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Systematic Philosophy between the Empires

Some Determining Features

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INTRODUCTION

It would be a mistake to take the Vedic Upaniṣads as point of departure for the development of systematic philosophy in India. These Upaniṣads contain no systematic philosophy, nor are they taken as basis for the elaboration of systematic philosophy during the period that interests us. No sources of systematized so-called Vedānta philosophy—which should perhaps be called "Vedāntism" or "Vedāntic" or even "Vedāntistic" philosophy—have come down to us from this period, and it is the one school of thought that is absent in the debates of that time. Probably the first more or less datable reference to systematic Vedānta philosophy occurs in the work of the Buddhist scholar Bhavya, who belongs to the sixth century CE. Systematic philosophy did exist before this date in India, and its practitioners were interested in each others' opinions, but systematized Vedānta philosophy was either nonexistent, or ignored by all (Qvarnström 1989: 15).

The other two so-called orthodox ontologies, viz., Sāṃkhya and Vaiśeṣika, did exist during the period preceding the Gupta Empire, but the number of surviving texts is very small indeed. This small number stands in sharp contrast with the number of Buddhist philosophical texts that are still accessible to us. Two volumes of the *Encyclopedia of Indian Philosophies*, nos. VII and VIII, describe Buddhist texts composed before 350 CE (Potter 1996, 1999). No Sāṃkhya text from that period survives, and for Vaiśeṣika we only have the *Vaiśeṣika Sūtra*, which is known to have undergone changes and interpolations.

These contrasting numbers should not induce us to draw hasty conclusions. An important number of Buddhist texts have survived because they had the good luck of being translated into Chinese at an early date. Few Brahmanical texts had this good fortune. It is also clear that Sāṃkhya and Vaiśeṣika were in existence at least during the last centuries preceding the Gupta Empire, and that texts belonging to these schools existed but have not survived. It seems yet undeniable that during the early centuries of

the Common Era and before, systematic philosophy had far more Buddhist than Brahmanical practitioners.

For the early history of Buddhist systematic philosophy we have access to a large number of surviving texts. In the case of the Brahmanical schools we depend on what might be called textual archeology. In order to reestablish at least some degree of equilibrium between the two currents, it may be useful here to summarize some of its findings with regard to Brahmanical philosophy.

The systematic exploration of quotations of Sāṃkhya material in texts belonging to other traditions of thought allowed Erich Frauwallner (1958) to reconstitute passages presumably belonging to the *Ṣaṣṭitantra* of Vārṣagaṇya, a lost Sāṃkhya work that may have belonged to around 300 CE. The passages reconstituted by Frauwallner deal with epistemology. To recover these, Frauwallner based himself primarily on the *Pramāṇasamuccaya* of the Buddhist Dignāga along with Jinendrabuddhi's commentary, and on the *Dvādaśāranayacakra* of the Jaina Mallavādin along with Siṃhasūri's commentary *Nyāyāgamānusāriṇī*. Frauwallner argued that some of the material contained in these texts had been quoted from Vārṣagaṇya's composition, some of it from commentaries thereon. Frauwallner's exploration of Jinendrabuddhi's Pramāṇasamuccayaṭīkā for fragments from the Ṣaṣṭitantra has been continued by Ernst Steinkellner (1999).

Other quoted passages in the works of non-Sāṃkhya authors bring to light further features of the system of thought that appears to have been presented in Vārṣagaṇya's *Ṣaṣṭitantra*. Various early authors—most notable among them Bhartṛhari, Dharmapāla, and Mallavādin—attribute to Sāṃkhya a position which differs from the one which finds expression in the surviving Sāṃkhya works. According to them, Sāṃkhya looked upon substances as being collections of qualities. Nothing in the surviving Sāṃkhya literature supports this point of view, but the early testimonies are clear in this regard. What is more, there are indications that the qualities once figured among the twenty-five *tattvas* of Sāṃkhya, contrary to the list preserved in the surviving texts, which does not mention them. There are also indications that the five *tanmātras*, which in classical Sāṃkhya would seem to make up for the five qualities of preclassical Sāṃkhya, may have undergone a major change in the way they were conceptualized, from atomic to omnipresent. The nature of material nature (*pradhāna*), finally, turns out to be quite different in the *Ṣaṣṭitantra* from what it became in the classical system. If we are correct in attributing these various preclassical positions to Vārṣagaṇya's *Ṣaṣṭitantra*, it will be clear that systematic Sāṃkhya went through important changes during the last century or so of the period that interests us.[1]

The frequent occurrence in various early texts, prominent among them the *Mahābhārata*, of the term *Sāṃkhya* and of ideas that are similar to those of systematic Sāṃkhya, has not so far allowed a plausible reconstruction of the earliest history of systematic Sāṃkhya before the time of Vārṣagaṇya. One of the difficulties is that we do not know in what relation those passages stand to Sāṃkhya as a systematic philosophy. Are they early echoes of a system of philosophy that had been created and

[1] See Motegi 1986; Bronkhorst 1994a, forthcoming-c, and the Appendix at the end of this chapter.

that found its direct expression in texts that are now lost to us? Or do these passages provide glimpses of the nonsystematized predecessors of Sāṃkhya philosophy? The fact that Sāṃkhya-like ideas still appear in much more recent religious texts suggests that nonphilosophical Sāṃkhya largely led a life of its own, little influenced by the attempts of systematic thinkers to create a coherent whole out of these floating elements. It also suggests that nonphilosophical Sāṃkhya existed before, as well as beside, philosophical Sāṃkhya. Regarding the latter it is difficult to look back further than Vārṣagaṇya, even though it is clear that some form of philosophical Sāṃkhya existed already at the time of Āryadeva and therefore most probably before Vārṣagaṇya (see Bakker and Bisschop 1999; Brockington 1999).

The situation of Vaiśeṣika is similar to the one of Sāṃkhya in that we have a short exposition of the classical system in the *Padārthadharmasaṅgraha* of Praśasta, and various fragments from a more detailed earlier work which appears to have been for some time the main text of this school of thought. This lost earlier text is the Kaṭandī, whose author may have been a certain Rāvaṇa. The Kaṭandī was a commentary on the *Vaiśeṣika Sūtra*, and was itself commented upon in a *Ṭīkā* by the same Praśasta who also composed the *Padārthadharmasaṅgraha*. This commentary by Praśasta, too, is now lost, but fragments of this text, too, have been preserved. Information about the Kaṭandī and Praśasta's *Ṭīkā* can be derived from critical discussions in the works of Mallavādin and Siṃhasūri, as well as from the works of the Vedāntin Śaṅkara. The Kaṭandī appears to have been more recent than the Ṣaṣṭitantra: though older than Dignāga, its treatment of fallacious reasons indicates that it is more recent than Vasubandhu the author of the *Vādavidhi* and *Vādavidhāna*.

The Vaiśeṣika of the Kaṭandī was not in all respects identical with that of the *Padārthadharmasaṅgraha* and its commentaries. A particularly important difference is the acceptance of a creator god in the latter where the former had no place for one. A relatively minor, yet theoretically important, difference concerns the question how many atoms there are in a speck of dust: six in classical Vaiśeṣika, three in the Kaṭandī (Bronkhorst 1993a, forthcoming-b).

