'Verschriftlichung' and the relation between the *pramāṇa*s in the history of Sāṁkhya^{*}

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... the 'interest' of knowledge ... lies in the dialogue with other worlds ... 'I' need to know whether 'you' know things that can destroy my universal generalizations, or disrupt my implications ... we could say that any interest in 'truth' *presupposes interaction* between a plurality of knowledge bearers. ¹

Summary:

"Why did rationality thrive, but hardly survive in Kapila's system?" Problems in connection with this question have been investigated in this paper. 'Rationality' has been characterised in a general and loose way as an attitude which accords a high value to the *ratio* – that is, to reason and reasoning, reflected in reasoned argument – in arriving at reliable knowledge. To this corresponds an operational definition of rationality as the attitude which accords a high value to *anumāna* in arriving at reliable knowledge. Sāmkhya shared circumstances favoring reflection and reconsiderations of established beliefs with other early movements and schools. It is next argued that one factor contributing to the disappearance of the ancient Sāmkhya-text the Ṣaṣṭitantra, which apparently displayed a high degree of "rationality", is the method of knowledge transmission: this was an extremely laborious process, presupposing devotion to a tradition. In the course of time, the method of knowledge transmission quite generally strengthened and reinforced traditionality, and marginalized rational criticism on traditional truths,

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¹ Roberts 1992:286f, author's emphasis. I thank Dr. Sudhakar Jatavallabhula for having drawn my attention to J. Roberts' book, a few years ago.

by some sort of "natural selection". This happened also in Sāṁkhya which gradually transformed from a relatively heterogeneous rational movement (reflected e.g. in passages in the Mahābhārata, the epic which is thought to have arisen roughly from 2nd B.C.E. – 4th C.E.) into the doctrinal system represented in the Sāṁkhya-Kārikās (ca. 4th C.E.) for which a very late Sāṁkhya-Sūtra appeared in the fifteenth century, with as most important commentary the one by Vijñānabhikṣu (16th century). Further questions regarding rationality and irrationality are addressed in connection with the developments observed in Sāmkhya.

- 0.1 The present article is a sequel to "Why did rationality thrive, but hardly survive in Kapila's 'system'? On the *pramāṇa*s, rationality and irrationality in Sāmkhya (Part I)" (Houben 1999b).² The two articles present ideas which I started to develop before I became acquainted with Professor Bronkhorst's circular for this seminar (elsewhere in this volume) and with his paper "Why is there philosophy in India" (abbr. as WITPI; first presented as Gonda lecture in Amsterdam, 13 November 1998; a revised version elsewhere in this volume). My articles do not directly address the large questions posed by Bronkhorst, but, dealing with the related but more limited problems of the development of a single philosophical school in South Asia, they do have implications for these questions and the suggested answers. These are addressed in sections in smaller print and in some footnotes.
 - 0.2 The following remarks are occasioned by the main question in Bronkhorst's circular: how is the presence of a tradition of 'rational inquiry' in (ancient) South Asia to be explained; and by Bronkhorst's own challenging answer suggested in his WITPI-paper: because the Buddhists in the northwest were influenced by the Greeks in discussions with them; the latter already had such a tradition which developed in their unique democratic system.
 - (a) Although I would like to understand a 'tradition of rational inquiry' (or 'tradition of rational criticism') in a different way than Bronkhorst, the extension of our understandings will largely overlap. Some major differences have been mentioned below under section 1.
 - (b) Discussions between Greek and Buddhists in the northwest of the Indian sub-continent, in Hellenistic / post-Aśokan times, may have worked as an extra catalyst for

 $^{^2}$ A third study dealing with the attitude of early South Asian philosophers, and prominently among them Sāṁkhya philosophers, towards the ethical problem "to kill or not to kill a sacrificial animal" (Houben 1999a) further complements these two articles.

the establishment of a 'tradition of rational inquiry and criticism' in South Asia; to present them as the main immediate cause for the development of such a tradition appears an exaggeration.

- (c) As for the more remote cause, why in the early period (before, say, 330 B.C.E.) only the Greeks would have developed a 'tradition of rational inquiry (criticism)' and not the Indians: it is difficult to see why the quite varied political and cultural climate in South Asia (esp. the Gangetic plain from ca. the 6th cent. B.C.E.)³ should have been less favorable to the development of such a tradition than the political and cultural climate in ancient Greece.⁴ There is an important difference between pre-Hellenistic Greece and pre-Aśokan South Asia, but, as we will point out below, it does not consist in the (absolute) presence versus (absolute) absence of an (incipient) tradition of rational inquiry and criticism.
- 0.3 Before starting with the present discussion, we may here first give a brief overview of the contents of the sections (1-4.1) of the preceding article on rationality in Sāṁkhya (Houben 1999b).
- 1.1 Three closely interrelated problems pertaining to rationality in Sāṁkhya are implied in the twofold question (Q) which is our starting point:
 - Q: Why did rationality thrive, but hardly survive in Kapila's 'system'?

The three interrelated problems are: (a) Why did rationality, distinguished by the presence of reasoned argument for perferring one alternative to others, thrive, but hardly survive in the Sārikhya-'system';

(b) to what extent did rationality thrive, and at a later stage stop to thrive, in Sāṁkhya;

³ From sources such as the early Buddhist and Jaina texts and the Arthaśāstra, it is clear that South Asia knew apart from monarchies also non-monarchical polities, including oligarchies and those sometimes called republics; cf. Basham 1967:96-98; Sharma 1968.

⁴ The following story on Bindusāra, father of Aśoka, suggests there was openness and eagerness to debate already before the period which is crucial in Bronkhorst's account. I quote from Basham 1967:53: "Bindusāra ... was in touch with Antiochus I, the Seleucid king of Syria. According to Athenaeus, Bindusāra requested of the Greek king a present of figs and wine, together with a sophist. Antiochus sent the figs and wine, but replied that Greek philosophers were not for export. This quaint little story seems to indicate that Bindusāra, like many other Indian kings, shared his attentions between creature comforts and philosophy ... "Indications for an early "culture of asceticism, discussion and argument, in the margins of an urbanized society" have been mentioned in section 4.3.

and (c) to what extent and in what sense is *irrationality*—that is, the counterpart of our still very preliminarily defined rationality—important in different stages of its development.

- 1.2 Sāmkhya, especially in its classical form (which I take as comprehending the period from the Sāmkhya-Kārikā to the Yukti-Dīpikā) and post-classical form, but also pre-classical Sāmkhya, has appeared to several Western observers, from Richard Garbe 1888 and 1894 onwards, as a system in which 'rationality' plays a remarkable role.
- 1.3 The concept of rationality is not without problems. The main points may be recapitulated as follows:

If the notion of 'rationality' is associated with claims of being a general human faculty and of having universal validity—aspects which can be traced back to the Aristotelian concept of man as *animal rationale* or *zooion logikon*—a confrontation with the South Asian philosophical tradition is unavoidable. If, conversely, 'rationality' is regarded as a culture-specific notion—if human 'rationalities' (in plural), including Western ones (also in plural), are thought to have only relative validity—there is all the more reason to confront and compare dominant notions of 'rationality' in Western philosophy with those in South Asian philosophy.

Because serious claims of 'rationality' with regard to South Asian thought, made esp. in the 19th century and afterwards, have remained quite controversial (cf. Halbfass 1988, esp. pp. 263-309), it may be wise to begin with a generalizing approach rather than a culture-specific one, and start off with a **relatively loose** and general characterisation of 'rationality' as an attitude which accords a high value to the *ratio*—that is, to reason and reasoning, reflected in reasoned argument—in arriving at reliable knowledge. In the course of our discussion, our understanding of 'rationality' is then to be made more concrete in terms of the attested philosophical developments in South Asia. A philosophical system or school or movement may be regarded as 'rationalistic' or as 'a rationalism' if it makes it a matter of principle to accord a high value to reason and 'rationality' or reasoning. If this is genuinely the case, one may say that "rationality is thriving." If reason and reasoning are severely restricted on

⁵ Cf. for various definitions and characterizations of 'rationality': Blackburn 1994:318, Furley 1973, Gawlick 1992, Gert 1995, Gosepath 1992, Hoffmann 1992.

account of other sources of knowledge such as tradition and perception (including divine, inspired perception), 'rationality' cannot be said to be 'thriving' any more.

This 'rationality'—and the same applies to 'rationalism'—is a coin with two sides. One may say: "be rational, don't believe the earth is flat just because you see it flat." And one may say: "be rational, don't believe that the world was created in seven days just because the Bible says so." In other words, one may be 'rational' vis-m-vis tradition, and 'rational' vis-m-vis direct perception. For the sake of my discussion I will accordingly distinguish these two sides of the coin as Rationality-A (vis-m-vis direct perception and empiricism) and Rationality-B (vis-m-vis tradition and traditionalism).

