependent on the gods. Jaimini, our earliest informant, had acquired a number of sophisticated philosophical defenses for his conservative stance, clearly formed in part in reaction to the arguments of the materialists.⁵⁰ Jaimini insists that the *Vedas* be interpreted solely as a set of injunctions

⁴⁹Following the common practice, I shall refer to Purva Mimamsa (Earlier Interpretation) as the Mimamsa system, though Vedanta is sometimes called Uttara Mimamsa (Later Interpretation), so confusion is possible here.

⁵⁰ The earliest existing exposition of the school’s doctrines is the *Mimamsa–Sutra* of Jaimini, which took its present form between 300 BCE and 200 CE. English selections from Jaimini are found in Radhakrishnan et al. (1957) 487–498. The earliest surviving commentary on this work is that of Sabara, from the 3rd or 4th century CE (?). See *Sabara–Bhasya*, translated along with the

to carry out the sacrifices, not as the exposition of any truth. Thus the speculative impulse that might lead to the abandonment of the unreconstructed *Vedas* for other religious systems is curbed.⁵¹ The movement devoted a great deal of attention to epistemology, arguing, of course, for the authority of the *Vedas*, and the reasonableness of accepting them. Their epistemological concerns led them to insist that the *Vedas* were eternal and uncreated, and they draw many odd conclusions concerning language and cosmology from this doctrine. Mimamsa insists that Sanskrit, the language of the *Vedas*, is as eternal as they are. Reasons were found why all words properly belonging to Sanskrit, with their significations, should turn out to be eternal, so that they do not acquire meaning by convention, or in any other way, but always have meaning already.⁵² Mimamsa also makes the present world order everlasting, and denies the notion of the periodic destruction of the world that had been introduced along with the doctrine of karma and rebirth. The problem is that world cycles would require a transcendent God of some sort who preserved the *Vedas* between world-cycles, and that would introduce an author for the *Vedas*, and spoil the arguments for their unquestionable authority. Mimamsa thus developed a line of atheistic arguments, to rule out any alternative to their postulate of a beginningless tradition. After a while, the school developed doctrines of its own concerning the self and release from karma.⁵³

Mimamsa's defence of the *Vedas* is based on the foundationalist and reliabilist analysis of knowledge in Samkhya. As Jaimini reads it, the skeptic's insistence that we *show* a particular way of knowing to be reliable, at least assuming that all things are working in its favor, is simply wrong-headed. It is characteristic of a way of knowing that it produces knowledge *as long as nothing prevents it from doing so*. Thus all apparent cognition in accord with a given way of knowing is to be assumed accurate and true unless some positive reason can be

Mimamsa-Sutra, by Ganganatha Jha, Gaekwad's Oriental Series, Vols. 66, 70, 73 (Baroda: Oriental Institute, 1933, 1934, 1936). A super-commentary on Sabara, the *Sloka-vartika*, was written by Kumarila Bhatta in the 7th century CE. Translated by Ganganatha Jha (Calcutta: Asiatic Society of Bengal, 1909). Selections from this in Radhakrishnan et al. (1957) 498–505. Kumarila also wrote the *Tantra-vartika*, arguing extensively against the existence of God, and the *Tup-tika*. A student of Kumarila, Mandana Misra, wrote a commentary on the first work, the *Nyanya-ratnaraka*, and also the *Vidhi-viveka*, the *Rju-vimala*, and the *Prakarana-pancika*.

⁵¹For this, see *Chandogya Upanishad* VIII 7–12.

⁵²One is tempted to refer the reader to Plato's *Cratylus* for a Greek exposition of this sort of view, which Plato clearly thought absurd.

⁵³It was in the time of Kumarila and Prabhakara that the old Vedic aim of attaining to rebirth in the heavens was displaced by release in the Upanishadic manner in the Mimamsa tradition. In the medieval period there is Parthasarathi's *Sastra-dipika*, Madhava's *Nyaya-mala-vistara* (1350 CE), and Khandadeva's *Bhatta-dipika* (1650 CE). These works are influenced by the New Nyaya School. The present discussion of Mimamsa depends especially on Hiriyanna (1932) Ch. 12, which is very thorough. Where material is gathered from elsewhere I indicate as much in the notes.

advanced why it is not.⁵⁴ Each way of knowing, of course, has its own potential problems, but we do not ordinarily demand justification for a cognition apparently acquired in one of the valid ways, and in fact such justification cannot ordinarily be provided. Indeed, a reason needs to be given why an apparently valid piece of knowledge, produced by an ordinarily reliable process, should be rejected. If such a reason is forthcoming, it will point out that there is some defect in the way in which the belief purported to be knowledge was produced, rendering it unreliable. So, one's eyesight may be bad, or it may be foggy, or the object seen may be distant—but if no such reason is forthcoming, then the reasonable thing to do is to accept that the eyes are working reliably and trust them. One should assume apparent knowledge arising from a reliable means of knowing to be valid unless some reason can be proposed to reject it. This throws the burden of proof on the skeptic, who cannot bear it, for he can only show a given apparent piece of knowledge to be wrong by assuming most apparent knowledge to be right.

If knowledge is “self-valid” in its origins, that is, it is correct belief reliably produced, then consideration of the justification the believer might have for accepting his belief turns out to be irrelevant to its status as knowledge. It is not specified that the believer has to know about the origins of his belief if it is to be knowledge, only that they have to be such as to establish its reliability. Moreover, knowledge is self-valid in its ascertainment. That is, anyone who knows something thereby knows his belief to be justified (even if he does not know the justification) without any need for further consideration. Perhaps we would say that we know that we know when we know. If we took it that whatever produces a belief that counts as knowledge produces confidence in it as well, then it seems plausible that it would produce a belief that one's belief is in fact knowledge, and this belief, of course, would be reliably produced if the belief it refers to was reliably produced. So we would not only know, but know that we know, and so know that there is justification to be found for our belief (if we once understand how it is produced). So a knower will be confident that he knows, and this confidence amounts to knowledge that he knows, even if he cannot produce a justification for this confidence.⁵⁵

We find out that a piece of apparent knowledge is in fact spurious by making use of the knowledge,

⁵⁴This is the doctrine of *svatah-pramaya*, the “self-validity” of knowledge.