In order to find out more about Vaiśeṣika from the period before the Kaṭandī, our most important source of information is, of course, the *Vaiśeṣika Sūtra*. Unfortunately this text has reached us in a number of differing versions. What is worse, we know that this text had already undergone changes at an early age. The full extent of those changes can no longer be determined, but the evidence of some early authors—among them Bhartṛhari, Dignāga, Jinabhadra, and Praśasta himself—permits us to conclude that certain portions have been added to the original text. We know, for example, that the original *Vaiśeṣika Sūtra* did not look upon sound as a quality, but rather as a substance, a form of wind (Bronkhorst 1993b, 1994b).

Since there are serious doubts about the form of the original *Vaiśeṣika Sūtra*, it is difficult to determine its date. Quite independent of the *Vaiśeṣika Sūtra*, however, there is evidence to show that Vaiśeṣika did exist during the early centuries of the Common Era. A Vaiśeṣika position is criticized in the Spitzer manuscript, which presumably dates from the third century at the latest (Franco 2000a, 2000b, 2000c, 2001). The voluminous Sarvāstivādin *Mahāvibhāṣā* shows acquaintance with Vaiśeṣika (and with Sāṃkhya), as does perhaps Aśvaghoṣa, the author of the *Buddhacarita*. All this shows that Vaiśeṣika and Sāṃkhya existed in some form from

at least the first centuries of the Common Era onward. There is, on the other hand, no evidence known to me that would allow us to conclude that these schools existed already before that period. The earlier Buddhist texts do not mention them, and not even Patañjali's voluminous *Vyākaraṇa-Mahābhāṣya* contains any trace of awareness of them; being a Brahminical text, it might have been expected to do so (Bronkhorst forthcoming-d).

As stated above, a number of Buddhist philosophical texts have been preserved, and we do not therefore depend on textual archeology to find out what Buddhist thinkers thought. There is, on the other hand, a fair amount of uncertainty regarding the exact dates of many of those texts. We know that systematic thinking started early, first of all it seems in Sarvāstivāda Buddhism. We have Chinese translations of systematizing texts that date from the first centuries CE. A manuscript dating from the first century has been found which, as Collett Cox informs me, contains a polemical Abhidharma text which criticizes the Sarvāstivādins.[2] All this shows that systematic philosophizing among the Sarvāstivādins began early, probably well before the beginning of the Common Era. Further reflections about the period at which it began will be found below.

Jainism came to contribute to the philosophical debate at a rather late stage. This religious movement—or rather one major branch of it: the Śvetāmbaras—has left us what it considers the original canon of Jainism. The authenticity of this canon is not accepted by other Jainas. Even the Śvetāmbaras agree that part of their canon got irrevocably lost, and that what survived did not reach its final form until the fifth century of the Common Era; there are clear indications that at least some of its texts are not very old. What is more, there is nothing that one might call systematic philosophy in the canon. The first attempt to systematize traditional doctrine finds its expression in the *Tattvārtha Sūtra*, a text which may belong to the third or fourth century CE (Dundas 1992: 61f., 74; 2002: 70f., 86; Bronkhorst 1985).

THE EARLY HISTORY OF INDIAN PHILOSOPHY IN OUTLINE

In spite of the limited source material at our disposal, a number of indications suggest that the period from the beginning of Indian systematic philosophy up to the time of the Gupta Empire can be divided into two distinct eras. During these two eras those who were intellectually active had altogether different preoccupations, and were driven by different fundamental assumptions about the nature of the world. This is true to the extent that it may be useful to borrow a concept from the French thinker Michel Foucault. In his book *The Order of Things* he introduces the concept of episteme. An episteme, as Foucault uses the term, is the structure of thought that defines an era. In the recent history of Europe, for example, the Renaissance could be defined by its assumption of the resemblance between words and things. Following periods—the classical age or Enlightenment, then the modern age—are characterized differently:

[2] Collett Cox has provided further information about this manuscript in a paper ("Reconsidering the Early Sarvāstivādin in the Light of a Gāndhārī Abhidharma Fragment") presented at the Thirteenth Conference of the International Association of Buddhist Studies held in Bangkok, December 2002.

sciences in the classical age were dominated by systems of classification; the modern age is characterized by humanist philosophy and the invention of the human sciences. Foucault is of the opinion that two principles govern these epistemes. The first of these states that each era can have only one episteme. As he puts it: "In any given culture and at any given moment, there is always only one episteme that defines the conditions of possibility of all knowledge." According to the second principle, each episteme is discontinuous with the next. As a result, in different eras "things are no longer perceived, described, expressed, characterized, classified, and known in the same way" (Foucault 1973: 168, 217; Windschuttle 2000: 137f.).

It is not necessary to side with Foucault in holding that eras are thus unambiguously defined each by its own episteme. Nor is one required to accept that "in any given culture and at any given moment there is always only one episteme that defines the conditions of possibility of all knowledge." Also Foucault's claim that different eras have to be radically different from each other may legitimately be questioned. In spite of whatever objections one may have to some or all of Foucault's claims, it may yet be useful to be open to the possibility that intellectual life in different periods may be characterized or to some extent even determined by different preoccupations and presuppositions. This may not be quite what Foucault meant when he introduced the notion of episteme, yet has the undeniable advantage of drawing attention to what connects different manifestations of thought that occur during one and the same period of time in a specific culture, and to what distinguishes them from preceding and succeeding periods. One might, of course, prefer to use some such term as Zeitgeist instead, but this term is too little precise for our present purposes. It will become clear that an adjusted notion of episteme, which remains more specific than Zeitgeist, will be helpful in making sense of the early centuries of Indian systematic philosophy.

For the period that interests us at present, two epistemes can be distinguished, two fundamental approaches to reality. These two epistemes succeed each other in time. This does not mean that at no point of time the two coexist. There is, as will become clear, considerable overlap. This overlap does not however remove the impression that the first of these epistemes really belongs to the earlier era, and continues into the second one, if not as a fossil, then at any rate as a survival from the past.

The first of the two epistemes to be considered is characterized by the belief that reality is thoroughly atomistic. Not only does the material world consist of identifiable ultimate constituents; also processes, which by their nature extend over stretches of time, can be analyzed into successions of momentary occurrences. Whatever happens in the world can be reduced to the interaction of those ultimate constituents. In the case of processes, this interaction is strictly unidirectional: earlier momentary occurrences determine the immediately following ones.

The second episteme, which succeeds the first one and in some cases supplants it altogether, has as principal characteristic the conviction of a close and inseparable connection between language and reality. A belief of this kind, though in a weaker form, had already accompanied some of the philosophical developments of the preceding era. In the new era this belief, now extended in a fundamental manner, did not only become the shared conviction of all thinkers; it became a shared concern,

which inspired philosophers to develop most of the fundamental doctrines that were to accompany and even define the different schools of thought for centuries to come.

Since time and space do not permit me to argue each of the following points in detail, I will limit myself to a short presentation based on research published elsewhere.

The First Episteme

Sarvāstivāda

The Sarvāstivādins may have been the first systematic philosophers in India. It seems likely that these Buddhists created, in a short time span, a coherent system of thought out of traditional material. This traditional material consisted primarily of lists of so-called *dharmas*. For present purposes it will not be necessary to provide a detailed description of these *dharmas*. The lists of *dharmas* were revised, new *dharmas* were introduced, and an altogether different categorization was imposed upon them (the so-called Pañcavastuka). All these changes did have consequences that had more than mere scholastic interest. Or rather: these changes were the scholastic expression of a changed and systematized way of understanding the world, of an ontology that had not so far been part of the Buddhist tradition.

The ontology which Sarvāstivāda imposed upon its Buddhist heritage is thoroughly atomistic in its nature. It denies the existence of composite things. Existence, it is maintained, only belongs to their ultimate parts. These ultimate parts are the *dharmas*.