In order to be able to apply our questions to the specific cultural and philosophical material of our enquiry, we will adopt an operational definition of 'rationality'. Making use of conceptual distinctions developed in the Sanskrit philosophical tradition, more specifically of the concept of the *pramāṇas* and their subdivision into *pratyakṣa* 'direct perception', anumāna 'inference', and āgama 'traditional knowledge' (or 'statement by a reliable person', āptāgama, āptavacana, or āptaśruti) also found in Sāṁkhya (SK 4-6), we can for now reformulate our characterization of rationality as the attitude which accords a high value to anumāna in arriving at reliable knowledge.

⁶ If one regards the Vedas as having no personal author (god, seers), as the Mīmāṁsakas did, 'traditional knowledge' is quite different from just a 'statement by a reliable person' (Mīmāṁsā of course emphasizing the former only; cf. D'Sa 1980). Otherwise there is a considerable overlap between the two. But whichever term is used, *āgama* or śabda or āptavacana, the 'orthodox' Brahminical schools consider the Vedas as the main instance of this pramāṇa. In the Sāṁkhya-Kārikā (4-6) āptāgama, āptavacana, or āptaśruti are used interchangably.

The number of *pramāṇa*s to be accepted was an important topic of debate among the various philosophical schools in South Asia. The acceptance of the three mentioned *pramāṇa*s seems to have been a kind of default position: if more or less *pramāṇa*s were to be accepted a special argument was needed (to establish, for instance, that 'traditional knowledge' is subsumed under 'inference'). Apart from Sāṁkhya also Yoga and the grammarians (cf. Aklujkar 1989a and b), and some Buddhist schools accepted these three; for the latter cf. e.g. Vasubandhu's AKB 2.46b, p. 76 line 22, Saṁghabhadra's Nyāyānusāra 19.4 (cf. Cox 1995:312), and a passage in the Śrāvakabhūmi to which Prof. Vetter kindly drew my attention (ŚrBh p. 238, section (I)-C-III-10-b-(2)-ii-(c)).

1.3.1 While my characterization remains close to the traditional understanding of 'rationality' as a faculty, but translates it into a characterisation which can be more directly observed in textual sources, Bronkhorst's 'rationality' and 'tradition of rational inquiry' are inspired by a Popperian understanding of rationality and rational criticism (cf. the references to Popper and Popperian authors in footnote 3 of WITPI). The expression 'tradition of rational criticism' would reveal Bronkhorst's intentions (as explained in footnote 3 of WITPI) as well as their Popperian background more directly. The term 'inquiry' may even be felt to be somewhat misleading to the extent that it suggests open ended investigations and an 'object orientedness' neither of which are strongly present in the South Asian philosophical tradition. 'Object orientedness' are found in linguistic disciplines and in medicine; both border on philosophy and touch on its issues, but do not fall squarely into its domain. I will hence prefer to speak of a 'tradition of rational criticism' with reference to specialized, philosophical discourse.

Since the employment of reasoned argument—our indication that reason and reasoning are important—is usually at least partly if not largely for the sake of convincing others, my characterisation overlaps with Bronkhorst's first condition of a 'tradition of rational inquiry (criticism)', "There is an ongoing debate ... in which the participants try to show that their own system is right and that of the others wrong or incoherent." However, in my view there need not be completely developed systems, and if there are, participants and contributors in the debate neither have to opt for any existing system nor develop a system of their own, before one can speak of a tradition (or incipient tradition) of rational criticism.

Hence, Bronkhorst's second condition "thinkers try to improve their own system so as to make it immune to attacks" need not apply to all participants in the debates, but once we can speak of established systems, it may be expected that these do get improved in the course of time. It is to be noted, however, that in philosophical systems which have a very weak orientation on the object, it is generally difficult to measure any progress.

The first part of Bronkhorst's third criterion can be rejected: there may very well be areas of reality which, for the thinkers involved, are fundamentally beyond critical inquiry. In that case they can remain silent or speculate. But Bronkhorst's intention is probably that there are no areas of reality which are *for political or social reasons* beyond the realm of critical examination; this may be seen as a laudable but probably irrealistic (Popperian) ideal for modern scholars; in spite of Bronkhorst's "most importantly," it does not apply to those to whom he regards it most applicable: ancient Greek thinkers and Buddhist thinkers. Socrates had to drink deathly poison because he questioned established religious beliefs, and the Buddhists were wedded to a partly

⁸ Already in pre-Kārikā Sāmkhya separate treatment was given to 'inference for oneself' and 'proof' or 'inference for another' (Frauwallner 1958, e.g. 128f, 137 [267f, 276]). In a school such as Nyāya with a more dialectical background, the emphasis was basically on 'inference for another'. In the Buddhist epistemological school the two were distinguished as *svārthānumāna* and *parārthānumāna*.

heterogeneous body of traditional 'teachings of the Buddha' from which they could not deviate too far without ceasing to be Buddhists. Bronkhorst's criterion is therefore too strong: a tradition of rational and critical inquiry can very well emerge with regard to a limited area (or a number of limited areas) of reality. In practice, one may add, such a tradition will most probably emerge only with regard to a limited area of reality. In South Asia, language was the limited area where a tradition of open and critical inquiry arose, just as it was physics and mathematics in the Greek-Hellenistic world. The methods and techniques developed in the tradition of inquiry dealing with language may next be applied to other areas as well. Unlike Bronkhorst, I therefore see the earlier phases of this tradition, as exemplified in Pāṇini and Kātyāyana, as a full-fledged tradition of rational inquiry (though, on account of its focus on language, of course not of universal criticism).

- 2. The Sāṁkhya-Kārikā (ca. 4th cent.) testifies primarily to a *preceding* period of philosophical activity. Rationality continued to thrive also some time after the composition of the Sāṁkhya-Kārikā.
- 3. If we want to arrive at an understanding *why* rationality was strong, the circumstances and earlier phases of Sāmkhya rationalism are to be studied. Previous attempts to reconstruct earlier phases of Sāmkhya (such as Frauwallner 1953:288ff [227ff], van Buitenen 1956) show a one-sided focus on established doctrines in Sāmkhya, while these cannot have formed the core of Sāmkhya if rationality occupied the important place it apparently did. One of the sources of pre-Kārikā Sāmkhya, the Mahābhārata, is rooted in an oral tradition. It would be wrong to expect here the same word-by-word similarity in doctrine which one could expect to find in later periods in Sāmkhya when e.g. the Ṣaṣṭitantra became a generally accepted authoritative text, and in the classical phases of other philosophical systems—a word-by-word similarity in doctrine on which elsewhere 'religions of the book' insist when judging for instance new

⁹ Pāṇini's grammar is not primarily or exclusively a testimony to the intelligence and genius of a single author, Pāṇini, as Bronkhorst (WITPI-paper, p. 34) and many others seem to hold; Pāṇini formed part of a tradition of grammar-authors plus an educated public making use of grammars (cf. Houben 1997a, 2001); from Pāṇini's, Kātyāyana's and Patañjali's works we know that within this language-oriented tradition rational criticism occupied an important place.

publications, and on which they *can* insist only because of the rigid fixation of the religious doctrines in script. ¹⁰

Dharmasūtra-passages were discussed which show a continuity with the Mokṣadharma-&-Kārikā-Sāṁkhya in their emphasis on the importance of non-harming and in their association with renunciation. Following the suggestions in the texts, the social-religious renewal of a fourfold division of orders with high status for the ascetic may be attributed to an early Kapila. This development—apparently the result of someone's tradition-independent considerations and decisions—can be seen as reflecting an emerging rationality-B which in a more developed form persists in the well-known later manifestations of Sāṁkhya.

4.1. After the ground-clearance in the preceding sections, it is time to directly address question Q (section 1.1) "Why did rationality thrive, why did it stop to thrive in Sāṁkhya?", especially the first part: "Why did rationality (start to) thrive?" Attention may be drawn to one quite general explanatory factor: developments in agriculture allow larger food crops (rice), and some people are free to follow the ascetic life-style of their choice, and to take distance from and reconsider established beliefs, rituals (see now also Heesterman's contribution to this book) and social structures.

So far the picture of the development of Sāṁkhya rationality is: the antecedents of rationality in Sāṁkhya, if we can really locate them in Kapila's asceticism and his renewal of the social-religious system, were very modest indeed in terms of clearly discernible traces of rational reflection. Through the Mokṣadharma we see a rising line which finds its climax in the lost Ṣaṣṭitantra. In the SK a more doctrinal Sāṁkhya has already started, though rationality remained dominant at least until the time of the 'destroyer of Sāṁkhya', Mādhava. It was argued that the explanation suggested by Frauwallner for the rising line of Sāṁkhya rationality, viz., a major influence of the Aryan invaders in philosophical thinking, is untenable.