⁵⁵It is not so easy to argue that one knows that he knows as it is to argue that he knows his belief is correct, for to know that he knows he would have to know, that is, have a reliably formed belief, that his belief was reliably formed, and this would not occur, presumably, unless he reflected on the matter. But if anyone were to ask him, and he understood the question, surely he would immediately answer that his belief must be reliably formed, even if he does not know how.

and discovering its incompatibility with other apparent knowledge. So, if one thinks he sees a serpent, he will discover his error if he comes close to catch it, and sees that it is in fact only a rope. The point is that he will *not* discover his error (or at least need not do so) by examining the conditions under which his belief was acquired and finding the process of acquisition to be flawed, though he may work out where the unreliability was introduced into the picture later, and will no doubt assume that his belief was unreliably produced as soon as he discovers it is in error. So we have ways of showing that a belief is false, but is there a way of proving a belief true? No, at least there is no conclusive test, but “fruitful activity” (*samvadi-pravrtti*) based on the belief is the test we use. Of course, whatever verification we find in our use of the belief can be questioned, so that further testing is always necessary, and that is why we cannot prove the belief to be true. (The belief remains knowledge, if it is in fact reliably produced, whether we can prove it true or not.) If one seems to see water, one tests this by drinking it, but it may be questioned whether he now correctly perceives that he has quenched his thirst. The truth of the belief is its correspondence with reality, but such a correspondence can never finally be established. It must simply be assumed as long as apparent knowledge has not been invalidated.

This is a very canny response to skepticism, but how can it be applied to the defense of the Vedas? The knowledge gained from the *Vedas* is the sort obtained from verbal testimony. This sort of knowledge must be accepted as *prima facie* valid, like other forms of knowledge, such as those arising from perception or causal inference, and for pretty much the same reason. If we reject as untrustworthy this whole class of beliefs acquired from verbal testimony, we no longer have a sufficient basis to construct a picture of the world at all. We simply do not have enough data from our private experience to put together a picture of the world without accepting others as experiencers, and blending their reports of their experiences, obtained through verbal testimony, into the mix. Now the way in which belief gained by verbal testimony fails to be valid is that there is some flaw in the source. The fellow testifying doesn’t know what he is talking about, or is lying, has a bad memory, or whatever. (Also, of course, we might misunderstand him, but if that is all that is wrong, his testimony will be correct enough.) Now the *Vedas* are verbal testimony that has no source. No person lies behind the *Vedas*, and so no flaw in the one reporting his beliefs can possibly be there to be found. For instance, it cannot be argued that the *Vedas* are untrustworthy because their authors were intoxicated, senseless people.⁵⁶ This, of course, for all the immense sophistication of the moves leading up to it, seems a bit balmy, but it will give a critic pause if it can be established that the *Vedas* have no author. Indeed, all the criticisms of the *Vedas*

⁵⁶So Kumarila, *Slokavartika*, translated in Radhakrishnan et al. (1957) 505.

must have assumed they did have an author or authors before the Mimamsa provided this argument, and so it at least puts the debate on a new standing.

In any case, this line of argument is completed by pointing out that the *Vedas* cannot come into conflict with other apparent knowledge. Any authority that did that might well end up being overruled, particularly if we take the Samkhya view that authority is a secondary means of knowledge, dependent on the ultimate author's use of perception and inference. The reason is that the only references in the *Vedas* are to matters that we cannot learn about in this life of reasoned sensory experience, and so the *Vedas* are not scientifically falsifiable. Moreover, any apparent contradictions within the *Vedas* can be resolved if the offending passages are interpreted properly. We can never have a good reason to reject the *Vedas*, then, and the upshot, given that we need a positive reason to reject a piece of apparent knowledge rooted in verbal testimony, is that the *Vedas* must be accepted.

One response to this would be to argue, as Samkhya does, that Authority is not really a way of knowing independent of the others. First, there is the problem of establishing what the authority means, and even if we take the point against epistemological solipsism, this means that authority stands within the context of our other ways of knowing, and one possible objection to an authority is, after all, that the authority simply has it wrong. It is for this reason, though, that the Mimamsaka claims that the authority of the *Vedas* cannot be contradicted by other ways of knowing, since it concerns only things that are not accessible to other ways of knowing. What things are these? It would seem that two sorts of things might be intended: truths about realities that cannot be perceived, and cannot be argued to as causal prerequisites for what can be perceived, and injunctions, which would seem to state no truths at all.

As to the first, one might wonder if such truths can have any bearing on our lives, since they seem to have no bearing on how experience would go. This would be a Buddhist objection, and the Buddhist pragmatic empiricism very likely evolved in part in reaction to the Mimamsaka position here. In practice, of course, the Mimamsaka is imagining that there will be a difference made in experience after our deaths, for those who follow the *Vedas* will attain the Heaven of the Fathers, which is clearly a realm of experience, even if we cannot experience it before we die. So his argument hangs on the assumption that we shall experience such things after our deaths as cannot be experienced now, and this will give content and meaning to the *Vedas*, but in this life there is no way experience can bear on these truths. One might wonder at this point how it is that the *Vedas* in fact come to reflect these afterlife experiences, and in truth this question is never answered by the Mimamsa

tradition, for the strategy is to identify no way at all in which this happens, so that we cannot raise skeptical objections to the process identified. Whether it is reasonable or not to believe the authority of the *Vedas*, even given that they have no author, as Mimamsa claims, still seems open to question, though. It cannot be claimed, for instance, that belief in the *Vedas* is known to give rise to fruitful activity, at least, not until after our death, and not without arguing the point on the authority of the *Vedas* alone.

As for the second strategy, injunctions don't seem to be capable of truth, however valid they may be. Prabhakara (7th or 8th century, contemporary with Kumarila, whose work he knew) agreed with Jaimini that the *Vedas*' verbal testimony referred only to future things, that is, things yet to be accomplished. This should not be taken to mean that they are statements of fact about the future—what they say is true now, but they do not indicate what is, not even what is now true about the future, but rather *what now is to be done* in the future. One might take what is to be done here as something like a presently existing potentiality, which is not an actuality, and somehow has reference to the future time when it will be realized. Prabhakara interprets apparent statements of fact as recommendations that something be done or not done, so, for instance, if it is said that some god created the world, this is taken as a way of emphasizing that rituals directed to this god are to be performed. So verbal testimony does not establish truths, but only the validity of certain injunctions.

But one might argue that certain truths can be derived from the injunctions, inasmuch as they presuppose certain things. One cannot validly be ordered to pick up a ladle, for instance, unless there are ladles. This is turned to account to undermine the more radical skeptical positions, it being argued that the authority of the *Vedas*, for instance, establishes the existence of an external physical world. More radically, Mimamsa argues, at least later, after Realism has become self-conscious in the Indian traditions, that every meaningful word in the *Vedas* must refer to some actual thing, quality, action, or whatever, on the ground that it would otherwise have no meaning. If one were to press one's luck here, and argue that an injunction is imposed for a reason, for instance, attainment to the Heaven of the Fathers, then it must be possible to accomplish what the injunction aims at accomplishing, and so there must be, for instance, a Heaven of the Fathers. No doubt, at first the opponents in this discussion were yogic practitioners who reinterpreted the sacrifices as meditative exercises, arguing that the explicit aims of the sacrifices were not actually attained, but that something else worth the trouble was. This sort of thing would be blocked by insisting that what the *Vedas* say is that the sacrifice is to gain wealth or beauty, and the injunction to perform it for this purpose makes no sense if that is not what in fact happens. All this would seem to capture the thoughts of Kumarila (8th century

CE), when he held that verbal testimony can refer to existing things, to states of affairs, or to future things, that is, things to be done. When the *Vedas* discuss what is the case, he says, it is always with regard to something that is to be done, commending it to the hearer.