These *dharmas* are not to be identified with material atoms. Most of the *dharmas* which the Sarvāstivādins inherited from the preceding Buddhist tradition concern mental states, and even those few that do concern the material world are not themselves material atoms. This does not mean that the existence of material atoms is rejected. Their existence is accepted, but they are conceived of as conglomerations of certain *dharmas*, among them the qualities form, odor, taste, and touch. Material atoms in Sarvāstivāda are not therefore the ultimate constituents of matter.

The same atomistic attitude which postulates that only the *dharmas* really exist is applied to things extended in time: all that exists is momentary, so that strictly speaking only momentary *dharmas* exist.

The world, seen in this way, consists of series of momentary *dharmas* that succeed each other. This succession is clearly not haphazard: the world is a relatively stable and to some extent predictable place. This is due to the fact that a causal mechanism is responsible for the orderly continuation of things. This causal mechanism, which receives due attention in the Sarvāstivāda texts, sees to it that each succeeding moment is determined by the immediately preceding one.

This model of the world, in which all things and processes are presented as "trains" of momentary entities, and in which the earlier entities are proximate causes that "push" the later ones forward, applies also, and especially so, to mental processes. Recall that most *dharmas* are mental by nature. Indeed, the canonical source inspiring much of the thought about causality—the doctrine of *pratītyasamutpāda*, "origination in dependence," see below—primarily concerns the causal interrelationship between

mental factors.

In explaining mental processes, the Sarvāstivādins were confronted with difficulties which had to be dealt with. They were of the opinion that two mental events cannot simultaneously occur in one person. This leads to difficulties in the case of some such mental event as the observation of one's own desire. This involves two mental events: the desire and the observation of which it is the object. The desire, being the cause of its own observation, has to precede the observation. Since mental events are momentary, and the desire is therefore no longer present when it is observed, this would imply that one observes a nonpresent event. Confronted with this dilemma, the Sarvāstivādins concluded that something nonpresent exists. Future and past things all exist: *sarvam asti*. This peculiar belief gave the Sarvāstivādins their name.

The vision which the Sarvāstivādin systematizers imposed upon the world is very different from the common sense perception of the world. These Buddhist thinkers were confronted with the task of explaining how it is that such a thoroughly atomistic world appears to us as if it consists of objects that are extended both in space and in time. They provided an answer by bringing in the words of language. Composite objects—such as chariots, houses, and indeed persons—do not really exist, but are believed to exist because there is a word for them. These things derive their pseudo-existence from the words of language. This implies of course that the world of our experience (which does not really exist) has a close and intrinsic connection with the words of language (Bronkhorst 2000a: 76–127, esp. 94ff.).

Other Buddhist Schools

The interpretation of reality first elaborated by the Sarvāstivādins spread to other Buddhist schools in continental India, not without being adapted and modified in the process. Soon all continental Indian Buddhists shared notions such as the momentariness of all that exists, and the fundamental nonexistence of composite objects. Even the schools that adhered to the so-called *pudgala-vāda* tried to define the *pudgala*—whose existence they supposedly accepted—in terms that owed much to the scholastic efforts of the Sarvāstivādins and related schools. That is to say, the fundamentally atomistic understanding of reality became common property of all those continental schools that have left us traces of their intellectual labor.

Vaiśeṣika

The same basic understanding of reality also spread further, beyond Buddhism. We have seen that very little documentary evidence regarding the earliest form of Vaiśeṣika has survived, but the texts that have survived allow us to conclude that Vaiśeṣika, probably from its beginning, is pervaded by the same atomistic vision of the world which we associate with Sarvāstivāda and other Buddhist schools of that period. In the case of Vaiśeṣika, this is all the more striking since it obviously made a point of rejecting Sarvāstivāda and of replacing their positions with different ones of their own. Vaiśeṣika did not accept that only ultimate constituents exist; this does not change the fact that it postulated the existence of ultimate constituents, atoms, which it then granted existence beside composite objects. Vaiśeṣika was not willing to deny the existence of things extending in time, either; yet its analysis of mental and related

processes (which includes their ideas about number) reveals a succession of momentary steps; indeed, it has been said to be expressive of an "atomistic mode of thinking." Even the acceptance of common sense reality, which distinguished Vaiśeṣika from Sarvāstivāda, led to a position which is very close to the one rejected. The common sense world of our experience is unreal and intimately connected with the words of language, according to Sarvāstivāda. This same common sense world is real according to Vaiśeṣika, but still intimately connected with the words of language.

In order to create a coherent vision out of the elements just mentioned, Vaiśeṣika had to introduce a number of notions which in themselves were very different from what we find in contemporary Buddhist philosophy. This easily obscures the fact that both worked on the basis of an atomistic understanding of the world (both spatially and temporally) in which only proximate causality was allowed to "push" the next moments forward (Lysenko 1994; Bronkhorst 1992).

Jainism

The *Sūyagaḍa* (Skt. *Sūtrakṛtāṅga*), one of the oldest texts of the Jaina canon, is acquainted with the Buddhist doctrine of momentariness. More interesting for our present purposes is that younger texts of the Jaina canon themselves adopt atomistic notions: the moment (*samaya*), the smallest unit of space (*pradeśa*), the atom (*paramāṇu*). All these are stated to be single, indivisible, indestructible in the *Ṭhāṇa* (Skt. *Sthānāṅga*). The *Viyāhapannati* (*Bhagavatī*) adds that "the atom and the objects that occupy one unit of space last one unit of time." Other canonical passages show that the Jainas side with the Vaiśeṣikas in accepting composite objects as separate and individual things (Jaini 1979: 98ff.; Bronkhorst 2000c).

Grammar

The new atomistic way of thinking exerted an influence not just outside Buddhism but outside religio-philosophical thought as well. There is reason to think that it exerted an influence on the discipline of grammar. This would then account for the conceptual gap which is known to exist between Pāṇini and his commentator Patañjali.

The commentator Patañjali imposes a form of linearity on grammatical derivations which is not taught in Pāṇini's grammer. S. D. Joshi and Paul Kiparsky have recently shown that many Pāṇinian derivations make use of (and have to make use of) "lookahead." Patañjali tries to arrive at the correct result without it. Only one example will be given here to illustrate the difference. In the derivation of *dadhati* "they put," the third person plural ending is not *anti*, as usual, but *ati*. In Pāṇinian terminology this means that the suffix *jhi* in the initial situation *dhā-jhi* is not replaced by *anti*, but by *ati*. However, the general rule (P. 7.1.3: *jho 'ntaḥ*) prescribes substitution by *anti*, while the special rule (P. 7.1.4: *ad abhyastāt*) prescribes *ati* only for the special case of reduplication. But at the initial stage there is no reduplication as yet; this does not come about until after some intermediate steps. Lookahead takes this future development into account, and does not replace *jhi* by *anti* until reduplication has taken place. Patañjali, and following him all later commentators, did not like lookahead, and tried to avoid it wherever possible. He goes through much trouble to formulate special principles and ad hoc rules that are meant to secure that each step in a derivation be determined by the elements in place, not by elements that have not yet appeared.

Derivations as envisaged by Patañjali cannot use preceding information, either. Only the elements in place at a particular stage determine the next operation.

This linear scheme characterizes processes in the first episteme: they consist of distinct stages, each of which is wholly determined by the immediately preceding one. It seems reasonable to assume that Patañjali thought of a grammatical derivation as some kind of process. Whether he thought of it as a mental process is less clear. For our present purposes this does not matter. Patañjali treated derivations as processes, and expected them to behave the way his episteme told him processes should behave.