4.2 From this reconstruction of the development of rationality in Sāmkhya and the suggestion for at least one explanatory factor in the context of larger cultural

¹⁰ Cf. Goody & Watt 1968, Introduction in Goody 1968 and Goody 1986, 1987 (cf. also section 5.5 below). A practical alternative for written fixation in a philosophical school could be fixation in an orally transmitted sūtra-text; but early Sāṁkhya did not have such a sūtra-text. See further section 4.2, below.

developments in South Asia in 4.1, we turn now to the second part of our question Q: Why did rationality stop to thrive in Sāṁkhya, why did it start to wither?

One may say that it is simply a matter of bad luck that the Ṣaṣṭitantra got lost in the course of the centuries and stopped to influence further development. Still, is it entirely accidental that this text got lost while others such as the Mīmāmsā-Sūtra and the Vedānta-Sūtra persisted over at least an equally long period (for the Mīmāmsā-Sūtra probably an even longer one)?

It is to be realized that the method of knowledge transmission was an extremely laborious one, both in the older predominantly oral time (esp. if the Vedas or Sūtras were to be transmitted), and in the later time when written sources became accepted and gained in importance. The Buddhists were apparently pioneers in writing down their sacred texts in ca. the first century B.C.E., while transmitters of Vedic texts were more reluctant to commit these to writing. It is tempting to see this as an important correlative, if not causal factor in the gradual decline of a philosophical system emphasizing rationality. This method of knowledge transmission is itself strongly dependent on traditionality, in the sense that it requires considerable efforts (teaching and

Cf. Falk 1993:287. Professor T. Vetter commented at this point that the transition from a mainly oral to a mainly written mode of transmission must have been a slow and gradual one. Even when Buddhists had fixed the teachings of the Buddha in writing, the authority of these written sources had still to compete with oral traditions and innovations. The canon continued to undergo considerable changes upto ca. 400 C.E., as Vetter has argued on the basis of a comparison of some passages in the Mahānidāna-Sutta with different Chinese translations (Vetter 1994:138, 139, 159).

Still in the 11th century, Al-Bīrūnī observed the following on the transmission of the Veda: "The Brahmins recite the Veda without understanding its meaning, and in the same way they learn it by heart, the one receiving it from the other. Only few of them learn its explanation ... They do not allow the Veda to be committed to writing, because it is recited according to certain modulations, and they therefore avoid the use of the pen, since it is liable to cause some error, and may occasion an addition or a defect in the written text. ... not long before our time, Vasukra, a native of Kashmir, a famous Brahmin, has of his own account undertaken the task of explaining the Veda and committing it to writing. He has taken on himself a task from which everybody else would have recoiled, but he carried it out because he was afraid that the Veda might be forgotten and entirely vanish out of the memories of men ... " (Sachau 1888:125f). References to the employment of writing appear in Smṛti-texts such as the Manu-Smṛti, but are still entirely absent in the late Vedic Dharma-Sūtras, Falk 1993:251f; cf. also 284-289.

learning by heart mantras and sūtras, copying by hand of quite rapidly deteriorating manuscripts) of persons *devoted to the tradition*. Hence, in the course of time, traditionality is unavoidably strengthened and reinforced by some sort of natural selection: those ideas which have the strongest bond with traditionalism have the best chances for survival. By the same process, rationality is marginalized, and can survive only in submission to traditionality (on a small scale: as $p\bar{u}rvapak\bar{s}as$ 'preliminary theses' introducing the $siddh\bar{a}ntas$ 'final positions'; on a larger scale, as a doctrine-centered Kārikā-Sārikhya, and later as a neo-Sārikhya subordinated to Vedāntic systems). We can also say that the rationality promoted by Sārikhya led to a lack of interest in maintaining the own traditional doctrines and stimulated doctrinal diversity. The task of transmitting all significant texts simply became too big for later generations of transmitters of the system.

In the light of this diversity which was unavoidably connected with the dominant position of rationality, one may wonder whether one can really speak of a philosophical 'system' in the early period. Rather, Sāṁkhya in this period (as reflected e.g. in the Mokṣadharma) appears as a 'movement' of numerous individual teachers and their pupils, and loosely held together by the acceptance of an ascetic life-style (without fully rejecting Brahmanism, unlike the Buddhists and Jainas) and by an agreement on the main topics to be reflected upon (at some point systematized as 'the sixty topics').

4.3 The above answer to the second part of question Q (in 4.2) may make us return to the first part of the question, why rationality thrived in Sāmkhya (4.1): if the laborious method of knowledge transmission was so unfavorable to a rationalistic movement, how could a situation in which rationality was dominant arise at all? How could rationality thrive in this earlier period?

It could do so—again, at least partly—because of the predominantly oral nature of philosophical activities—debate and knowledge transmission—not only in the ascetic Sāmkhya movement but also in most other currents in the early phases of South Asian philosophy. This orality is clearly visible in early (originally orally transmitted) accounts of the Buddha's life and of the life of Mahāvīra. Sāmkhya's early phase of development seems to have taken place in a similar mainly oral environment, and its main strategies of allegorical 'stories' to promote certain perceptions of reality, of reasoning to go beyond the directly perceptible (as well as beyond traditionally transmitted views), and of numerical series to organize and memorize accepted conclusions was successful in this

environment. While Buddhism and Jainism succeeded in gaining sufficient momentum and in establishing traditions of their own (in which rationality originally played a rather restricted role), alongside the widely spread Brahminical culture, other critical and ascetic currents (Ājīvikas, materialists) virtually disappeared.

Pali sources on the Buddha place loud discussions and arguments in an unfavorable light, whereas the Buddha's followers are said to be able to remain extraordinarily silent¹³; in early Jaina texts discussions and arguments are overshadowed by doctrinal expositions in regulated encounters. 14 In spite of this, or perhaps precisely because the Buddhist and Jaina biases are clearly visible, these texts suggest a culture of asceticism, discussion and argument (with also Brahminical participation), in the margins of an urbanized society. Sāmkhya may be assumed to have arisen, possibly somewhat later than Buddhism and Jainism, in an environment which was rather similar. Its continuity and growth must have been favored by its association (ever since Kapila formulated an all-embracing Óśrama-system in which renunciators occupied a respectable position) with the wide-spread and in spite of all criticism well-established Brahmanism—an association which not only promoted the survival of Sāmkhya, but which also in several ways restricted and gave direction to its rationalism. Sāmkhya rationalism, while participating in broader non-Brahminical critical tendencies, was relative to Brahminical traditionalism.

It was when competing schools were gaining momentum because subsequent generations could focus on the elaboration and defense of a limited number of traditionally fixed doctrines, that the doctrinal flexibility which in the early phase allowed Sāmkhya to grow (in a dialectical relation with Brahmanism) became a draw-back for its continuation. Here it is to be noted that it was not simply the gradual shift from orality to writing which allowed other schools to focus on

Cf. in the Dīghanikāya: Brahmajāla-Sutta 1.1-3; Poṭṭhapāda-Sutta 2-6; Sāmaññaphala-Sutta 10-12. The Brahmajāla-Sutta section 1.18 on ascetics and Brahmins "addicted to disputation" (*viggāhika-kathaṁ anuyuttā*) further shows that discussions did not just consist of statements and counter-statements: statements were to fulfill certain argumentative requirements; in section 1.34 reference is made to ascetics and Brahmins who argue and deliberate (who are *takkī*, *vimaṁsī*).

Cf. the Jaina Paesi-story in comparison with the Pāyāsi-Sutta in Leumann's translation and analysis, 1885; in the Jaina-story the Jaina ascetic Kesi appears less ready to have a discussion with the king and more intent on teaching the doctrines he learned from his own teacher, than Kumāra Kassapa in the corresponding Buddhist Pāyāsi-Sutta.

fixed doctrines. Especially the Brahminical knowledge systems developed methods of fixation and transmission of knowledge in the genre of the Sūtra (cf. Renou 1963; Houben 1997b). Thus, even when the grammarian Pāṇini was familiar with script, the system of his grammar is thoroughly oral (cf. Deshpande 1992:17ff). It must have been composed mainly orally, and it was in any case transmitted and employed mainly orally for centuries. Emerging philosophical schools like Mīmāmsā and Vaiśeṣika have apparently applied a number of the Sūtra-techniques in the development of their system, and are in the possession of an early Sūtra-text still very much rooted in a mainly oral environment. Sāmkhya had its own strategies for success in the oral environment, and did not participate in the Brahminical Sūtra-genre.

5. Summary and discussion of the results

5.1 To summarize the results of the above considerations we may return once more to the questions and notions implied in question Q section 1.1, starting with the first part of Q: Why did rationality thrive in Sāmkhya? One general, explanatory factor in the context of larger cultural developments in South Asia may be found in an increasing urbanization which facilitated the emergence of monastic orders whose members could survive without an active contribution to food-production, and were free to follow the ascetic life-style of their choice, and to take distance from and reconsider established beliefs, rituals and social structures. But this explains also the emergence of other groups where rationality could thrive, but about which only some disparaging accounts e.g. in Buddhist and Jaina sources have survived.