Kumarila's strategy comes closer to giving the believer what he wants from scripture, but it would seem faulty logically, since if some way of knowing other than authority were to establish that anything an injunction presupposes or implies is false, then it would cut against the validity of the injunction. But the likely reaction to that would be to claim that those things presupposed in the injunctions fall into two categories: those things that can be known by means other than authority, and are pretty obviously true (the existence of the ladle), and those things that cannot be known by such means (the existence of the Heaven of the Fathers). That might seem to fail, if it turns out that a ritual is supposed to lead to wealth, and we observe that it does not, so under those circumstances additional defenses would have to be deployed. In particular, it might be claimed that it would have led to wealth, had the injunction been followed precisely, but an error was made. Given the *prima facie* legitimacy of the authority of the *Vedas*, then, the perceptual observation that no error had been made would be called into question. It seems that in the end, then, the injunctions of the *Vedas* can come into conflict with perception and inference. But when that happens, since there is always room to suggest that the perception or inference might have gone wrong due to some unperceived problem, and there is no room to suggest that the non-existent author of the *Vedas* could have made a mistake, the authority of the *Vedas* will always win out.

The next issue, then, has to do with the status of the *Vedas*. Why suppose that the testimony of the *Vedas* is to be accepted as a source of *prima facie* knowledge? The argument begins with a consideration of meaning. Both words and what they signify are, it is argued, eternal. The eternity of words might be denied on the ground that the particular utterance is a word, and it lasts but a short time. It is answered that each sound is a universal with many instances. So we says that the sound "oy" is uttered any number of different times, the *same* sound, which suggests that the sound was there all along, as a universal, and only manifested itself in the particular utterances of it. Thus the particular manifestation of a sound is distinguished from the sound manifested, which is an omnipresent and eternal unity. A word is an ordered collection of sounds.⁵⁷ Now

⁵⁷*Mimamsa-Sutra* I.1.20. Also, it is observed that there is no material cause of a word, no stuff out of which it is made, unless one figures the phonemes are the stuff, but they are not material that can be destroyed, but sounds, which are eternal substances, and their arrangement to make the word is eternal, too, since it need only be a possible arrangement to establish a permanent possibility of instances of the word. So words cannot be destroyed. (I.1.21.) Radhakrishnan et al. (1957) 490.

the word would have to persist after the utterance of it if it is to function properly and convey meaning to another, for the other must consider it and its meaning even after the sounds uttered have ceased to be experienced. So the word must continue to be present after the utterance of it is past. Moreover, the same word is used many times, and we learn its meaning through hearing it used repeatedly, so the word here must be something other than the utterance. But these arguments only establish that words are not the same as their utterances, and persist for some time.⁵⁸

Now what words signify is clearly eternal, since they signify real universals such as *tree* or *boy*. Words are always referred first of all to universals, though they can be used in the right combinations to pick out individuals. The eternal connection of words to the universals they signify must be assumed since whoever might be supposed to have established the connection between a word and its meaning (perhaps God does this) would have to do so by pointing out first the universal the word is to mean, and this cannot be done unless we have a word already to point out the universal.⁵⁹ There must be an original language in which words and meanings are not established by convention, if we are to explain how the artificial languages of men arose. The variation in languages, and the existence of synonyms and homonyms (which violate the “one word—one meaning” principle), are explained through corruptions of the natural language, the Sanskrit of the *Vedas*, in everyday use. The incorrect words of artificial languages express their meanings indirectly, through their historical connection to the correct words from which they evolved, and on whose meanings they draw. Or else their meanings are originally metaphorical, drawing on the correct meaning as the jumping off point for the metaphorical shift.⁶⁰ Thus convention is not the original source of meaning, though in any existing language there are agreements about what words will be used to mean. This conventional agreement is compared to light, which must be present for vision to occur, although the eye and the object of vision were there all along. That is, if anyone is actually to use a language, they must consent to use the words to mean what they are currently agreed by the linguistic community to mean, and one learns the meaning of a term from what others

⁵⁸The possibility not considered here is that the word may exist for a while, perhaps as long as its language is spoken or read, and finally cease to exist when no one is capable any longer of using or understanding it. *Mimamsa–Sutra* I.1.18–19 (Radhakrishnan et al. (1957) 489–490).

⁵⁹This is the argument of Sabara’s commentary to Jaimini, I.1.19 (Radhakrishnan et al (1957) 490). It has an analogue in Wittgenstein’s considerations of language, for Wittgenstein argues that the use of words that signify cannot be learned in the first instance by ostension, though he does not conclude that necessarily there is a “natural” connection between words and signification that we know by knowing the nature of the word or some such thing.

⁶⁰Kumarila, *Tantravartika on Mimamsa–Sutra* I.3.28, cited in Raja (1963) 42–45.

take it to mean,⁶¹ but agreement does not create the meanings of words in the first place, for all language arises from earlier language, and no language is ever established from scratch by an agreement to use specified words with specified meanings. By the way, Sanskrit is not assumed to be a natural language in the sense that its words have some innate psychological effect impressing their meanings on a person's mind. The impression of its meaning on one's mind is only accomplished by a word through one's discovery what people take the word to mean. Its meaning cannot be learned by a child unless he takes it that people mean something, something he knows about (corresponding to some concept he has already), and then tries to figure out what they mean given their behavior. Sanskrit, however, is not, it seems, the language of thought or concepts, it is just that Sanskrit is the language that always was, from which all other languages have derived.⁶²

Given the necessity of postulating the eternity of words not contrived by men to explain the possibility of meaningful speech, it seems that a verbal thing need not necessarily have arisen in the course of time. The *Vedas* in fact have been preserved in their current state through a verbal tradition that, handed down from teacher to student, stretches without beginning into the past. Thus no mention is ever made of any author in the *Vedas*. (A similar doctrine was held by the grammarian Patanjali in the 2nd century BCE, who said that the *sense* of the *Vedas* is eternal, but not the order of the words, apparently allowing that the language is not eternal, though changes in language always preserved the sense.) This entails, of course, that the language of the *Vedas* is also eternal, not just in the sense that every word or collection of words is eternal, but in the additional sense that the conventions underlying that language are eternal, and were never established by anybody.