It is of some importance to note that Kātyāyana, whose *Vārttikas* are incorporated into Patañjali's *Mahābhāṣya*, does not yet adhere to Patañjali's vision of a grammatical derivation in which each stage is completely and exclusively determined by the elements in place (Bronkhorst forthcoming-e.).

Sāṃkhya

Sāṃkhya systematic thought looks at first sight like the odd man out in this enumeration of intellectual currents affected by the atomistic episteme. At first sight it seems indeed that the systematizers of this philosophy were not affected by it. Philosophical Sāṃkhya as known to us from its classical texts does not postulate the existence of atoms, nor does it divide processes into momentary units. Sāṃkhya causal thinking is poles apart from the idea of momentary proximate causes that push processes forward.

There is yet evidence concerning early systematic Sāṃkhya that suggests that the situation was not quite like that during the centuries preceding the Sāṃkhya *Kārikā*, the earliest surviving text. A variety of early testimonies indicate that the Sāṃkhya that found expression in Vārṣagaṇya's *Ṣaṣṭitantra* and before included the view that the five qualities sound, touch, color, taste, and odor were the ultimate constituents of all material objects. This point of view is of course similar to that of the Sarvāstivādins, who in addition thought that these qualities were essential ingredients of material atoms (Bronkhorst 1994a).

A number of indications furthermore suggest that early systematic Sāṃkhya did have the idea of atoms that were constituted of more elementary parts. These more elementary parts are often called *tanmātras*, and contain among themselves (or are simply identified with) the five qualities.[3]

As has been pointed out above, the Sāṃkhya that we find in the surviving texts is not in all details identical with the earlier form which interests us most at present, but information about which can only be obtained through more or less direct references and quotations in other works. We will see below that the second episteme may be responsible for the modifications subsequently introduced into school doctrine.

[3] See the Appendix, below, and Bronkhorst forthcoming-c.

Other Sciences

The scarcity of surviving textual material from the centuries around the beginning of the Common Era does not allow us to fathom the extent to which the atomistic vision of the world affected other sciences of that time. One might think that sciences such as medicine would be unlikely to be influenced by it. It is therefore all the more noteworthy that the *Caraka Saṃhitā* mentions atoms (*paramāṇu*; Śārīrasthāna 7.17),[4] and accepts momentariness in the following words, which it puts in the mouth of Ātreya Punarvasu (Sūtrasthāna 16.33): "Because it passes so rapidly, a thing perishes the moment is has come into being. There is no cause of its disappearance, nor does it undergo modification." It would be imprudent to conclude more from this last passage than that the idea of momentariness was widespread enough to find expression in this isolated passage of the *Caraka Saṃhitā* (Meulenbeld 1999: IA: 110f.; Bronkhorst 2002c). Isolated remarks in other texts, such as the *Manusmṛti*'s observation (1.27) that the world comes about with (*sārdham*) the impermanent atomic particles of the five elements (*aṇvyo mātrā vināśinyo daśārdhānām*), have to be treated with equal caution. Commentators (Medhātithi, Kullūka, etc.), be it noted, interpret these impermanent atomic particles as being the Sāṃkhya *tanmātras*.

Conclusions

This short presentation of the way in which the first episteme finds expression in Indian intellectual life during the centuries around the beginning of the common era allows us to draw some tentative conclusions about chronological and related issues. It seems hard to deny that this particular way of visualizing the world started within a school of Buddhism. Several traditional Buddhist elements easily lent themselves to a new interpretation that is in conformity with the newly propounded vision of the world. The problematic *anātman* doctrine of traditional Buddhism lent itself to an interpretation in which no composite person is believed to exist beside its components, the *dharmas*. Statements about the impermanence of things could be taken as a confirmation of the momentariness of all that is. The incomprehensible doctrine of "origination in dependence" (*pratītyasamutpāda*) could be interpreted as a causal theory in which earlier *dharmas* determine succeeding ones ("that being, this comes to be; from the arising of that, this arises; that being absent, this is not; from the cessation of that, this ceases"). These aspects of traditional Buddhism could be interpreted so as to fit the new ontology, and they were.

There are strong reasons to believe that this vision was first launched in the Sarvāstivāda school of Buddhism in particular. The complete revision of Abhidharma undertaken by the Sarvāstivādins has already left clear traces in their *Abhidharma Piṭaka*, which is in these respects totally different from the other surviving *Abhidharma Piṭaka*, that of the Theravādins. Early noncanonical texts of the same school provide us with further information. It seems probable that all the new ideas that we associate with the new episteme were introduced more or less simultaneously

[4] Tr. Wujastyk 2003: 398: "The parts of the body cannot, however, be counted because they are divided into tiny atoms (*paramāṇu*), and these are too numerous, too minute, and beyond perception."

with the new categorization known by the name Pañcavastuka. The fact that the Sarvāstivāda revision of Abhidharma has determined the content of at least a number of canonical Abhidharma texts suggests that it must have taken place at a rather early date. The Sarvāstivāda texts themselves do not however allow us to make a precise estimate.

It is here that the interpretation of Pāṇini's grammar by Patañjali may be of help. We have seen that this commentator imposes upon the grammar processes of the kind characteristic of the first episteme. This suggests that he had been infected by ideas that started with the Sarvāstivādins; he may therefore postdate the Pañcavastuka. This would agree with the fact that there are various other indications supporting the view that Patañjali was acquainted with Buddhist literature, and with Sarvāstivāda ideas in particular (Bronkhorst 1987, 1995, 2002d). This would then justify the conclusion that the conceptual revolution that took place in Sarvāstivāda must be dated before Patañjali the author of the *Mahābhāṣya*. Patañjali is supposed to have lived around or soon after 150 BCE, in the Northwest of the subcontinent.[5] The Sarvāstivādins are commonly accepted to have belonged to that region. Their intellectual revolution may therefore have taken place before 150 BCE.

The fact that already parts of the Śvetāmbara Jaina canon have yielded to the atomistic vision of the world does not permit us to draw chronological conclusions of much importance. The chronology of this mass of texts is notoriously uncertain; the only reliable information seems to be that the texts reached their present forms in the fifth century of the Common Era. This does not imply that all parts of the canon are equally young, but the fact that the *Sūyagaḍa* (= *Sūtrakṛtāṅga*), which is normally considered one of its oldest parts, already associates Buddhists with momentariness, suggests a relatively late date for the Jaina canonical texts that have adopted momentariness and general atomism themselves. (It may of course also be taken to argue for an early date for the Pañcavastuka.)

The Second Episteme

At four different places of the *Mahābhāṣya* we find the following passage: [6]

> Someone says to some weaver: "weave a cloth out of this thread." He (i.e., the weaver) thinks: if it is (already) a cloth, it is not (still) to be woven. But if it is (still) to be woven, it is not a cloth. (To say,) it is (still) to be woven and it is a cloth becomes contradictory. Certainly, what he means is a designation (viz., "cloth") yet to come (*bhāvinī saṃjñā*). That, I think, is to be woven, which, when woven, becomes the (thing called) cloth.

Patañjali draws from it a simple conclusion about the use of words: a word can be used

[5] Note that several scholars (among them Frauwallner 1960) propose a more recent date for the *Mahābhāṣya*.