Having gained sufficient momentum as a rational movement in a primarily oral environment, proto-Sāmkhya survived at all over the centuries as a system—and this *in spite* of the dominance of rationality in its earliest phases—because

of its simultaneous association, in a kind of love-hate relationship, with the wide-spread and well-established Brahmanism or Brahmanical ritualism. Compared to other critical groups of its time, Sāṁkhya or proto-Sāṁkhya had a relatively positive attitude towards this Brahmanism.

5.2 (Second part of Q:) Why did rationality stop to thrive in Sāmkhya? Rationality became less dominant and was more and more submitted to other sources of knowledge, esp. the tradition, in a period when the fixation of doctrines (in orally transmitted Sūtra-texts, later on in written Sūtra-texts plus elaborate commentaries) was favoring other systems whose traditionalism was reinforced, through a kind of natural selection, on account of the laborious methods of knowledge transmission. These other systems were by no means entirely irrational or anti-rational; but there was a well-defined body of basic doctrines, a kind of 'research program' which was not seriously under discussion, and which generations of adherents could elaborate and defend in ever more refined ways. 16 It was attempted to formulate a set of doctrines also for Sārhkhya which had always been strongly rational and critical; but this artificial attempt turned it into a weakened, doctrinal Sāmkhya-system. After many dark centuries of survival on the verge of extinction, this doctrinal Sāmkhya could be quite easily adopted and adapted by thinkers from different schools (esp. Vijñānabhikşu). 17

5.3 (The notion of 'system' in question Q:) To what extent was early Sāmkhya a 'system'? In early Sāmkhya, the diversity which was unavoidably connected with the dominant place occupied by rationality, suggests a rationalistic

Authors such as Kumārila Bhaṭṭa could defend their basically irrational starting points with refined rationalizations and with much philosophical acumen. In the words of Halbfass (1988:325): "In a sense its [i.e., Pūrvamīmāṁsā's, particularly Kumārila Bhaṭṭa's] major 'philosophical' achievement is its method of shielding the Vedic *dharma* from the claims of philosophical, i.e., argumentative and universalizing thought, its demonstration that it cannot be rationalized or universalized within the framework of argumentative and epistemologically oriented thought, and its uncompromising linkage of *dharma* to the sources of the tradition and the identity of the Aryan."

The development was in fact more complex. Vijñānabhikṣu took as starting point and appropriated a recent revival in Sāmkhya, which had resulted in the composition of a Sūtratext plus a commentary on it by Aniruddha. The Sāmkhya of the revival was in its doctrines and in its doctrinal attitude close to the doctrinal Sāmkhya of the Sāmkhya-Kārikā and especially also to the developed philosophical schools of the time, Nyāya, Vedānta, etc.

'movement' rather than a philosophical 'system'. A philosophical 'system' can hardly survive as system if it really strongly emphasizes rationality. The Sāmkhya 'movement' was connected with asceticism and maintained a dialectical relation with Brahmanism. An agreement on the main topics to be reflected upon may have come about quite early. That early Sāmkhya came to be characterized by a systematization of 'topics to be reflected upon' (eventually 'the sixty topics') rather than by a system of doctrines perfectly suits the dominance of rationality. The ascetic character of the 'movement' dissociates early Sāmkhya from early Upaniṣadic developments (e.g. in the Chāndogya-Upaniṣad and Bṛhadāraṇyaka-Upaniṣad) which seem to foreshadow later Sāmkhya-doctrines but are much more connected with householder-Brahmins and Kṣatriyas (e.g. Yājñavalkya and king Janaka). The legendary Kapila and other early exponents of Sāmkhya may have adopted such Upaniṣadic thought-patterns and developed these in their own way.

5.4 ('Rationality', 'irrationality': Implied questions b and c:) To what extent was there **rationality**, and to what extent was there **irrationality** in different phases of Sāmkhya? If early Sāmkhya is regarded as a 'rationalist movement' in which rationality was dominant, this dominance was first of all, within Sāmkhya, relative with regard to the role played by the empirical and by tradition. The dominance was acknowledged and emphasized in early and classical Sāmkhya by giving a primary place to *anumāna*, and by a relative neglect of direct perception and the tradition as sources of knowledge (as shown in Frauwallner 1958). However, in Sāmkhya's definition of *anumāna* and especially in the definition of the most important form of *anumāna*, viz. *sāmānyato dṛṣṭam*

In the Ṣaṣṭitantra *anumāna* had the first place quite literally (Frauwallner 1958:100 [1982:239]), and was much more elaborately discussed than the other *pramāṇas*. In the Sāṁkhya-Kārikā the sequence of enumeration accords with that of other schools (direct perception, inference and statement of a reliable author). Yet, it is still *anumāna* (especially 'inference based on general correlation', or an 'Analogieschluss', see next note) which is invoked to establish the basic doctrines of classical Sāṁkhya, such as the existence of a primordial nature (*prakṛti*), of transformations (*vikṛti*) and of souls (*puruṣa*). Cf. Frauwallner 1992:96f: "Nun folgt die entscheidende Feststellung, daβ zur Erkenntnis _ubersinnlicher Dinge Analogieschl_usse dienen. Sie sind es daher, mit deren Hilfe das System seine wichtigsten Lehrs_atze ableitet. Wo auch Analogieschl_usse versagen, kann die heilige Ueberlieberung herangezogen werden. Sie findet aber, wie gesagt, im System praktisch keine Verwendung."

'inference based on what is perceived generally', ¹⁹ perception, philosophically relatively unreflected, plays a basic role, since it is the professed starting point of all Sāmkhya reasoning. ²⁰ This way, irrationality maintains a place at the heart of Sāmkhya rationality. Perception was investigated with more philosophical sophistication in other schools which did not make *anumāna* as dominant as Sāmkhya did. Apparently under their influence, Sāmkhya refined its concept of perception (cf. Frauwallner 1958:114[253]) by adopting the distinction between conception laden and conception free perception; the latter was presented as the perception intended in the Sāmkhya-system (*śrotrādivṛttir avikalpikā pratyakṣam*). ²¹ Irrationality remains then lurking in this 'conception free perception': a point which needs no explanation, though the realization that it is

SK 6. Cf. Larson & Bhattacharya 1987:94ff where the phrase is rendered as 'inference based on general correlation'; Frauwallner speaks of "Analogieschluss" (e.g. 1992:97), and elsewhere of "Sehen dem Gemeinsamen nach" (1958:136 [275]) or "auf Grund der Wahrnehmung im allgemeinen" (1955:76 [213]). On the interpretation of this phrase cf. Garbe 1917:211ff, 219; Cakravarti 1951:191f; commentators' interpretations of this and other types of inference: Larson 1969:170f; more recently, very briefly: Aruga 1991 and Harzer 1992; on sāmānyato dṛṣṭa in Sāmkhya and Vaiśeṣika: Wezler 1983, Nenninger 1992.

In the standard Sārikhya phrase *sāmānyato dṛṣṭam anumānam* Frauwallner's and others' "auf Grund" ("on the basis of") seems required but it is not expressed. Is the phrase derived from a compound *sāmānyatodṛṣṭānumāna*, where an ablative *dṛṣṭāt* was implicit? I am not aware of any author having addressed this problem of the presice formulation of the phrase. (Just as the terminological problem of other terms in early Sārikhya epistemology, such as *vīta* and *avīta/āvīta*, have hardly started to be addressed, as E. Franco pointed out in his contribution to the Sārikhya-seminar, Lausanne, November 1998—more generally, the study of early Sārikhya epistemology and logic has been much neglected since Frauwallner 1958; studies like those of Oetke 1994 and Nenninger 1992 in the field of Nyāya and Vaiśeṣika epistemology and logic would be welcome.)

That is, of both *sāmānyato dṛṣṭa* and of its complement *viśeṣato dṛṣṭa*. Cf. also the fol-lowing statement in Frauwallner's reconstruction of the Ṣaṣṭitantra: *sambandhād ekasmāt praty-akṣāc cheṣasiddhir anumānam* "Die Schluβfolgerung ist der Nachweis des Restlichen durch das Sichtbare auf Grund einer bestimmten Verbindung" (Frauwallner 1958:123, 126 [262, 265]).

It replaces the earlier śrotrādivṛttiḥ pratyakṣam ascribed to the pre-Kārikā school of Vṛṣagaṇa, cf. Frauwallner 1958:98 [237]. The more elaborate definition excluding conception laden perception is ascribed to Vindhyavāsin, who may have been a near predecessor or a contemporary to the author of the Sāmkhya-Kārikā; his innovations were not adopted in that work (they are reflected in Vyāsa's Yoga-Bhāṣya).

so may require some reflection.²² The dominance of rationality in the form of $anum\bar{a}na$ is thus not only relative to the role played by other sources of knowledge within Sāmkhya, but also to developments in other schools.