11. LATER MIMAMSIKA THOUGHTS ON KNOWLEDGE

Following Jaimini, there were five independent sources of knowledge (*pramanas*) recognized in

⁶¹Raja (1963) 26–27. According to Kumarila, a child learns the meaning of an utterance by first perceiving the utterance and how others respond to it, then inferring that the others have heard and understood the utterance, and postulating what the utterance must mean to explain what the others do. That Sanskrit lies behind other languages may have seemed plausible to Indians, given the widespread influence it has in India. Presumably peoples further away have introduced more variation into the original language of the *Vedas*.

⁶²Raja (1963) 20. The argument seems to miss the possibility that an infinite number of languages might have been spoken in the past, each evolving from its predecessors in the ways suggested. There is no need for a single master language to have been always. I do not know if the Mimamsa school thought it could be shown a priori from the consideration of the nature of language and meaning that there is such a master language, and then identified Sanskrit as the obvious candidate among known languages for the office, or if they argued for the existence of such a language from experience, arguing that we observe that Sanskrit is indefinitely old, has not changed in known times, and so on. The former line is stronger, of course, if it could be pulled off.

Mimamsa around the time of the 3rd century CE. Each is held to produce knowledge naturally, as long as there is no hindering condition. The first two are perception and inference, that is, reasoning from a known effect to its cause, which are treated in a more or less conventional manner. We have discussed verbal testimony already, though we should note that our remarks are to be restricted to the testimony of the *Vedas*, other forms of verbal testimony having an author being reduced to inference—the author would not have said it had it not been true. In addition to these three, Jaimini adds comparison. On Kumarila’s account, this occurs when one observes that one thing is similar to another, and then concludes the (metaphysically distinct) fact that the second is also similar to the first. Sabara reads the *Mimamsa–Sutra* differently, so that comparison is analogical argument. For instance, you are aware of your own experience, and by analogy others must have experience as well. On both accounts the idea is that one compares something before one to something that is not present, and attributes the characteristics of what is present to what is not on the basis of other shared characteristics known through memory, observation, or whatever.⁶³ The fifth source of knowledge is postulation, which is a matter of assuming something to be so because it is the only way to account for two other facts, as when one assumes that Devadatta is somewhere outside when one knows he is alive and observes that he is not in his house, or when one assumes he is eating at night when it is observed that he does not eat by day, but remains plump. This is not assimilated to inference because it does not work through a middle term, nor does the explanation sought rest in an invariable causal connection, for eating at night is not the only cause of plumpness, though it is the only possible cause in this context.⁶⁴

Kumarila, in addition to these five, also held that absence of apprehension was a fundamental source of knowledge, for instance, the knowledge that there is not a jar on the table. The idea is that one knows this through the absence of apprehension of the jar on the table, not through any other form of knowledge. Nyaya holds that such negations are known either through perception, if the absence of the object is perceptible, or

⁶³See Chatterjee and Datta (1954) 326–327. This is somewhat less detailed than Hiriyanna, but sometimes goes beyond him, and is generally more clearly thought out.

⁶⁴Mimamsa does not allow a syllogism with a negative universal premise, since it is held that such a premise can always be expressed in positive terms. Hiriyanna (1932) 321 suggests that this fifth valid sort of knowledge fills in the gap here where a positive expression of the negative universal cannot be found, but that seems out of focus. Each of the examples would require several syllogisms chained together for its expression, or else the fallacy of four terms would occur. Moreover, each of them seems to rely on a disjunctive premise at some point. So it would be best, perhaps, to represent the form as a constructive dilemma, rather than a chain of syllogisms. Or perhaps, considering other examples not given here, one should regard it as an argument to the best explanation, where it is conceived that an explanation is demanded when there are two facts that somehow present a problem, when taken together, namely, “how is it that both these things can be true at once?”

through inference. Kumarila, though, follows Sabara's commentary on pJaimini in taking this particular form of knowledge to be irreducible to the others. So he argues that one cannot perceive an absence, and moreover, if one realizes later in the day that there was no elephant there in the morning, this cannot be due to a perceiving of the non-elephant-presence in the morning, since at that time he did not even consider the question whether there was an elephant there. (The argument seems inconclusive, since one certainly sometimes perceives a thing, and realizes only later that he was perceiving it.) Since inference arises from perception, such negative knowledge cannot arise from inference if it never arises through perception. (From a positive perception one can infer the unavoidable cause, but, presumably, that cause is always itself a positive state of affairs. To argue to a negative state of affairs, some negative assumption is needed—there is no elephant, since there is no smell of peanuts.)

Kumarila's problem with the Nyaya position is that he thinks one can only perceive what is, just as a word can only *mean* what is. (Perhaps we could say that Nyaya holds that one perceives facts, but Kumarila thinks one perceives things.) This is fundamental to his theory of knowledge, for if perception and meaning could be of what is not, he argues, one could not then be sure that a thing existed just because one perceived it. Perhaps one could argue that an absence is something that is, but Kumarila is unwilling to grant that an absence is a *thing*, that might be perceived. Rather, it is a fact, that is deduced from what we do (or don't) perceive. Of course, this means that perception is not only reliable in the sense that it does not misreport what is there, but also in the sense that if the thing is there perception can be counted on to pick it up, unless, of course, something prevents its doing so. Moreover, those things that might prevent its doing so can be listed by us, and none are in principle undetectable.

Memory presented interesting problems. According to Kumarila it is not a valid form of knowledge, for it does not present us with anything new, so what is remembered is, in effect, known through whatever form of knowledge originally presented the fact to us. Prabhakara held a similar view, but does not insist that knowledge present something new. Rather, he insists that a valid form of knowledge not be dependent on some earlier form of knowledge of the same fact.

Like Plato in his later dialogues, Indian Realists worried about the possibility of error. Say we view a shell, and mistakenly take the mother of pearl to be silver. What has happened here is that two genuine cases of knowledge have become confused together. The first is the apprehension of *this*, which is not rejected even when the error is corrected, for we then insist that *this* is shell. The second is memory, a recollection of silver,

which is accurate enough, for, although there is no silver present, this is just what we would expect from a recollection of silver. There is no error here, then, only two knowings, which are confused with one another, so that we take their objects to be the same.⁶⁵ What appears to be error, one might think, is a lack of knowledge, that is, lack of knowledge that this is not silver, but that won't do, for such a lack of knowledge occurs even in dreamless sleep, when it would be absurd to say that one is in error. So what we really have is only partial knowledge, that is, two pieces of knowledge together with a failure to know a third thing. The whole point is to avoid postulating as error a special grasp of what is not. All apprehension is of what is, and if we seem to apprehend a fact that is not, that appearance cannot be correct.