[6] *VMBh* I p. 112 l. 10–13 (on P. 1.1.45 Vt. 3); I p. 275 l. 6–8 (on P. 1.3.12 Vt. 2); I p. 394 l. 13–16 (on P. 2.1.51 Vt. 4); II p. 113 l. 18–21 (on P. 3.2.102 Vt. 2): *tad yathā | kaścit kaṃcit tantuvāyam āha | asya sūtrasya śāṭakaṃ vayeti | sa paśyati yadi śāṭako na vātavyo 'tha vātavyo na śāṭakaḥ śāṭako vātavyaś ceti vipratiṣiddham | bhāvinī khalv asya saṃjñābhipretā sa manye vātavyo yasminn ute śāṭaka ity etad bhavatīti |* Tr. Joshi and Roodbergen 1971: 35–36.

to designate something that is not yet there. Most, if not all, thinkers belonging to the era characterized by the second episteme[7] draw very different conclusions from very similar statements: conclusions not about the use of words but about the nature of the world. The reason is that those later thinkers all shared a presupposition which clearly was not yet part of Patañjali's intellectual baggage.[8]

The shared presupposition which came to steer the subsequent development of Indian philosophy is the correspondence principle. Those who, explicitly or implicitly, accept the correspondence principle accept that there is a close relationship between statements and the situations described by those statements, or more precisely: between the words of the statement and the things that make up the situation described. A possible example is the statement "John reads a book," it describes a situation where there is John, a book, and the activity of reading. A similar analysis is possible in the case of numerous other statements.

Severe problems arise in the case of statements that describe the production of something, or its coming into being. The statement "the weaver weaves a cloth" can illustrate this. It describes a situation in which there is a weaver, the activity of weaving, but no cloth. Patañjali the grammarian (and his weaver) had already realized this, but had not been particularly puzzled by it because they did not yet accept, implicitly or explicitly, the correspondence principle. They had not yet fallen victim to the second episteme, which characterizes the next era.

It is difficult to understand how and why this major conceptual change had to take place, some time after Patañjali. For him and no doubt for most of his contemporaries, a simple statement like "the weaver weaves a cloth" was not disturbing in any manner, and might at best tell us something about the way how in actual practice words are used. This same simple statement, on the other hand, confronted all thinkers of the succeeding era with profound ontological questions of the kind: where is the cloth? All of them were convinced that the word "cloth" had to refer to something present in the situation described. Since common sense sees no cloth here, many were ready to discard common sense and replace it with a vision of reality in which there is something in the situation described corresponding to the word "cloth."

Nāgārjuna

The first episteme appears to have entered Indian intellectual history through Buddhist thinkers; the same may be true of the second one. It is possible, though not certain, that Nāgārjuna was among the first to draw attention to the internal contradictions marring commonsense statements of the kind "the weaver weaves a cloth" or "the cloth comes into being." Indeed, contradictions do not just mar such commonsense statements, they also mar many statements describing reality as conceived of by the Buddhist Abhidharma specialists, among them the Sarvāstivādins. The statement "the cloth comes into being" is problematic because there is no cloth in the situation described (if there were, it would not need to come into being); the same difficulty attaches to

[7] On this episteme in general, see Bronkhorst 1999b.

[8] This, of course, is an argument against assigning too recent a date to the *Mahābhāṣya*; see note 5 above.

statements describing that a *dharma* comes into being. Nāgārjuna concludes that in reality nothing exists. This position is known by the name *śūnyavāda*.

One verse from the *Mūlamadhyamakakārikā* will here be cited because it clearly illustrates Nāgārjuna's procedure:[9]

> If any unproduced entity is found anywhere it could be produced. Since that entity does not exist, what is produced?

What, indeed, is produced? Nāgārjuna's answer is: nothing, for nothing really exists.[10]

Sāṃkhya

Denying that anything exists is not the only possible way of dealing with the problem. Another solution would be to maintain that, contrary to appearances, the cloth *is* present in the situation described by "the weaver weaves a cloth." It could be held to be present in the thread from which the cloth is being woven. This is the position that is known by the name *satkāryavāda*, and which systematic Sāṃkhya chose in order to deal with the problem.

In an attempt to make this counter-intuitive position plausible, Sāṃkhya henceforth emphasizes the continuity of the material cause that remains present before, during, and after the production of a particular object: the thread precedes the cloth, clay precedes the pot, gold precedes the ornaments made of it. However, this emphasis on the continuously existing material cause is difficult to reconcile with the early notion that substances are mere collections of qualities. This may be the reason why this earlier notion was abandoned and is no longer present in the surviving texts of philosophical Sāṃkhya. In other words, under the influence of the second episteme Sāṃkhya abandoned the few links it had had with the first episteme.

Sarvāstivāda

The Sarvāstivāda Buddhists were better equipped than most to deal with the problems connected with the production of things. As a matter of fact, they already had a solution before the problem made its appearance. We have seen that this school of thought had introduced the notion that the past and future exist in order to solve the problem connected with the perception of one's own mental states. This same notion could now solve the new problem. Since the future cloth exists, each of the terms in the sentence "the weaver weaves a cloth" denotes an existing thing. (Strictly speaking all this must of course be translated into terms of the *dharma* theory, for *dharmas* are the only things that really exist.) The *sarvāstivāda*, though not created in order to solve the difficulties connected with the second episteme, provided a solution which in essence coincides with that provided by the *satkāryavāda*.

[9] *MadhK(deJ)* 7.17: *yadi kaścid anutpanno bhāvaḥ saṃvidyate kvacit | utpadyeta sa kiṃ tasmin bhāve utpadyate 'sati ||.*

[10] Bronkhorst 1997. Walser (2002) gives a long and detailed argument in support of a date around 200 CE for Nāgārjuna.

Ajātivāda

There is a third way to make sense of the statement "the weaver weaves a cloth." Nāgārjuna had concluded that no cloth exists. The *satkāryavādins* maintained that no cloth can be produced because it is already there. The third solution would be to hold that no production can take place. This is the *ajātivāda*. We find it most notably in Gauḍapāda's *Āgamaśāstra*, a text claimed by later Advaita Vedānta as its own, but also in the *Mokṣopāya*, which was to become the kernel of the later Yogavāsiṣṭha (Bronkhorst 2001b).

Vaiśeṣika

The two schools of Nyāya and Vaiśeṣika become, toward the end of our period, the most important representatives of a position known as *asatkāryavāda*, which is the opposite of *satkāryavāda*. However, textual archeology reveals that, before reaching this point, Vaiśeṣika underwent a development during which its position was close to the *satkāryavāda*. Exploiting the possibility offered by the system to the extent that something may be existent without possessing existence, Vaiśeṣika could maintain that something could exist while being produced.

Jainism

Jaina canonical and postcanonical sources show that the attraction of a variant of *satkāryavāda* was great here, too. However, Jainism gave this solution a special twist of its own. Jinabhadra's position, for example, finds expression in the following words: "a pot is being produced having been produced in the form of clay etc., because it is made of that. That same [pot] is being produced not having been produced concerning its particular shape, because that was not there before." This way of speaking is, of course, typical of the so-called *anekāntavāda* that characterizes Jaina classical thought. What is more, the earliest canonical passages expressive of the *anekāntavāda* all occur in a context dealing with the difficulty of production. In other words, *anekāntavāda* appears to be the way in which Jainism responded and gave expression to the second "episteme" (Bronkhorst forthcoming-a).