In other respects as well, Sāṁkhya's professed rationality or emphasis on anumāna²³ is unavoidably associated with a number of 'irrational' or (as far as we can tell) relatively unreflected choices regarding e.g. the (soteriological) purposes of man's rational reflections (viz. liberation from suffering). If it is recognized that the range of rationality remains always limited and can neither dispell all irrationality from the perceptual foundations of knowledge, nor that of inherited or adopted conceptual schemes as fundaments of thinking,²⁴ the association or 'confusion' of 'cosmology' and 'psychology', to which Franco and Bronkhorst have recently drawn our attention,²⁵ but which troubled already the first

A brief pointer to modern reflections on a partly overlapping problem area (avoiding the psychological side): Popper adds in 1968 to chapter V of his Logik der Forschung: "Unsere Sprache ist von Theorien durchsetzt: *es gibt keine reinen Beobachtungss_atze*;" and "*Es gibt keine reinen* Beobachtungen: sie sind von Theorien durchsetzt und werden von Problemen und Theorien geleitet" (Popper 1994a:76; author's emphasis).

In the Sanskrit tradition this fundamental epistemological problem was addressed mainly in discussions on the relation between perception and language or linguistically shaped awareness. Perception which is free from language is necessarily beyond the reach of rational reflection. It is therefore understandable that a school with strong 'rationalistic' pretensions such as the Nyāya-school, which was initially working with a 'naive' (prima facie quite acceptable) view in which a conception- and language-free stage is the starting point for perception, gradually reduced, in the course of centuries of further reflections and discussions, the range permitted to this conception- and language-free stage till its role in common daily perceptions became virtually zero. For a brief overview of these and related Sanskrit philosophical discussions, see Houben 2000.

Parallel to this rationality is the one engaged with 'lines of action' and which one may see manifested in an emphasis on 'conscience' vis-m-vis traditional doctrines. In several Sāmkhya stories and ethical discussions in the Mahābhārata one may read references to this 'conscience' and to conflicts between 'conscience' and the tradition or other authorities; cf. e.g. the stories discussed in Schreiner 1979.

The difference between 'metaphysical research programs' such as atomism (Popper 1983:189-193, 1994b:28 n 28) and theories implicit in observations and observational statements (Popper 1994a:76) seems mainly gradual.

Franco 1991:124; Bronkhorst 1997a, ms. p. 8-12; Bronkhorst 1997b; Bronkhorst, circular to Sāṁkhya conference Lausanne, November 1998. The point is that it is often unclear whether Sāṁkhya entities such as *buddhi* etc. are intended cosmologically, psychologically, or as both at the same time. See also previous article, Houben 1999b.

Indologists who dealt with Sāmkhya (cf. Max M_uller 1899:294), may be regarded as primarily a matter of *perception*—a perception of man and the cosmos as one or homologous, a perception which much of early South Asian myth and ritualism seem to reflect and foster—rather than a matter of deviant or defective *reasoning*. Attempts in the 'second flourishing' of Sāmkhya and especially those of Vijñānabhikṣu to reorder this 'confused' perception, cited by Bronkhorst (1997a, ms. p. 11) as showing that the confusion was indeed there, could then be attributed to a different world perception or world conceptualization rather than to an increase of rationality.

At the same time reference may be made to Lévy-Bruhl's thesis (1910, 1926) that a broad distinction can be made between a 'pre-logical' and 'logical' mentality. As recognized but originally insufficiently emphasized by Lévy-Bruhl, the 'pre-logical' mentality is not the prerogative of 'primitive societies' and, conversely, the 'logical' mentality is not the prerogative of a 'developed' (in Lévy-Bruhl's words the 'mediterranean') society. In Lévy-Bruhl's 'pre-logical' mentality, an important place is taken by "the law of participation", which implies that "objects, beings, phenomena can be, though in a way incomprehensible to us, both themselves and something other than themselves . . . In other words, the opposition between the one and the many, the same and another, and so forth, does not impose upon this mentality the necessity of affirming one of the terms if the other be denied, or vice versa" (1985:76-77). With regard to this law and the corresponding 'mentality' it has been observed that they, more than the 'logical' mentality, suit the "fundamental tenets of Christianity and other mainstream religions" (Littleton 1985:xliv). Thus, "embedded in all of us . . . are the seeds of this 'separate reality', this alternate way of looking at the world, and the current popularity of so-called New Age religions . . . is eloquent testimony of the degree to which the 'law of participation' is still to be reckoned with in Western thought, despite the overt dominance of the rule of non-contradiction and a 'rational' world view" (Littleton 1985:xliv).²⁶

Although in Lévy-Bruhl's understanding this perception of the world—which one may recognize in the early Sāmkhya 'confusion' of cosmology and psychology—belongs to a 'pre-logical' mentality, he also recognizes its validity within its own context. Depending on one's understanding and definition of rationality, one may therefore speak either of a 'rational' logical mentality versus

See however Jonathan Z. Smith's "I am a parrot (red)", Smith 1978: 256-288, for serious doubts on one of Lévy-Bruhl's main examples of the "law of participation".

an 'irrational' pre-logical mentality, or of two different modes of rationality. The popularity of Sāṁkhya concepts and dogmas in Purāṇas and other works—to which reference was made by several persons at the Sāṁkhya-conference in Lausanne—in contrast with the diminishing importance of Sāṁkhya as philosophical system, may be understood with regard to the 'pre-logical' (or 'differently logical') world perception which was present in the system from the beginning, and which was 'irrational', but perhaps also naturally and spontaneously attractive (to people with a similar cultural background of Vedic texts, etc.).

These and similar large problems lurking behind the questions on rationality and irrationality in Sāmkhya can here only be hinted at. Another crucial question to be addressed with regard to Sāmkhya is the influence of fixation of texts, in oral methods (Sūtras) and in writing, on the mode of rationality. Sāmkhya rationality seems to have been most successful in a mainly oral environment with limited doctrinal fixation. And it lagged behind when other schools channelled their thinking more and more in the 'written mode' of rationality. An amount of 'irrationality' was unavoidably present throughout Sāmkhya's history, with some shifts e.g. when Vijñānabhikṣu's established his version of neo-Sāmkhya.

5.5 (Again on 'Rationality', 'irrationality': Implied questions b and c:) To speak of rationality and irrationality in Sāmkhya, that is, to use these two terms with regard to an Indian system of philosophy, is to bring in an unavoidably **comparative** element which could hardly be reflected upon in the present paper. The scheme of three *pramāṇa*s was adopted to make the questions with which the history of Sāmkhya was approached 'operational'. Whether this precarious undertaking has led to any valuable results is to be judged by the reader, but that some 'correctives' are definitely needed was indicated in the preceding section. Further investigations are needed to show whether the analytic scheme of three *pramāṇa*s has nevertheless a potential for general cross-cultural philosphical

Note that Bronkhorst gives as one of the main examples of 'rationality' in the South Asian philosophical tradition one which apparently presupposes written texts (1997a, ms. p. 6; with ref. to Bronkhorst 1997b): "Here Uddyotakara criticizes the Buddhist doctrine of No-Self (anātman). One of the arguments he presents is that the Buddhists, by believing this, go against their own sacred texts. At this point Uddyotakara cites a text which it is not possible to locate in the surviving versions of Buddhists Sūtras. But apparently the cited text was not well known to the Buddhists in Uddyotakara's time either, for he says: 'Don't say that this is not Buddha's word; it occurs in the Sarvābhisamaya Sūtra'."

comparisons, as a way to meet half-way the conceptualizations of Western philosophical historiography, especially also those concerning 'rationality', 'rationalism', and 'irrationality'.²⁸

Only when problems of cross-cultural philosophical-historical conceptualization are sufficiently solved, larger issues can be fruitfully addressed such as a comparison of Western and South Asian rationalisms and their circumstances. To give a suggestive example of a possible direction for such a comparison: While Sāṁkhya rationalism seems to have suffered from a gradual shift to laborious modes of knowledge transmission (through written texts), it can be argued that the Cartesian "declaration of independence" of reason (cf. Halbfass 1988:281) could gain momentum because it could reach, thanks to the printing press, a large, sufficiently educated, reading public. The same printing press controlled by State and Church—Descartes suppressed his *Le Monde* when he heard of the condemnation of Galileo by the Inquisition—prepared the ground for Descartes' success by imposing a homogeneous (religious) traditionality on Europe's intelligentsia with which Descartes' system stood in a dialectical relation.