Kumarila held a different view of error, taking it that an incorrect view arose, not through a failure to know something, but through an actual confusion, so that the shell and the silver appear to be unified, when they are not. So it seems there is a meaningful statement about what is not, namely, about the union of the shell and the silver, but no apprehension of anything except the shell, and the silver.⁶⁶ Both Kumarila and Prabhakara agree with their tradition that no negative statement is true except in virtue of some positive statement, so that, for instance, if one says this is not green, this will be true because it is red or yellow. (The opposing view is taken in Vaishesika, which allows for negations irreducible to affirmatives.) So both approaches to error aim to avoid apprehension of what is not, except insofar as one might come to know what is not purely in virtue of apprehending what is. Kumarila's view is the older, going back to Sabara's commentary on Jaimini.⁶⁷

Prabhakara's view leads to the conclusion that there is never really any positive error, only incomplete knowledge, a view shared by the Jains. In this view, everything one believes will turn out to be true, though perhaps incompletely so. Error, Prabhakara suggests, is knowledge that misleads us due to its incompleteness, but it is incomplete only in view of certain aims, and so this incomplete knowledge falls short pragmatically, and what we call "knowledge" is pragmatically sufficient. No knowledge, of course, is ever complete in the sense of being knowledge of everything there is to know, and so we have to decide when to count our inevitably incomplete knowledge as incomplete. Prabhakara's answer is that it is incomplete when its incompleteness prevents it from serving us well in our normal activities. And this brings us back at last to the

⁶⁵This, of course, is a suggestion also made to account for error in Plato's *Theaetetus*.

⁶⁶Note how this parallels Plato's line of thought on the issue.

⁶⁷I.1.5. Radhakrishnan et al. (1957) 488.

Vedas. The view that the *Vedas* consist entirely of injunctions is in fact going to fall a little short of the truth. All language whatsoever that purports to express facts in fact expresses injunctions insofar as it is informative at all. The reason for this is that merely stating a fact is so easy to do. The question is not whether what you said was true. Of course it was. It cannot but express the various contacts with reality that you've experienced, and if there is an error in it, that error consists only in its failure to note other facts. Where the real content of the statement is found is in what it recommends that I do. It is on the basis of that recommendation that it will be decided to be in error, or to be, for all practical purposes, the whole truth.⁶⁸

12. LATER MIMAMSA ON THE EXISTENCE OF GOD AND OTHER MATTERS

Mimamsa argued against the existence of a God, both because of the independence of the *Vedas*' authority, which was not to be justified as that of the *Bhagavad Gita* was, as stemming from the authority of God, its author, and because the notion of God suggested to these philosophers that the world had a beginning in time, which would again undermine their account of the *Vedas*' authority. It has been suggested that Mimamsa does accept a God, but not a creation in time, and it certainly seems this could have been an option, but there is no positive proof to support this reading of their doctrine, so we must take them to reject theism entirely. This does not mean, of course, that they need have rejected the naturalistic theism of such groups as the Buddhists and Jains, making the gods ordinary souls fortunate in their birth, living long lives in the heavens, nor does it mean that they reject the talk of gods in the *Vedas*, which is readily interpreted in this naturalistic manner.

In the beginning of the discussion in the *Slokavartika*⁶⁹ theism is compared to the notion of an omniscient person in Jainism, and that suggests the direction of one criticism of the view. It is attacked as something with no empirical support, something we could not know to be the case. This being is not a part of nature, so is not perceivable, since perception is a natural process. Moreover, he could not have had anyone present with him to observe his initial creation, so that we could learn about it from testimony. Not even the first beings created

⁶⁸There is a very strong similarity here to the thought of the Sophists in Ancient Greece.

⁶⁹Radhakrishnan (1957) 498-505, for translation by Ganganatha Jha of Section 16.41–87, and Aphorisms 27–33.

can testify to the creation itself. If God himself asserted that he created the world, then he might be boasting, so his testimony could not be trusted. The view is an odd one for a Westerner, but consonant enough with the belief in a naturalistic polytheism. One of the gods who are part of nature in the heavens might produce a sacred text, such as the *Bhagavad Gita*, but the claims of such a god for himself would not necessarily be trustworthy. The Buddhists argued in a similar way that Brahman might think that he was eternal and had made the world, since he could not remember a time when he was not, and was the first of all beings to come into existence in this world cycle, and so knew that he preceded all else—but for all this there was in fact an earlier world cycle with a different Brahman.

There are additional problems with the conceivability of a non-natural process of creation. What form did this god take? How did he create the world, that is, by what means? If creation was due to his desire, how could desire arise without a material body (matter being the natural source of desires in the self)? If he did have a body, that is, some natural organization from which his abilities and actions might be explained and understood, then this must come from some other creator prior to him, and so on, ad infinitum. Perhaps his body is eternal, but then what is its nature? We know of no sort of body that is not subject to cessation. Whatever cause we attribute to God's desire to create, we are setting up a causal order that presupposes a world beyond this one that is created.

Indeed, if all that is meant here is that living things control the events in the world through naturally arising desires, then no one disputes it. (It is to be remembered that intelligent souls played a much larger role in natural events for ancient Indians than they do for us.) But if the intention is that the desires of just one intelligent being brought about the world order immediately, without any intervening causal mechanism, it can be objected that no such immediate causation is ever observed to occur. This last point smacks of Buddhism, which would have argued that no *unconditioned* causation could occur. Moreover, if this God were a pure soul unconnected to matter, it could not act at all. So we cannot use psychology as a model by which we can understand God.

A third set of problems rotates around the evil to be found in the world. It is pointed out that in the beginning no being would have committed any bad deeds (or good ones, for that matter), and so how could he determine what beings deserved what sort of life? If he created of compassion, well, for one thing, there was then no one to feel compassion for, but if one sets that aside, surely the project has miscarried—he would have created only happy beings. Perhaps the world could not arise or continue without some pain and suffering,

but why is that so? What natural laws here govern what God can or cannot accomplish? Either none, in which case evil has not been explained after all, or else there are such laws, and God is not independent of nature after all. But perhaps God's motivation for creating the world was not the good of his creatures. What, then, was it? Surely he was in need of nothing, living in perfect bliss, so he did not create the world for amusement. Why does he want to destroy the world at the end of things if he wanted to create it in the first place? Is this due to lack of foresight, so that it did not turn out as he had expected?

What of the authority of the *Vedas* themselves? Well, the texts that speak of a creator there are intended only to praise certain injunctions, and are not to be taken as statements of fact. Mere story-telling has no use in itself, but the stories told in the *Puranas*, for instance, are intended to praise some action enjoined in the *Vedas*, or in the *Puranas* themselves. It seems the stories need not be true at all to accomplish this, and the references in them to particular beings may fail to refer to anything real, for their meaning is wrapped up in the universals they refer to in describing that being. That this or that, or anything, fits a given description crafted from these universals is not something that must automatically be the case, for the description is meaningful enough even if nothing fits it. If we press this view all the way, Kumarila Bhatta may intend that no factual content is to be found in the *Vedas* at all, only injunctions. The myths are told to get people to follow the injunctions.