Asatkāryavāda

All the thinkers considered so far were willing to draw drastic and often counter-intuitive conclusions from the perceived difficulties linked to statements describing the production of things. The Nyāya school of thought—soon to be followed by Vaiśeṣika—was not willing to do so. These thinkers rightly saw that the fundamental problem was related to the problem of referring. In "the weaver weaves a cloth," the word "cloth" presumably had to refer to something that is present in the situation described. As long as we assume that the word "cloth" has to refer to the individual cloth that is being produced, there are difficulties. However, do words only refer to individual things?

The ontology accepted by Nyāya and Vaiśeṣika allowed of another solution. In this ontology there are not only individual things but also universals. Beside countless individual cloths there is the universal that inheres in all of them. Individual cloths have a limited life span; the universal that inheres in all of them is eternal: it has no beginning and no end. That is to say, this universal is there at the time at which the cloth is produced. Nyāya and Vaiśeṣika therefore accepted that words do not only refer to their corresponding individuals but to the related universals as well. This allowed them to solve the problem connected with the second "episteme" without straying too far from common sense.

Apohavāda

A word must here be said about a development that took place after the end of our period. It must be mentioned because it is, if not the logical consequence of what happened before, the solution found to a problem that had occupied Buddhist thinkers for a long time. Buddhist thinkers were in no position to follow the example of Nyāya and Vaiśeṣika. Their ontology had no place for such things as universals. However, the sixth-century thinker Dignāga—whom we know had been preoccupied with the problem of production—found an elegant solution, based on his analysis of the process of referring. He introduced the *apohavāda*, which implies that words do not directly denote, but exclude. The technical details of this solution cannot be dealt with here, but the consequence was clear: since referring is not based on a one to one relation between words and things, the correspondence principle cannot hold either. There does not have to be a cloth in the situation described by the statement "the weaver weaves a cloth," because referring does not work like that (Bronkhorst 1999c).

Bhartṛhari

Bhartṛhari follows Patañjali in matters grammatical. But where Patañjali saw no fundamental difficulties in statement like "the weaver weaves a cloth," Bhartṛhari did. He offers no fewer than four different solutions, some of which coincide with the ones already discussed. New is his suggestion that the objects referred to may have metaphorical, rather than real existence. Equally interesting is his proposal to attribute mental existence to those objects.

The Persistence of the First Episteme

It will be clear from the preceding sections that the first and the second episteme do not behave like "real" epistemes as thought of by Foucault. The second episteme does not fully replace the first one in all cases: a number of thinkers held on to features of the first episteme even while looking for solutions for the problems posed by the second one. Most Buddhist Abhidharma schools as well as Brahmanical Vaiśeṣika fall into this category. These schools remain thoroughly atomistic in character and stick to the earlier understanding of causality. This last feature confronted them with major difficulties.

Recall that in causality as conceived of in the first episteme each succeeding moment is determined by the immediately preceding one. This conception is not problematic in itself, but makes it difficult to visualize by what mechanism karmic retribution takes place. In order for karmic retribution to function, causal mechanisms must extend over long time spans: a present causal situation must determine right

down to the last detail a future event that may be one or many lifetimes away. How is that possible without the interference of numerous other causal "trains"? Is such a long-term causal mechanism really conceivable without outside supervision?

A school like Sāṃkhya was not much bothered by such questions. It seems likely that Sāṃkhya had never adopted the causal mechanism of the first episteme to begin with; its surviving texts shamelessly resort to teleological explanations. Buddhist Sarvāstivāda was not much concerned either: its specific doctrine, to the extent that the past exists in the future, allowed for the possibility of direct intervention at the right moment. But other Abhidharma schools and the Brahmanical school of Vaiśeṣika were deeply affected by this difficulty. Some of their thinkers took drastic steps to remove it.

According to tradition Vasubandhu, the author of the *Abhidharmakośa* and *-bhāṣya*, converted later in life to become a Yogācāra *vijñānavādin*. He was not the first Buddhist idealist, but his reasons for adopting this position are clearly set out in his *Viṃśatikā*, in the following words (commentary to verse 7): "The impression (*vāsanā*) of a deed enters into the series (*santāna*) of consciousness, nowhere else. Why don't you accept that the fruition [comes about] right there where the impression is, and is [therefore] a corresponding modification of consciousness? What is the reason that you imagine the fruition of an impression [to come about] there, where the impression is not?" Vasubandhu considers all these three—a deed, the impression it leaves, and its future result—mental events. The causal connection between a deed and its karmic retribution much later—being different mental events in the one long concatenation of mental events that make up a person and her reincarnations—looses in this way most of its mystery. Karmic retribution seen like this is no more difficult to explain than an agreeable or disagreeable dream.

Vaiśeṣika was, once again, not inclined to abandon the commonsense view of reality. It did not therefore opt for idealism, and made a determined effort to discover the mechanism of karmic retribution. This effort did not succeed, and by the time of Praśasta the school turned to the one remaining option: it introduced the notion of a creator god, whose primary task it was to supervise karmic retribution (Bronkhorst 2000b).

Summary and Implications

The preceding sections indicate how a number of what may appear at first sight unrelated positions that find expression in classical Indian philosophy—such as *satkāryavāda*, *asatkāryavāda*, *śūnyavāda*, *ajātivāda*, *anekāntavāda*, *apohavāda*, *vijñānavāda*, *īśvaravāda*, to mention but these—are to be understood against the background of the two epistemes specified above. This in its turn implies that the history of Indian philosophy, even in its early phases, is more than the story of a number of unrelated schools of thought. Quite on the contrary, it consists of a web of interrelated developments, in which thinkers participated who, even though from different backgrounds and without much sympathy for each other, shared several presuppositions and questions. It is also clear that many of these thinkers were aware of each others' ideas, even across the boundaries of school, religion and, we may assume, geography.

All this raises questions. How did these early thinkers communicate with each other? and above all: why did they bother? The answer to these kinds of questions will not come from a mere analysis of doctrines. The very existence of shared epistemes takes us to the sociopolitical background of early Indian philosophy.

SOCIOPOLITICAL FACTORS

Philosophical ideas do not grow on trees, nor do they find their origin in some Platonic heaven, isolated from the realities of life. This does not imply that the inner logic of philosophical developments can be ignored. It does however call for reflection on the circumstances which allow philosophies to develop in accordance with their "inner logic." What do we know about these circumstances in early India?

The testimonies of Buddhist pilgrims from China as well as a multitude of legends preserved in India itself inform us that philosophical debates frequently took place, often at royal courts. Exponents of different positions would confront each other and try to show the superiority of their own views over those of their opponents. Winning such a debate could bring great advantages, and losing one could have catastrophic consequences not only for the debater but for his group as a whole. The outcome of debates was often decided by the king and his advisers, but this should not make us conclude that the art of debating played no role. The Chinese pilgrim Xuanzang tells us of a public discussion in which Dharmapāla, a Buddhist, had gained a great victory over non-Buddhists. Yet this discussion had been organized by a king who wished to destroy Buddhism in the country. This shows that other factors than political power could play a decisive role in these discussions (Watters 1904–05: 372–373).