The social implications of a society's choice for a certain mode of knowledge transmission are to be investigated further while making more intensive use of the South Asian data. Pioneering work has been done by Jack Goody, but he tried to contrast orality and writing while underestimating the importance of precise oral transmission in South Asia. South Asia shows that a text may be transmitted with great precision even if it is not written down. This has been argued convincingly by Indologists such as Staal and Falk (cf. Staal 1986, Falk 1993:284, 324ff). What remains to be done is to think through the social implications of the (precise) transmission of culturally important texts in a purely

According to the 'systematic' characterization of 'rationalism' as a system, school or movement where it is a matter of principle to accord a high value to reason and 'rationality' early Sāmkhya can indeed be regarded as a 'rationalism'. Halbfass thought the term misleading with regard to Sāmkhya (1988:282) presumably because he associates 'rationalism' in his historical approach primarily with the specific manifestations of rationalism in 17th century Europe (e.g. the Cartesian rationalism which not just favored reason as the main source of knowledge, but was also wedded to a specific method of deriving knowledge from reason; Sāmkhya, while emphasizing the importance of reason, was working with an entirely different method in which the empirical played an important role).

oral mode.²⁹ These social implications differ no doubt both from those associated with a more flexible oral transmission, and from those associated with written transmission of knowledge. With a sufficiently flexible system of oral knowledge transmission, the tradition is more easily subordinated and adapted to an evolving present; but this remains in the hands of a limited number of exponents of the tradition (e.g. professional bards, initiated shamans). When knowledge is committed to writing, especially in a very succinct alphabetic system as in ancient Greece, knowledge is 'democratised' (something which went hand in hand with political democratisation according to Goody and Watt 1968), and at the same time its fixation over time is sufficiently precise and 'unflexible' (unless the material bearer of the text deteriorates) to enable precise critical reflection and improvement upon the thoughts of predecessors. The oral system of precise and unflexible knowledge transmission in South Asia did enable precise critical reflection and improvement upon the thoughts of predecessors, but the required investments in this laborious system limited the number of those participating in the transmission and improvement of a tradition considerably. The 'democratic' access to knowledge—which also in Greek polities pertained only to a small number of the population of adults—remained restricted to limited communities of educated Brahmins, Buddhists, Kşatriyas, etc. This 'democratic' access must have increased when South Asian communities switched more and more to written transmisson of knowledge. But the contrast with the oral phase was probably less than in Greece, first because there was already a developed system of precise oral transmission, and, second, because the phonetic writing system was somewhat more elaborate than in in Greece.

Derrida's criticism (1976 and 1978) of the common view that "In speaking one is able to experience (supposedly) an intimate link between sound and sense, an inward and immediate realization of meaning which yields itself up without reserve to perfect, transparant understanding" (Norris 1982:28), and more particularly of "Saussure's attitude to the relative priority of the spoken as opposed to written language" (idem, 26) is generally appropriate. Hence, it can be said that "oral language already belongs to a 'generalized writing', the effects of which are everywhere disguised by the illusory 'metaphysics of presence'" (idem, 29). Nevertheless, the oral mode does restrict and direct the transmission of knowledge and information, and enables one to control it in definite ways, different from the written mode, and this gives each mode its particular social implications (with further differentiations needed for various techniques of oral transmission, and for various alphabets and techniques of written reproduction).

5.6 If we return now to Bronkhorst's main suggestion regarding the reason for the perceptible presence of a tradition of rational inquiry and criticism in South Asia, viz. the presence of Hellenistic Greek in the northwest of the Indian subcontinent, and their questioning of South Asian Buddhists, we see that one factor which emerged as one of considerable importance in our discussion of the history of Sāmkhya philosophy has been left out of consideration. And it may very well be that this is precisely the one major factor which stimulated a development leading to a tradition of rational criticism which we are nowadays able to perceive and appreciate as such. It would not seem very convincing that the Hellenistic Greek, who were not any more living in a democratic system as they did in pre-Alexandrian Athens and other polities, transmitted a particularly open 'philosophical' attitude to the South Asians which the latter would have lacked. The Hellenistic Greek brought something else, something more tangible and probably more challenging: philosophical texts committed to writing. ³⁰

A major difference between Greece and South Asia in the development of philosophical thought appears to be that the Greek committed their philosophical thoughts much earlier to writing (in a simple alphabet). In Greece this process took not place without the serious doubts of at least some.³¹ In South Asia, there was some resistance against it (cf. above, 4.2 and footnotes 11 and 12), but this was least among the Buddhists. Their shift to the written mode of knowledge transmission allowed a construction of more objectified, relatively accessible systems of knowledge. Rationality is than channelled into criticizing and improving these systems. To some extent, probably within more limited circles, this was also possible for philosophical schools which developed a Sūtra-text; but these schools could not for long lag behind in committing their main texts (Sūtras and commentaries) to writing. Within Buddhism, the change in the mode of knowledge transmission changed the mode of argumentation as well. Cf. Richard Gombrich's observation (1996:18) on the Buddha, a few centuries before the first South Asian religious texts were committed to writing: "the Buddha was continually arguing ad hominem and adapting what he said to the language of his interlocutor" (cited in Bronkhorst WITPI n. 51). The attitude of the Buddha briefly

³⁰ See Rapin 1992:115-121, to which Bronkhorst draws attention in WITPI n. 33>?>?, for the description of a Greek papyrus with a philosophical text found in the Hellenistic Aḥ Khanum, at the confluence of the Amu-Darya and Kokcha (present-day Afghanistan).

Cf. Plato's dialogue Phaedrus (274C-275B) on the myth of the Egyptian god Theuth, who invented writing and who recommended it as a 'memory-elixer' to the divine king of Egypt; the latter rejected Theuth's claims and predicted that it would lead to forgetfulness and bring seeming rather than true wisdom; cf. also Plato's remarks in his 'Seventh Letter' and remarks of Proclus and Aristotle on Plato's 'unwritten teachings'. Derrida's eloquent criticism of the priority of spoken over written language in the work of Plato (cf. Derrida 1976:15, 34, 37, 39; above, note 28) should not make us overlook the social implications of writing and orality which could partly justify Plato's preference (without having recourse to a metaphysics of 'presence' and 'meaning' in spoken language).

sketched by Gombrich reminds one of the attitude of Socrates (who was not a great advocate of committing philosophical discourse to writing) and would seem typical and almost unavoidable in an environment in which orality dominates. It is rationality functioning in a strongly literate environment which we now recognize more easily as such (cf. Bronkhorst's example of rationality, discussed in footnote 27 above).

One further step may be suggested to include the other major Asian culture in our considerations, the Chinese. Bronkhorst's challenging thesis is that a tradition of rational inquiry or criticism never came about in China. Differences with both Greece and South Asia seem obvious. Whatever factors Sinologists may find to either accept or reject Bronkhorst's thesis, it would seem that, apart from the particular political circumstances as pointed out in B. Dessein's contribution to this seminar, the specific mode of knowledge transmission which developed in China is of considerable relevance. China developed neither a phonetic script nor a tradition of precise oral transmission of texts (Sūtras and Vedas), but it did develop an ideographic and logographic script at a very early date (14th - 11th century B.C.E., cf. Li 1992:261). This laborious system made the knowledge accessible to specific, limited groups and focused their rationality in a specific way. In the field of linguistics, for instance, the intellectual efforts of countless generations resulted in important works on the analysis and explanation of logographs, on lexicography and on phonology; syntax and morphology were entirely neglected.³² Referring to my more classical understanding of 'rationality' as a general human faculty (rather than Bronkhorst's Popperian understanding of the notion), and deferring to Sinologists for more definite observations, I suggest that it was the logographic script which deflected first of all the (linguistic, but also philosophical) perception of the Chinese in a specific way, and that this has made it difficult to those with a Western or South Asian background to recognize the critical rationality invested in their work and thinking.

Three general concluding remarks on Bronkhorst's approach: First, Professor Bronkhorst is to be praised for his ability to become surprised by the presence of a tradition of philosophical system-building and rational criticism in South Asia, and to

Cf. Malmqvist 1994:2: "The logographic nature of the Chinese script has to a very great extent conditioned traditional Chinese linguistics. The logograph has from earliest times been conceived of as a unit possessing a unique shape, a basic meaning and a particular sound. Traditional Chinese linguistics may therefore be divided into three branches, dealing with the analysis and explanation of logographs, semantic glosses and lexicography, and phonology respectively. The study of morphology and syntax plays an insignificant role in traditional Chinese linguistics. ... the first systematic *Chinese* grammar of the Chinese language did not appear until 1898 ... and ... it represents a fairly successful attempt at applying the categories of Latin grammar to the Chinese language. The lack of interest on the part of traditional Chinese linguists in systematic research into the internal structure of words and the function of words in the sentence is no doubt conditioned by the logographic nature of the script which gives no clue to the internal analysis of the word."

ask the question which Indologists and South Asianists have generally overlooked: "Why is there philosophy in India?"