As Mimamsa developed, it acquired views on other matters, eventually adopting, in the 7th or 8th century, a form of Atomism to explain the material world, and a belief in continuing, eternal selves (since volition presupposes such an agent). So it was held that there are substances (*dravyas*) which are the substrates of qualities, and that these substances persist, rather than being produced anew in each instant, as the Vaishesika would have it. Kumarila accepted the nine sorts of substances postulated by the Vaishesika, and added two more, namely darkness and sound, the latter for the sake of views on language. He held that all sorts of substance other than darkness could be perceived, even time as long as some other object was present. (Prabhakara adopted the Vaishesika view that darkness is only the absence of light.) Atoms were taken to get no smaller than could be perceived, the size of a mote in a sunbeam. Prabhakara took views here much closer to those of the Vaishesika, denying that a substance could change, and taking its attributes to be really distinct from it, items which came to inhere in its without changing what it is in itself. Kumarila took it that substances changed, and were not really distinct from their accidental attributes. Similarly, Prabhakara found a real distinction between universals and their instances, and material causes and their effects, while Kumarila did

not.

The selves were conceived as omnipresent, though each expressed itself in the world only through a certain definite body. They attain release through dissociation with matter, and retreat into pure potentiality and quiescence.

The school of Kumarila adopted a view of the self like that of the Nyaya–Vaishesika schools, for it is both an agent and a subject of experience. But unlike the Atomists, Kumarila took the self to be capable of change, not in place, but in form, so that, for instance, it gets knowledge (*jnana*) for itself when it illumines an object. Knowledge is knowable only through inference from the illumined object, for it can never illumine itself. Thus the Atomist’s idea that introspection is possible is rejected. Perceptual knowledge is of two sorts, the indefinite perception of an object without

13. SKEPTICAL ARGUMENTATION: THE LATER SCHOOL

So with philosophical theories leading in this way to their own destruction, conventional views may be enjoyed only for as long as they remain unexamined.

Jayarasi, the concluding judgment of the
*Tattvopaplava-simha*⁷⁰

The *Tattvopaplava-simha* of Jayarasi belongs to the second, more extreme, skeptical school, mentioned above, which denied even the efficacy of perception in producing knowledge. It criticizes Buddhist theories as well as more orthodox views, and is firmly rooted in the problematic of the 7th century CE. The work quotes Brihaspati, the supposed founder of the Lokayata school, with respect, and adopts the materialist position, with its corollaries concerning the right way to conduct one’s life. But then it proceeds to argue that we have no good reason to suppose that even the four material elements are real, employing one of the basic forms of skeptical argument—in order to validate a means of knowledge we must know that it gives results corresponding to reality, but in order to know what reality is we need a valid means of knowledge. Thus we can never, without arguing in a circle, establish what is really the case. Having argued thus, Jayarasi nonetheless

⁷⁰Translated in King (1999) 19.

defends Brihaspati, the founder of his school. Brihaspati's intention, he claims, was not to say that the four elements definitely exist, but only to suggest archly that even if what is widely accepted, and, on pragmatic grounds, ought to be widely accepted, such as the existence of the four elements, material objects and pleasure, will not stand up to rational examination, then what can one expect of what looks doubtful on the face of it? He also seems to distinguish between the material and the immaterial inasmuch as he argues only that the material cannot be known to exist, but advances positive disproof of the existence of the soul. In Jayarasi's hands it is clear that materialism has gone beyond its initial brief, and an even deeper skepticism, extending to the sensible world as well as the world transcending the senses, is now to be advanced.⁷¹

Most of the book is devoted to epistemology, criticizing theories of the validity of knowledge defended by Mimamsa and Buddhism, theories of perception in Nyaya, Buddhism, Mimamsa, and Sankhya, and the theory of inference in Nyaya and Buddhism.

Let us look first at its treatment of inference in the Nyaya.⁷² The doctrine of the *Nyaya Sutra* regarding inference is stated thus: One first apprehends the relation between fire and smoke, say, in the kitchen, where both are observable. Then, having established that fire is the cause of smoke, when one sees smoke on the mountain, one infers fire. First it is asserted that perception is the only cause of grasping an inference, but what sort of perception in fact is this cause? If it involves the cognition of universals, such a perception is impossible, for universals are impossible (for reasons given earlier, in a part of the text not available to me). But if the perception of individuals is the cause of one's perceiving the causal connection, well, individuals are numberless (that is, perhaps, there are always new ones possible, so that no definite number can be established), and there is no way to perceive them all, so this won't work. Nor can we legitimately extend what we perceive to be true of a few to all.

Moreover, we have from our senses only information concerning certain sorts of smoke, not every possible sort of smoke.

The next major objection seems to add new material to Acarya. The argument rests on the point that we cannot know what is not, since there is no referent for us to cognize in such a case. But to cognize that smoke is caused by fire we must implicitly cognize the cessation of smoke when fire ceases. Perception of the smoke itself can only establish that it is, so what do we perceive when we perceive that it ceases? (1) If we

⁷¹Jayatileke (1963) 80-82.

⁷²The following discussion is based on the translation of Chapter 7 in Radhakrishnan (1957).

perceive nothing, then we can affirm or deny nothing on the basis of this perception. (2) But perhaps we perceive something, and perceive that something negative is true of it. But that something we perceive cannot be smoke, for it is no longer. Nor is any other candidate plausible. (3) Perhaps destruction, the event that ends existence, is what is perceived. But the perception of destruction is the perception of an event at a particular time, and does not necessarily entail the perception of the non-existence of the thing after it has been destroyed. (It does seem that destruction of a thing entails its non-existence only *immediately* afterwards, but no doubt it can be argued that once a thing ceases to exist it cannot be recovered again, so that destruction is always permanent. But then can we perceive the destruction alone without also perceiving what comes immediately after it? If so, we do not perceive the non-existence of what is destroyed in perceiving its destruction, and if not, well, it is a very odd event that can only be perceived by perceiving some other, later, situation as well!) If we define destruction without the specification that what is destroyed is no longer after its destruction, it is hard to see how to work in a necessary entailment that the thing not exist after its “destruction,” at least as long as there is a difficulty in knowing causal laws. For instance, destruction of a jar could be a matter of a very sharp blow against it with a hammer. But if that is all that is observed, then surely a jar could survive what is observed under the right circumstances, and if it could not, how would we know that?