There is every reason to believe that debates of this kind were already a feature of the period that concerns us at present. One clear indication is that debating manuals were being composed during this period. One early surviving manual of this kind has been preserved as part of the *Caraka Saṃhitā*, a treatise on medicine (*āyurveda*).[11] Part of the *Nyāya Sūtra* also counts as a debating manual. Nāgārjuna may have composed one (Kajiyama 1991). Debating, as is clear from the numerous more recent testimonies referred to above, was not a leisure occupation for scholars in ivory towers, but a matter of life and death, sometimes literally so. The obligation to defend one's positions against decidedly unfriendly critics obliged all actual and potential participants to thoroughly think and rethink their positions, and revise them where they had reason to fear that they might look less than totally coherent to an outsider. What is more, debates encouraged potential participants not only to rethink their own positions but also to get to know the details of the positions of their opponents in the hope of finding weaknesses in them. The inevitable result was that ideas traveled quickly and easily from one group to the next, and were also studied by those who were not inclined to accept them.[12]

[11] Prets 2000. The *Caraka Saṃhitā* also "records" debates, as does Kauṭalya's *Arthaśāstra*; see Wezler 1993.

[12] *Caraka Saṃhitā*, Vimānasthāna 8.15; Vidyabhusana 1920; Solomon 1976, 1978; Bronkhorst 2002e.

These considerations anchor the development of Indian philosophy into the firm ground of the sociopolitical reality of its time. Ideas did not follow their logical developments for some abstract logical reasons, but because the philosophers concerned were under pressure to improve their own positions and find weaknesses in those of others. They were under such pressure because they might be called upon to defend their points of view. Seen in this way, the development of Indian philosophy during the period under consideration was in no small measure due to a particular custom that had installed itself at the royal courts and perhaps elsewhere: the custom to organize debates between scholars representing altogether different currents of thought.

Once such a custom has become part of tradition, it may continue even without political pressure. That is to say, scholars may go on critically refining their own positions and continue to show an interest in positions with which they disagree even when there is no king around who may oblige them to participate in a debate. Indeed, debating traditions may persist even in times when the stakes are less high. This does not change the fact that few people, and this includes scholars, will be keen to have their most sacredly held beliefs questioned in public if they are not obliged to submit to such an ordeal. In the Indian situation, it appears, they were obliged to do so.

The question therefore presents itself: Why did kings play this role? How did the custom of organizing debates establish itself in India? And which are the reasons that it maintained itself there for many centuries?

These are difficult questions which cannot be answered by merely studying the philosophical arguments presented in the texts. Quite on the contrary, an answer to these questions may help us understand why those arguments were presented to begin with. It is by no means self-evident that arguments are important, or indeed that they have to be considered at all. In India itself voices were heard against the "dry reasoning" which was going on in the philosophical schools. These voices became particularly strong when Buddhism declined as a force in society in the second half of the first millennium. It is certainly no coincidence that precisely at that time ritual Mīmāṃsā and the Vedānta philosophy became important, both of which claimed to base themselves on the Veda, which is essentially beyond discussion.

Let us return to our period. I have suggested in another publication that the confrontation in debate with representatives of totally different points of view may have begun in the parts of northwestern India ruled by Bactrian Greeks. This hypothesis accounts for an important number of known facts. It seems to me the most plausible explanation so far for the appearance of the debate tradition in India.[13] This does not change the fact that the presence in India of two strong religious traditions one beside the other—viz., Buddhism and Brahmanism—could not but facilitate the confrontation of opinions. The circumstance that during this so-called "dark period" of Indian history many rulers appear to have been of foreign origin, and perhaps for this reason less exclusively linked to any one religious tradition, may have played a role as well.

Another factor that may have been of some importance is that this new tradition

[13] Bronkhorst 1999a (improved French version 2001a; Italian tr. 2002a), 2000a: 124ff. For a study of the establishment of a Greek kingdom in Bactria, see now Holt 1999.

of critical debate could easily be assimilated to older practices that already existed in India. Names like those of King Janaka are famous in late-Vedic literature, as are the debates which he is supposed to have organized in those early days. The debates recorded in the Upaniṣads are, to be sure, totally different from the ones that characterize classical Indian philosophy, and can by no means be looked upon as earlier manifestations of the same thing (Bronkhorst 2002b). But it is at least conceivable that the very memory of kings like Janaka may have encouraged later kings with Brahmanical sympathies, too, to organize debates. The result would not be an Upaniṣadic debate, but the organizing king would not know. Buddhism, too, preserved the memory of debates, usually between the Buddha and someone else. Being representatives of a missionary religion, Buddhist preachers could hardly avoid engaging in debates, following in this the example of their founder.

I do not think that these historical antecedents alone fully explain why debates subsequently became institutionalized. It seems yet likely that without such institutionalized debates systematic philosophy might have never arisen in India.

APPENDIX
ON THE ATOMIC NATURE OF THE SĀṂKHYA *TANMĀTRAS*

Classical Sāṃkhya as we get to know it through its most important text, the *Yuktidīpikā*, does not look upon the *tanmātras* as being atomic (Bronkhorst 1999d: 686ff.). However, by rejecting this position it indicates that it is aware of it.

The idea of *tanmātras* as being atomic is found in a variety of texts, both early and late. Shūjun Motegi (1986) has drawn attention to the Chinese translation of this term which is more often used to translate *aṇu* (see further Imanishi 1961, 1968).

Very important evidence is provided by the *Yoga Bhāṣya*.[14] Here we read:[15] "The *tanmātra* is the cause of the element. The single part of the [latter] is an atom (*paramāṇu*) which is itself a collection of different component parts which do not exist separately, consisting of a *sāmānya* and a *viśeṣa*. All *tanmātras* are like this."[16] This seems to mean that the *tanmātra* is an atom, the single part of an element (*bhūta*). All, or some, elements may be composed of various *tanmātras*; the *Yoga Bhāṣya* is not however clear about this. It does not look upon the *tanmātra* as a single quality, but as a collection of a *sāmānya* and a *viśeṣa*. The *viśeṣas* are the normal five qualities, sound etc. The *sāmānyas* are the five elements, but conceived of as generic qualities; they are corporeality (*mūrti*; which is earth), viscosity (*sneha*; which is water), heat (*uṣṇatā*;

[14] See Dasgupta 1924: 66ff., where also some relevant passages from Vijñāna Bhikṣu's *Yogavārttika* are referred to.

[15] *YBh* 3.44: *tanmātraṃ bhūtakāraṇam | tasyaiko 'vayavaḥ paramāṇuḥ sāmānya-viśeṣātmā 'yutasiddhāvayavabhedānugataḥ samudāya ity evaṃ sarvatanmātrāṇ[i] |.*

[16] The translation "consisting of a *sāmānya* and a *viśeṣa*" for *sāmānyaviśeṣātmā*, rather than "consisting of *sāmānyas* and *viśeṣas*" or the like, seems confirmed by *YBh* 3.47: *sāmānyaviśeṣayor ayutasiddhāvayavabhedānugataḥ samūho dravyam indriyam* "the sense-organ is the substance which is an aggregate whose parts do not exist separately, of a *sāmānya* and a *viśeṣa*"; here the singular number of *sāmānya* and *viśeṣa* is guaranteed by the dual ending of their compound.

which is fire), moving forward (*praṇāmitā*; which is wind), going everywhere (*sarvatogati*; which is ether).[17] In introducing these generic qualities the *Yoga Bhāṣya* deviates from other sources on Sāṃkhya.[18] The fact that the *Yoga Bhāṣya*, in spite of this difference, preserves the idea of the *tanmātra* as an atom is no doubt significant.