Second, parallel to the questions asked in my articles, also Bronkhorst's main question, "Why is there philosophy in India?" should be immediately followed by a second question: "Why did it stagnate?" The same applies to philosophy in Greece: Why did Greek philosophy arise, and why did it stagnate *in Greece*?

Third, his attempt to focus on rationality dealing with facts, situations or states of affairs (ontology) and to exclude or play down the importance of rationality dealing with lines of action (ethics)—an attempt no doubt inspired by the importance of the former in present days—is not suitable to the material under discussion, viz., ancient Greek and South Asian (and Chinese) thought, where the latter area is much more important than the former.

6 Conclusion and prospects.

The answers given in 5.1-4 are provisory and intended as inciters of further research, involving, among other things, a renewed philological study of the relevant sources, historical and philosophical works, cross-cultural philosophical and anthropological investigations of rationality, and studies in the sociology of 'knowledge production and transmission' (i.e., studies of the social implications of oral transmission, systems of writing, printing and possibly other methods of knowledge transmission).

To be retained from the preceding is the idea that a change in the mode of knowledge transmission was apparently, and with some temporal delay to let the 'law' of natural selection do its work, correlated with a change in the ballance between the *pramāṇa*s, viz. perception, inference and tradition, the sources of reliable knowledge as accepted in most of the South Asian philosophical schools. The change in mode of knowledge transmission was also correlated with a change in social relations and access to knowledge. When philosophical schools were switching from a purely oral mode of knowledge transmission to the mode of the written, that is, hand-written, text, traditionality was reinforced in Sāmkhya, at the cost of rationality which was its hall mark at earlier times.

If this theory has some acceptability, there are a number of important implications for the history of thought, including rational thought, of South Asian thinkers, and, indeed, of mankind. One implication is that the category of the 'Indian mentality' as explanation for an alleged unalienable traditionality³³ loses

³³ Cf. now also the attacks of Daya Krishna 1991 on popular (formerly scholarly) views regarding South Asian philosophy.

much of its force. There was, at one time, a rather strong rational movement in South Asia. It disappeared not because of the psychological propensities of the people, but because of factors such as the mode of knowledge transmission.

If this theory has some acceptability, there are further implications for the recent past, and even for the future. With some adaptations it can become a testable or falsifiable theory.³⁴ The relation between modes of knowledge transmission has changed considerably with the introduction of the printing press in South Asia; it may be expected that this change correlated somehow with a change in balance between the *pramāṇas* (here we have to go beyond the limited field of a single philosophical school, and take the larger field of philosophical thought and knowledge production into account), and also with a change in social relations. New modes of knowledge transmission (computerization) may be expected to change the balance between the *pramāṇas* again, and to have likewise implications in the field of social relations.

Note added on 5 oktober 2002: The preceding argument should have implications for the transition from pre-colonial knowledge systems to Indian intellectual production in the colonial period. In the colonial period Indian Brahmins and other intellectuals are for the first time widely exploring the possibilities of the printing press in channels of communication (among Hindu intellectuals and from intellectuals to a wider Hindu public) which were so far dominated by hand-written documents and orality. Quickly they started to make use of the new possibilities for the dissemination of the ideal of Indian self-rule (e.g. Lokamanya Tilak and his printed newspaper Kesari). Apart from obvious political factors, the shift to new means of knowledge reproduction must have contributed significantly to a profound reshuffling of relations between intellectuals and other intellectuals, and between intellectuals, the broader public, and centers of political, economic and religious power. On the other hand, to the extent that the social relations of intellectuals among themselves and with others are conditioned by the means of knowledge reproduction, the pattern of relations "on the eve of colonialism" must have been largely similar to the pattern in preceding centuries of Indian intellectual life.

Of course, the number and complexity of factors involved, and the indeterminacy of some factors such as the knowledge and decisions of future individuals (cf. Popper 1961), should prevent us from expecting to find 'exceptionless laws'.

Abbreviations

- AKB = Abhidharma-Kośa-Bhāṣya, ed. P. Pradhan, 2nd ed., Patna 1975.
- SK = Sāṁkhyakārikā. Ed. H.P. Malledevaru, Mysore 1982. Cf. also Wezler & Motegi 1998, App. II-III. Tr. Frauwallner 1992:104-117.
- ŚrBh = Śrāvaka-Bhūmi, Revised Sanskrit Text and Japanese Translation, ed. by the Śrāvakabhūmi Study Group, Tokyo: Institute for Comprehensive Studies of Buddhism, Taisho Univ., 1998.

References

Aklujkar, A.N.

1989a "The number of *pramāṇas* according to Bhartṛ-hari." WZKS 33:151-158.

1989b "Prāmāṇya in the philosophy of the grammarians." in: *Studies in Indology. Prof. Rasik Vihari Joshi Felicitation Volume*. Ed. Avanindra Kumar et al. New Delhi: Shree Publishing House: 15-28.

Aruga, Koki

1991 "Some problems of anumāna in Sāmkhya." *Journal of Indian and Buddhist Studies* 39.2:11-13.

Basham, A.L.

1967 *The Wonder that was India.* Third rev. ed. (First ed. 1954.) London: Sidgwick & Jackson.

Blackburn, Simon

1994 Oxford Dictionary of Philosophy. Oxford: Oxford Univ. Press.

Bronkhorst, Johannes

- 1997a "Indology and Rationality." Paper presented at the International Seminar on Indology: Past, Present and Future. Pune, January 13-16, 1997. [manuscript.]
- 1997b "L'Inde classique et le dialogue des religions." *Asiatische Studien/Études Asiatiques* 50.4.

Buitenen, J.A.B.

1956 "Studies in Sāmkhya (I): an old text reconstituted." *Journal of the American Oriental Society*, 76:153-157.

Cakravarti, P.

1951 *Origin and Development of the Sāmkhya System of Thought.* Calcutta: Metropolitan Printing and Publishing House.

Cox, Collett

1995 Disputed Dharmas: Early Buddhist Theories on Existence. An Annotated Translation of the Section on Factors Dissociated from Thought from Samghabhadra's Nyāyānusāra. (Studia Philologica Buddhica Monograph Series XI.) Tokyo: International Institute for Buddhist Studies.

Derrida, Jacques

- 1976 *Of Grammatology*. (Transl. by Gayatri Chakravorty Spivak.) Baltimore, Md: Johns Hopkins Univ. Press.
- 1978 Writing and Difference. (Transl. by Alan Bass.) London: Routledge & Kegan Paul.

Deshpande, Madhav M.

1992 "Pāṇini in the context of modernity." *Language and Text: Studies in Honour of Ashok R. Kelkar* (ed. R.N. Srivastava et al.):15-27. Delhi: Kalinga Publ.

D'Sa, Francis X.

1980 Śabdaprāmāṇyam in Śabara and Kumārila: Towards a study of the Mīmāmsā experience of language. Vienna: Indological Institute, Univ. of Vienna.

Falk, Harry

1993 Schrift im alten Indien. Ein Forschungsbericht mit Anmerkungen. T_ubingen: Gunter Narr Verlag.

Franco, Eli

1991 "Whatever happened to the Yuktidīpikā." [Review of Larson & Bhattacharya 1987.] WZKS 35:123-137.

Frauwallner, E.

- 1953 *Geschichte der indischen Philosophie. 1. Band. Die Philosophie des Veda und des Epos; der Buddha und der Jina; das Sāmkhya und das klassische Yoga-system.*Salzburg: Otto M_{\bar{\text{r}}}ller Verlag.

 (English translation by V.M. Bedekar, Delhi etc.: Motilal Banarsidass, 1973.)
- 1955 "Candramati und sein Daśapadārthaśāstram." *Studia Indologica, Festschr. W. Kirfel* (Bonner Orientalische Studien): 65-85. Bonn. [= *Kleine Schriften*: 202-222.]
- 1958 "Die Erkenntnislehre des klassischen Sāmkhya-Systems." WZKS 2:84-139. [= *Kleine Schriften*: 223-278]
- 1982 *Kleine Schriften*. Glasenapp-Stiftung Band 22. Ed. by G. Oberhammer and E. Steinkellner. Wiesbaden: Franz Steiner.
- 1992 Nachgelassene Werke II: Philosophische Texte des Hinduismus. Ed. by G. Oberhammer and C.H. Werba. Lsterreichische Akademie der Wissenschaften, Philosophisch-historische Klasse, Sitzungsberichte, 588. Band. Wien: Verlag der Oesterreichischen Akademie der Wissenschaften.

Furley, David

1973 "Rationality among the Greeks and Romans." *Dictionary of the History of Ideas:* Studies of selected pivotal ideas, vol. IV (ed. Ph. P. Wiener):46-51. New York:Charles Scribner's Sons.