In the final section of the chapter, it is argued, against a Nyaya commonplace concerning sound, that the impermanence of an object cannot be established from its being an effect. The impossibility of conceiving the destruction or non-existence of anything, already established, is brought to bear on the question, with the intention, it seems, of establishing that we cannot know that causal dependence always produces impermanence. (Also against Buddhism?) This is actually nothing more than a specific application of the general skeptical position against the possibility of causal knowledge, but the analysis of our knowledge of what is not is extended with two more proposals, perhaps proposals advanced by Nyanya thinkers in precisely this connection. (1) One is that the destruction of a sound can be inferred from the fact of its causal dependence. It is objected that that this means there must be some relation between the destruction and the sound that is grasped (it is the sound, and not something else, that is destroyed), but no such relation exists. It certainly does not exist before the sound is destroyed, since a relation holds between two terms, and only one term exists at that point. Nor does it exist after the sound is destroyed, since then there is still only one term, namely destruction, the sound being non-existent. Perhaps an atomistic view would identify an instant of destruction

during which the destruction occurs and the destroyed thing exists, but it could not be destroyed in that instant, then, since it still exists; nor in the next, if it does not exist in the next instant, since what does not exist has already been destroyed. The point is that destruction is an event which cannot occur at any definite time (but only between times?!), and so cannot be understood to occur at all. After this some of the previous points are run through—one cannot cognize non-being; if one could, non-being of the sound is what we need, so cognition of non-being alone won't get us anything unless we can cognize the non-existent sound as well; and we cannot cognize the non-being of the sound, since that is an absence (and, perhaps it is intended, we only know that we don't perceive it, not that it is absent). The second proposal, which sounds Nyanya, is that it may be the (universal) nature of sound itself that is inferred from its being caused, and it is in the nature of anything that is caused to be impermanent. No reply is given to this position in the text.

After the consideration of our possible cognition of the destruction of a thing, the argument proceeds to attack the very possibility of two things being opposed to one another. The point is straightforward—given that we know what fire is, how can we know what it is not to be fire, since we can in no way grasp what is not? (It is probably assumed that we can only refer to what we are aware of, and we cannot be aware of what is not, of course.) (1) It is first suggested that to perceive that fire is not is simply not to perceive fire. The rejoinder is that if not to be perceived is to be perceived not to be, or if to fail to assert that it is to assert that it is not, then in not perceiving fire (and not asserting that the fire is not) we also fail to perceive the universe as a whole (though we perceive some part of it), so that we perceive the universe not to be, and assert that the universe is not in failing to assert that it is. A thing may fail to be perceived, or fail to be asserted, for any number of reasons other than its non-existence or falsehood

If it is objected (2) that fire's failing to be is not simply its not being perceived by this observer, but its being perceived by no one, and its being stated not to be is not simply its being stated to be non-perceived by this individual, but its being stated to be non-perceived by all perceivers—then it is easily replied that we can never be entitled to assert the non-existence of a thing, since we can never be sure no one perceives it. Similarly, if we say something is destroyed when it is subsequently nowhere, we are never in a position to know that a thing has been destroyed, since we can never check all possible places. It seems likely that the Carvakans took this as at least close to a correct analysis of what it is for something to fail to be, given the assertion already discussed that what cannot be perceived by anyone does not exist. It would be fairly natural, faced with the problem posed here, to take it that the converse of this statement is true as well, and it does no

harm here, since this analysis fits right in with the skeptical proposal being defended.

But the text goes right on to other, less plausible, ways out of the difficulty here. Perhaps, (3) an object ceases to be when it loses all distinguishing marks, and so cannot be perceived, even though it is still there to be referred to, and asserted not to exist. But an object that loses all its distinguishing marks by which it is recognized, it is objected, surely cannot be cognized, and so is not available to be referred to.

(4) The next proposal seems to presuppose a view of certain naturalists to the effect that the cause of a thing is always its opposite. The idea may be that heat is the cause of cold, for instance, because everything in nature occurs in cycles, so that cold always follows on heat. Thus we could say that cold is not by saying that heat, the cause of it, is. The view is easily opposed, if that is what is intended, by extending it beyond a discussion of the polar opposition of the elements. The destruction of the jar is caused by the stick, and so opposed to it, as well as to the jar, which seems odd, given that the stick persists even after the destruction of the jar comes to be. (To try to wriggle out of it by announcing that the action of the stick causes the destruction, not the stick itself, will not help, since such an action is only perceived when the stick is, and so is nothing apart from the stick, so that the stick must be the cause, perhaps through its action, after all.) Moreover, the destruction of the jar, being opposed to the jar, should produce it! And since non-existence must somehow cause the knowledge of non-existence, it will be opposed to it, and so cannot be known.

If we say (5) that two things are opposed precisely when they have different causes, so that one perceives (and speaks of) the jar and its destruction or non-being through their different causes, we also fail. For then a jar and its destruction are opposed to the same thing, since the same thing, namely a jar maker who then destroys what he makes, can cause both. Moreover, we have to say more than merely that the causes are different, for then any random pair of things will turn out to be opposed, so that one is not when the other is, since any two different things will have different causes. So the upshot seems to be that simply specifying that the causes of a thing's existence and non-existence are what is really spoken of when we mention its existence and non-existence, without sneaking in an illegitimate reference to what it is that is caused, will not solve the problem. This is one of the cleverer responses to the problem, and it would seem that it could be defended against the attack against it here by specifying that the immediate, proper causes are referred to when opposites are spoken of. This will cover the special case of polar opposites such as heat and cold, but also the jar and the stick, for the jar maker is the proper cause of the jar, and the jar smasher the proper cause of its destruction or non-being, and these two are the same only accidentally.

The last view considered seems to be (6) that to assert that the jar is is to assert something, namely being, but to assert it dependently or relatively, that is, it is being that is asserted, but asserted of the jar. To assert that the jar is not is to assert something independently, standing in no relation to any real thing, namely not being. Now being and non-being are both always available to be referred to. But, we do assert the not being of the jar, surely, and not of other things, and does this not entail a reference to the jar? Indeed, it would seem that if this view were true, then the non-being of the jar, being simply non-being without relation to any real thing, would be just as much the non-being of everything else as well. So to affirm that the jar is not would be to affirm that the universe is not!

After this, the text takes up the relation of cause and effect once more, arguing that causal relations are unknowable. The text distinguishes the cause without qualification, which is able to produce the effect entirely on its own, from the cause with qualification, which is only able to produce the effect under the right conditions. The cause without qualification of a thing, it is argued, is imperceptible, which seems plausible, since we would have to perceive enough about the situation to rule out every possible countervailing circumstance to perceive such a cause. So we can only perceive a *prima facie* cause, a cause with qualification, before we perceive its effect. But the *prima facie* cause is not really the cause at all. From the rest of his discussion, the text now seems to take on the task of specifying what a *prima facie* cause is in terms which would allow us to identify one without perceiving the cause without qualification. The impossibility of doing this argues against the Buddhist notion of causation.

First, it is suggested that the *prima facie* cause both precedes and survives the effect, but this is clearly inadequate since any number of items unrelated to the effect might precede and survive it. Again, perhaps, following Nyaya practice, we are to identify a *prima facie* cause by its being present when the effect occurs, and absent when it does not. But then what we identify as the cause may only accompany the true, imperceptible, cause, and be itself no cause at all. So, perhaps we identify the *prima facie* cause as what is perceived first, before its effect. But often the order of perception is not due to one thing's coming first, but rather two simultaneous things like a cow and its horns, or the cloth and its thread, are cognized successively (as we come closer we first make out the cow, and later its horns). Also, sometimes a cause and its effect are perceived simultaneously (as a fire and its heat). Moreover, knowledge and its object (which causes it) are likewise simultaneous.