Another passage in the *Yoga Bhāṣya* can be interpreted along the same lines:[19] "The single modification as sound-*tanmātra* of the constituents of nature (*guṇa*), which here take the form of something to be grasped (*grāhya*), is sound as object. A single modification of sound etc. when they are of the same kind as corporeality (*mūrti*) is the earth-atom, which is constituted of *tanmātras*. A single modification of those [atoms] is such a thing as the earth, a cow, a tree, a mountain. Also in the case of the other elements, by taking up viscosity (*sneha*), heat (*auṣṇya*), moving forward (*praṇāmitva*) or giving space (*avakāśadāna*) as generic quality, a single modification is to be produced." The crucial word *tanmātrāvayavaḥ* must, in view of the context which speaks of ever more composite entities, be understood as a *bahuvrīhi* compound: "the parts of which are *tanmātras*."[20]

A passage from the *Maitrāyaṇīya Upaniṣad* (3.2; perhaps one of the first in which the term *tanmātra* is used) easily lends itself to an interpretation in which it means atoms or something of the kind: "The explanation of (*bhūtātman*) is this: the word *bhūta* designates the five *tanmātras*. The word *bhūta* also designates the five principal elements. The aggregate of these is called body."[21]

A peculiar passage in Vyomaśiva's *Vyomavatī*—the earliest known commentary on the *Padārthadharmasaṅgraha* which is better known by the name *Praśastapādabhāṣya*—confirms the idea that the *tanmātras* were at one point the ultimate constituents of the molecules of matter. This passage discusses and explains the Vaiśeṣika position according to which a body is made up either of earth, or of water, or of fire, or of wind, but not of any combination of these elements. The

[17] See Bronkhorst 1994a: 319. *YBh* 3.47 (*sāmānyaviśeṣātmā śabdādir grāhyaḥ | viṣayaḥ*) seems to suggest that the *tanmātras* have the same names as the qualities, also in the opinion of the author of the *Yoga Bhāṣya*.

[18] The parallelism between the position of the *Yoga Bhāṣya* and that of the *Abhidharmakośa Bhāṣya*—here as elsewhere—is striking; see *Abhidh-k-bh(P)* p. 8 l. 21–22; p. 53 l. 9–10. Note also that the Yuktidīpikā under *SK* 38 enumerates (in *ślokas*) a great number of characteristics of the five elements, which includes the ones given in the *Yoga Bhāṣya*, though sometimes different expressions are used (*YD* p. 225 l. 24 ff.).

[19] *YBh* 4.14: *grāhyātmakānāṃ [guṇānāṃ] śabdatanmātrabhāvenaikaḥ pariṇāmaḥ śabdo viṣaya iti | śabdādīnāṃ mūrtisamānajātīyānām ekaḥ pariṇāmaḥ pṛthivīparamāṇus tanmātrāvayavaḥ | teṣāṃ caikaḥ pariṇāmaḥ pṛthivī gaur vṛkṣaḥ parvata ity evamādi/ bhūtāntareṣv api snehauṣṇyapraṇāmitvāvakāśadānāny upādāya sāmānyam ekavikārāmbhaḥ samādheyaḥ |.*

[20] Hattori (1968: 154 n. 5.31) concludes from this passage that "[t]he Sāṃkhyas hold that the five kinds of *tanmātras* are composed of their respective atoms." This interpretation may have to be revised.

[21] van Buitenen 1962: 102: *asyopavyākhyānam: pañca tanmātrāṇi bhūta-śabdenocyante | atha pañcamahābhūtāni bhūtaśabdenocyante | atha teṣāṃ yad samudayas tac charīram ity uktam |*; tr. van Buitenen 1962: 129.

objection is raised that bodies might consist of various elements at the same time. In this connection the following passage occurs:[22]

> But if you accept the following: The constitution of a part, too, [can take place] with various elements. For example, a *dvyaṇuka* is constituted of an atom of earth and an atom of water, or again of an atom of water and an atom of fire, or of an atom of fire and an atom of wind. In the same way it [can be constituted] of wind and the *tanmātra* of sound. These *dvyaṇukas*, once arisen, constitute, passing through [the stages] *tryaṇuka* etc., a body.

This passage presents a position that is not accepted by Vyomaśiva, who points out that according to Vaiśeṣika doctrine the resulting *dvyaṇukas* and more complex entities cannot possess the qualities inhering in the constituent atoms. All this does not concern us at this moment. What does concern us is that the *śabdatanmātra* —the *tanmātra* of sound, or the *tanmātra* which is sound—is here presented as a constituent of a potential *dvyaṇuka*, and therefore as some kind of atom, besides the atoms of earth, water, fire, and wind. It takes the place of what should be the atom of ether; but obviously, ether being one and omnipresent, there can be no atom of ether in Vaiśeṣika.

This passage is enigmatic, because it is not quite clear who the opponent is. One may however guess that Vyomaśiva took this discussion, and therefore the position of the opponent, from an earlier work. Indeed, the same portion of the *Vyomavatī* ends with a long citation from a work which is identified as *asya sūtrasya bhāṣyam* "the *Bhāṣya* on this *sūtra*." The *sūtra* concerned (*bhūyastvād rasavattvāc codakaṃ rasajñāne prakṛtiḥ*) cannot be identified with certainty, but appears to have belonged to the *Vaiśeṣika Sūtra*.[23] The *Bhāṣya* on the *Vaiśeṣika Sūtra* was not, of course, the *Praśastapādabhāṣya*, but the *Kaṭandī*, probably composed after Vasubandhu but before Dignāga; this we have seen. It is therefore possible, or even likely, that the discussion about *dvyaṇukas* constituted of wind and *śabdatanmātra* occurred already in this earlier text, which may, in its turn, have been acquainted with an earlier work of Sāṃkhya, in which *tanmātra* was still known in the sense of "constituent of a molecule." It seems, however, clear that the position described by Vyomaśiva—and perhaps taken by him from the *Kaṭandī*—represents some hybrid between Sāṃkhya and Vaiśeṣika: whereas the notion of *tanmātra* appears to be Sāṃkhya, that of *dvyaṇuka* and *tryaṇuka* is decidedly Vaiśeṣika.

[22] *Vy.* I p. 81 l. 13–21: *athāvayavasyāpy anekabhūtair ārambhaḥ | tathāhi, pārthivāpyābhyāṃ paramāṇubhyāṃ dvyaṇukam, punar āpyataijasābhyām, tathā taijasavāyavīyābhyām ārabdham iti | evaṃ vāyuśabdatanmātrābhyām | etāni dvyaṇukāny utpannāni tryaṇukādiprakrameṇa śarīram ārabhanta ity abhyupagame ||.*

[23] *Vy.* I p. 82 l. 20ff. Two slightly different *sūtras* with their *Bhāṣyas* are cited *Vy.* I p. 85 l. 17ff. (*bhūyastvād rūpavattvāc ca rūpajñāne prakṛtiḥ kāraṇaṃ tejaḥ*) and I p. 90 l. 4ff. (*bhūyastvāt sparśavattvāc ca sparśajñāne prakṛtir vāyuḥ*).

A very late testimony to the atomic nature of the *tanmātras* is a remark by Nāgeśa, in his subcommentary on the *Mahābhāṣya* on P. 1.4.29. Nāgeśa explains that, according to some, atoms such as the ones that are the *śabdatanmātras* are the word.[24]

If the material presented in this appendix is a bit higgledy-piggledy, it does show that the notion of *tanmātra* has been associated with atoms from an early date onward, and until recently. The circumstance in particular that the *tanmātra* is atomic in the classical texts on Yoga justifies us to surmise that is was like that in preclassical Sāṃkhya.

[24] Nāgeśa on Kaiyaṭa on P. 1.4.29 Vt. 2: *paramāṇūnāṃ śabdatanmātrādirūpāṇaṃ kaiścit . . . śabdatvam iṣyate.*

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