Garbe, Richard

- 1888 "Die Theorie der indischen Rationalisten von den Erkenntnismitteln." Berichte der klniglichen saechsischen Gesellschaft der Wissenschaften, Philologisch-historische Klasse:1-30.
- 1894 See Garbe 1917.
- 1917 *Die Sāmkhya-Philosophie: eine Darstellung des indischen Rationalismus.* 2nd rev. ed. (first ed. 1894) Leipzig: H. Haessel.

Gawlick, G.

1992 "Rationalismus." *Historisches Wlrterbuch der Philosophie. Band 8: R-Sc* (ed. J. Ritter and K. Gr_under): 44-47. Darmstadt: Wissenschaftliche Buchgesellschaft.

Gert, Bernard

1995 "Rationality." *Cambridge Dictionary of Philosophy* (ed. Robert Audi): 674-675. Cambridge: Cambridge Univ. Press.

Gombrich, R.F.

1996 *How Buddhism Began: the conditioned genesis of the early teachings.* London etc.: Athlone.

Goody, Jack

- 1968 Literacy in Traditional Societies. Ed. by J. Goody. Cambridge: Cambridge Univ. Press.
- 1986 *The Logic of Writing and the Organization of Society.* Cambridge: Cambridge Univ. Press.
- 1987 The Interface between the Written and the Oral. Cambridge: Cambridge Univ. Press.

Goody, Jack, and Ian Watt

1968 "The consequences of literacy." In: *Literacy in Traditional Societies* (ed. J. Goody): 27-68. Cambridge: Cambridge Univ. Press.

Gosepath, S.

1992 "Rationalit_at, Rationalisierung. III. Analytische Philosophie." *Historisches W_orterbuch der Philosophie. Band 8: R-Sc* (ed. J. Ritter and K. Gr\u00f4\u00fander): 62-66. Darmstadt: Wissenschaftliche Buchgesellschaft.

Halbfass, W.

1988 India and Europe: An Essay in Understanding. Albany: State Univ. of New York Press.

Harzer, Edertraud

1992 "Sāmkhya inference." [Abstract.] ZDMG Supplement, 9: 484.

Hoffmann, Th.S.

1992 "Rationalit_at, Rationalisierung. I." *Historisches Wlrterbuch der Philosophie. Band 8: R-Sc* (ed. J. Ritter and K. Gr_under):52-56. Darmstadt: Wissenschaftliche Buchgesellschaft.

Houben, Jan E.M.

- 1997a "The Sanskrit Tradition." *The Emergence of Semantics in Four Linguistic Traditions: Hebrew, Sanskrit, Greek, Arabic* (by W. van Bekkum, J. Houben, I. Sluiter and K. Versteegh): 59-145. Amsterdam: John Benjamins.
- 1997b "Sūtra and Bhāṣyasūtra in Bhartṛhari's Mahābhāṣya-Dīpikā: on the theory and practice of a scientific and philosophical genre." *India and Beyond: Aspects of Literature, Meaning, Ritual and Thought: Essays in Honour of Frits Staal* (ed. D. van der Meij): 271-305. London: Kegan Paul.
- 1999a "To kill or not to kill the sacrificial animal (*yajña-paśu*)? Arguments and perspectives in Brahminical ethical philosophy." *Violence, Non-violence and the rationalization of violence in South Asian cultural history* (ed. J.E.M. Houben and K.R. van Kooij): 105-183. Leiden: Brill.
- 1999b "Why did rationality thrive, but hardly survive in Kapila's 'system'? On the *pramāṇa*s, rationality and irrationality in Sāṁkhya (Part I)." *Proceedings of the Conference on Sāṁkhya and Yoga, Lausanne, 6-8 November 1998 (Asiatische Studien / Études Asiatiques*), no. 53.3: 491-515.
- 2000 "Language and Thought in the Sanskrit Tradition." Geschichte der Sprachwissenschaften
 History of the Language Sciences Histoire des Sciences du Language (Eds. S. Aroux, K. Koerner, H.-J. Niederehe, K. Versteegh; Berlin: de Gruyter): vol. 1: 146-157.
- 2001 "'Meaning statements' in Pāṇini's grammar: on the purpose and context of the Aṣṭādhyāyī." *Studien zur Indologie und Iranistik*, 22: 23-54.

Krishna, Daya

1991 *Indian philosophy: a counterperspective*. Oxford: Oxford Univ. Press.

Larson, Gerald James

1969 Classical Sāmkhya: An interpretation of its history and meaning. Delhi: Motilal Banarsidass.

Larson, Gerald James, and Ram Shankar Bhattacharya (eds.)

1987 Sāmkhya: A Dualist Tradition in Indian Philosophy. Encyclopedia of Indian Philosophies, vol. IV. Delhi: Motilal Banarsidass.

Leumann, E.

1885 Beziehungen der jaina-Literatur zu andern Literaturkreisen Indiens. (Tiré du vol. II des Travaux de la 6e session du Congr\(des \) international des Orientalistes \(des \) Leiden: Brill.

Lévy-Bruhl, Lucien

- 1910 Les Fonctions mentales dans les sociétés inférieures. Paris: Alcan.
- 1926 *How Natives Think*. Authorized transl. [of Lévy-Bruhl 1910] by L.A. Clare. London: Allen & Unwin.
- 1985 New edition of Lévy-Bruhl 1926. With a new Introduction by C. Scott Littleton. Princeton: Princeton Univ. Press.

Li, Charles N.

1992 "Chinese." *International Encyclopedia of Linguistics* (ed. by William Bright), I:257-263. New York: Oxford Univ. Press.

Littleton, C. Scott

1985 "Lucien Lévy-Bruhl and the Concept of Cognitive Relativity." Introductory essay in Lévy-Bruhl 1985:v-lviii.

Malmqvist, G.

1994 "Chinese Linguistics." *History of Linguistics*, vol. I: *The eastern traditions of linguistics* (ed. by G. Lepschy): 1-24. London: Longman.

M_uller, Max

1899 The Six Systems of Indian Philosophy. Repr. London: Longmans, Green & Co. 1919.

Nenninger, Claudius

1992 Aus gutem Grund: Praśastapādas anumāna-Lehre und die drei Bedingungen des logischen Grundes. Reinbek: Inge Wezler Verlag.

Norris, Christopher

1982 Deconstruction: Theory & Practice. London: Routledge.

Oetke, Claus

1994 Vier Studien zum altindischen Syllogismus. Reinbek: Inge Wezler Verlag.

Popper, Karl R.

- 1961 *The Poverty of Historicism*. Paperback ed. with some corr. London: Routledge & Kegan Paul.
- 1983 The Myth of the Framework. In defence of science and rationality. London: Routledge.
- 1994a *Logik der Forschung*. Zehnte, verbesserte und vermehrte Auflage. Trbingen: J.C.B. Mohr.
- 1994b *Realism and the Aim of Science. From the Postscript to the logic of scientific discovery*, ed. by W.W. Bartley. London: Hutchinson.

Rapin, Claude

1992 La trésorie du palais hellénistique d'Aḥ Khanoum: l'apogée et la chute du royaume grec de Bactriane. (Fouilles d'Aḥ Khanoum, vol. VIII.) Paris: de Boccard.

Renou, Louis

1963 "Sur le genre du sūtra dans la littérature sanskrite." *Journal asiatique* 251:165-216.

Roberts, Julian

1992 The Logic of Reflection: German philosophy in the twentieth century. New Haven: Yale Univ. Press.

Sachau, Edward C.

1888 Alberuni's India, vols. 1-2. London. Repr. of 1914 edition: Delhi: S. Chand & Co., 1964.

Schreiner, P.

1979 "Gewaltlosigkeit und T_otungsverbot im Hinduismus." *Angst und Gewalt: Ihre Prṃsenz und ihre Bewṃltigung in den Religionen* (hrsg. v. H. von Stietencron): 287-308. Dṝsseldorf: Patmos Verlag.

Sharma, J.P.

1968 Republics in Ancient India, c. 1500 B.C. - 500 B.C. Leiden: Brill.

Smith, Jonathan Z.

1978 Map is not territory: Studies in the History of Religions. Leiden: E.J. Brill.

Staal, J.F.

1986 *The Fidelity of Oral Tradition and the Origins of Science*. Amsterdam: North-Holland Publishing Company.

Vetter, T.

1994 "Zwei schwierige Stellen im Mahānidānasutta: zur Qualit_at der Ueberlieferung im Pāli-Kanon." WZKS38:137-160.

Wezler, Albrecht

1983 "A note on [the] concept [of] *adṛṣṭa* as used in the VaiśeṣikasḤtra." *Aruṇa-Bhāratī*, *Prof. A.N. Jani felicitation volume* (ed. by B. Datta et al.): 35-58.Baroda: Oriental Institute.

Wezler, Albrecht, and Shujun Motegi

1998 Yuktidīpikā: The most significant commentary on the Sāmkhyakārikā. Crit. ed. Stuttgart: Franz Steiner.