It is argued, again, that cause and effect are not known, for if they were, it would have to be known

that they are known, and this too would have to be known, etc. (It is assumed that if one knows he knows that he knows.) And if it is denied that any additional act of cognition arises when one knows that one knows, since he knows this simply by his act of knowing, one avoids postulating an infinite number of actions, but one also leaves the question how we distinguish a case of knowing one knows from a case in which one knows, but does not know one knows. (This seems weak. Surely it could be argued that one always knows that one knows whenever one knows.) Or, more likely, the text intends to suggest that there would be no difference between the two, and there must be a second act if there is to be any knowledge that one knows.

The text then turns to the question how one knows an object. Not, it is suggested, through the object itself. For the mere existence of the object does not make us know it, and if we say the object causes us to know it, this is true of a great deal else, too, for instance of the light in which we see the object, of God who creates and supports the causal order, etc. So surely we must be said to know these things too, if knowledge is established by a causal relationship. The point is better than it looks at first. The text is demanding that an account of the relation of the object known to the knower be given without illegitimately presupposing the pre-analytical understanding of the relation between knower and known, and so it challenges a causal theory of knowledge either to suggest that every *prima facie* cause of knowledge is an object of that knowledge, or to tell us which of the many *prima facie* causes of our knowledge to pick out as its object, and tell us this from a consideration of the details of the causal theory alone, without a question-begging reference to our pre-theoretical understanding of the particular case at hand. Clearly, it is thought that the challenge cannot be answered, for in rejoinder, it is suggested that the object of knowledge has no particular sort of causal activity that identifies it as the object of the knowledge of which it is a *prima facie* cause. It is not like light or color, or the surface reflecting the light, or whatever one supposes is perceived due to its special causal role in vision. This view would have the decisive virtue that everything could in principle be known. If a special activity were required to produce knowledge, only things capable of that activity could be known, and knowledge, like the various modes of physical perception, could have only a limited class of things as its object. But then surely the totality of all the causal conditions, is the only thing that has in itself no special activity, that is, no particular role within the causal process, since it is the only cause that is not part of any larger causal process. So the totality of all causal conditions would be what is known, which is absurd.

The next argument depends on time. The cause without qualification must be cognized, but is it cognized or only remembered? Surely it must be cognized before it can be remembered. Well, then, is it

cognized while it exists? But a cause cannot persist any length of time at all without producing some effect, else it would exist for all time and produce no effect. It cannot, as it were, refrain from producing effects even though it has the power, since it is an unqualified cause, and so nothing there is can restrain it. So by time the cognition of the cause occurs, the cause cognized has already ceased to exist! That is, we do not cognize the cause, and then it produces its effect, but rather it produces our cognition of itself even as it produces its effects, so that that we first cognize it after it has ceased to exist considered as cause of the effect we are about to cognize.

Moreover, what is cognized by inference in virtue of cognizing the effect? (1) If it is the cause merely, it is hard to see how the inference to the cause can stand up. Why suppose that this thing has a cause? (2) If cognition of the effect produces cognition of the priority of the cause, that is, cognition that the cause comes beforehand, then the cause is not inferred at all, but perceived. (3) It might be that the effect as it is preceded by a cause is inferred from the cognition of the effect, but it is hard to see how it can be if one only perceives the essential nature of the effect, and not the preceding cause as well. (4) If it is argued, in accord with the Nyaya position, that one somehow infers the universal nature of the effect from cognition of the effect, and this universal nature contains within it the causal connection, it is pointed out that it can be disputed whether any such universal is real, and we can't be relying on something whose existence is in dispute in making this everyday inference from effect to cause. (This last argument seems weak—surely one may rely on a presupposition of which he is unaware, and there may be parts of our reasoning necessary for cogency that are hidden from us.) (5) Finally, it would seem that the effect is cognized by inference, not perception, if it is the effect as preceded by a cause that is inferred from the perception of the effect, for to consider an effect as it is preceded by a cause is to infer it from its cause. So one infers from the perception of the effect that it is inferrable from a cause. And if it is argued that the effect as it is preceded by a cause is indeed inferred from the cause, this cannot be, since the cause, being the totality of conditions contributing to the effect, is never entirely perceived.

The Buddhist theory of perception is examined next, which holds that perception is free of construction and incorrigible. The theory of the school of logicians is clearly the subject here, and the perception discussed is the perception of the aggregates as they are in themselves, not perception of the ordinary “constructed” world of objects made up of the aggregates. It is the sort of perception that occurs only to an enlightened one in the course of a certain kind of meditation. Jayarasi worries over the constructions from

which this perception is free. Is there no perception of the constructions themselves? Is construction the awareness of quality, motion and the like, or the consciousness that produces memory, or does it arise from memory, or from speech, or is it the apprehension of speech, or does it involve the apprehension of unreal objects, or is it itself unreal, or is it the perception of objects on the basis of inference, or a reflection of past and future objects, or is its nature unclear? On each assumption, problems arise. So, assume that it arises with the observation that what one perceives has qualities, motions, and other qualifications. Are these qualifications manifest? It seems they must be, or else no construction would occur, but the construction cannot have any object corresponding to it, for that would make it *correct*. Again, if construction is the consciousness that produces memory, then even the perception of the aggregates will be construction.

Against the Nyaya theory of perception, it is asked how it is known that perception arising from contact between the sense organ and the object cannot be in error. Is it from the presence of non-defective causes, the absence of obstacles, the efficiency of the process, or what? If the first, how is it known that the causes, namely the operation of the senses, are non-defective? The senses do not grasp their own non-defective operation, nor will inference do to establish it.⁷³

In the only section of his work not devoted to epistemology, Jayarasi argues against the existence of the self (*atman*) as it is described in Nyaya, Jainism, Sankhya, Vedanta and Mimamsa. So those Vedanta theorists who hold that the self is absolute and blissful must say either that the soul is blissful in its illusory existence in this world, or not. If it is blissful here in *samsara*, then there is no point in seeking salvation. If it is not, then it must be so covered with defilements that it is not recognizable for what it is, like a jar covered with excrement. But how can it be concealed from itself? For that is what would be required. It is not as if the soul is experienced through the senses, so that the defilements can intervene between it and the senses, and prevent the soul from being perceived. If the defilements are of the essence of the soul, then the soul may not perceive itself due to the defilements, but salvation once more becomes impossible, since it would entail the removal of the soul itself.⁷⁴

⁷³Jayatileke (1963) 85-87.

⁷⁴Jayatileke (1963) 82-83.