

LOGIC, DEBATE AND EPISTEMOLOGY IN ANCIENT INDIAN MEDICINE AND PHILOSOPHY — AN INVESTIGATION¹

KARIN PREISENDANZ*

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Part I

Logic and debate are considered to be important characteristics of a philosophical tradition. Concerning the Indian tradition of philosophy, much attention has been paid to these issues as they appear in early classical Āyurveda, specifically the *Carakasamhitā*. Satischandra Vidyabhusana argued that the relevant passages in this earliest work present us with summaries or expositions of the ancient teachings of Ānvīkṣikī, the “investigating science”, logical, dialectical and eristic teachings that soon after became – in a modified and pruned form – the core of Akṣapāda’s *Nyāyasūtra*, whereas Surendranath Dasgupta claimed that logic actually originated in the medical science and was later on codified in the *Nyāyasūtra*. The paper will present and discuss these contrasting positions, place the material of the *Carakasamhitā* in a broader historical context, briefly review the most important scholarship on the issue, and suggest a fresh interpretation of the evidence within the cultural context of early classical Indian medicine.

Key words: *Carakasamhitā*, Debate, Epistemology, Historiography, Indian Logic, Philosophical traditions, Surendranath Dasgupta, Vidyabhusana.

In the introduction to his still unpublished book “From Uddālaka to Kant: A Short Comparative History of World Philosophy”, the philosopher Ben-Ami Scharfstein justifies his view that there are only three great philosophical traditions – the Indian, the Chinese and the European tradition – and treats *inter alia* the

* Institute for South Asian, Tibetan and Buddhist Studies-South Asian Studies, University of Vienna, Spitalgasse 2, Hof 4/2, A-1090 Vienna, Austria, Europe. E-mail: preisendanz@univie.ac.at

question what he considers as “philosophical” in the context of this book. According to him, a tradition can be called philosophical first of all to the extent that the persons associated with it express its contents in the form of basic principles and inferences rationally derived from these principles. Furthermore, a tradition may be called “philosophical” to the extent that its followers justify these contents with rational arguments and defend them vis à vis the followers of other, rival traditions, or attack their positions, again by means of rational arguments. Finally, a tradition is also to be considered philosophical to the extent that its adherents understand and explain in which manner they strive for rational practice, that is, to the extent that they explicate their methods of argumentation and justification.

1.1 The two central characteristics of a philosophical tradition are thus logic and disputation or debate, characteristics of which are usually not found in so-called wisdom traditions; the latter comprise elaborate, but purely religious traditions, mythological traditions or traditions of practical intelligence.²

1.2 As to the classical philosophical traditions of India in general, the two components of logic and debate are closely intertwined from the historical point of view. This is especially obvious in the case of the *Nyāyaśāstra*, the expert body of knowledge concerned with “logic,” and its authoritative foundational work, the *Nyāyasūtra*.³ As is well known, the basic metaphysical tenets of the *Nyāyaśāstra* are closely related to a tradition of philosophy of nature whose various teachings are preserved in some early philosophical tracts found in the Mokṣadharmā section of the *Mahābhārata*. Similar tenets appear as the ontological foundations of early classical Āyurveda and form the main subject of the classical Vaiśeṣika tradition. In the case of Nyāya epistemology and eristics, however, which according to the testimony of the *Nyāyaśāstra* were the initial foci of interest for the thinkers of this tradition, striking and interesting parallels are to be found in the *Carakaśaṃhitā*.

2. The issue of the historical relationship between the epistemological and eristic teachings transmitted in the *Carakaśaṃhitā*, on the one hand, and the epistemology and eristics of classical Nyāya, on the other hand, is the central topic of this paper, with an initial focus on eristics. This focus can be justified by means of the assumption that in the Indian context, where the learned exchange of ideas and opinions as well as disputation in the broadest sense of the word were practised from early on, the theoretical concern with the principles and elements of scholarly debate contributed considerably to the development of epistemology, including

logic. More precisely, the consideration of the demonstration or statement of proof, central to any debate, can safely be assumed to have led to in-depth reflection on the foundations and means of valid cognition and thus to the development of theories of perception and logical theories. Beyond the immediate context of public or semi-public debates, the ancient Indian thinkers and scholars obviously applied the ascertained means of valid cognition in their own methodical reflections on doctrinal issues and their further development. This happened in the context of the rigorous examination of the argumentative and factual coherence and appropriateness (*yukti*) of doctrinal issues, in the process of the “turning around” (*tarka*) of these issues, that is, in the process of reasoning about them, and in the course of examining and corroborating them by means of reasons (*hetu*). In the course of the further development and systematization of Indian philosophy and its individual traditions, and especially in the context of the polemical dialogue with rival traditions, the epistemological foundations became themselves an important topic of reflection and controversial considerations.

2.1 With this brief sketch of the general background, I would now like to turn to the *Carakasamhitā* (CS). The first instalment of this foundational work edited by Gangadhar Kaviraj was published in 1868.⁴ Gangadhar Kaviraj (1798-1885) was a learned Bengali physician and chief reviver of the Āyurvedic tradition in the modern period who wrote about eighty works, original and commentaries, in different areas of Sanskrit learning;⁵ in his *editio princeps* of the *Carakasamhitā*, he supplemented the classical text with his own extensive Sanskrit commentary *Jalpakaḷpataru*.⁶ However, the text was published only step by step, and communication between India and Europe took its time. The first Western scholar who turned his attention to selected aspects of the *Carakasamhitā* relevant to the present topic, the German Indologist Rudolf Roth (1821-1895), thus still had to rely on manuscripts for the pertinent passages. Roth was not only professor of Indology, but from 1856 onwards also director of the library of the University of Tübingen for which he acquired a considerable number of manuscripts from India.⁷ A Devanāgarī-script manuscript of the *Carakasamhitā* was obtained by Roth through the good offices of August Hoernle,⁸ a scholar who was to become an important pioneering authority in the Western study of classical Indian medicine; Roth could furthermore use a Bengali-script manuscript which is still preserved at Trinity College, Cambridge.⁹ He was obviously intrigued by the *Carakasamhitā* because in this work medical knowledge is embedded within a wider cultural, social and philosophical context. Thus, in 1872 he translated a

substantial portion from the beginning of the eighth chapter of the Vimānasthāna (V) of the *Carakasamhitā*,¹⁰ namely, the passages that deal with the preliminaries of choosing the medical career and with the choice of a teacher in this field, and then treat the general requirements and rules for studying and teaching, including the selection of a student by a teacher and the former's ritual initiation into studenthood.¹¹

2.2 In this pedagogical context, the topic of debate or colloquy (*sambhāṣā*) is introduced inasmuch as debate is considered a didactic means to be employed beneficially in medical training and a useful tool in the continuing refinement and improvement of medical knowledge.¹² Peaceful colloquies (*sandhāya sambhāṣā*)¹³ are distinguished from hostile colloquies (*vigṛhya sambhāṣā*),¹⁴ terms and notions clearly related to the concepts of *sandhi* and *vigraha* which are well known from Kauṭilya's *Arthasāstra*¹⁵ and related literature.¹⁶ And indeed, the relevant passage, in its practical tone and refreshingly idiomatic style, suggests that debate was also practised, even in a ruthless manner, to resolve conflicts arising from the competition between rival traditions or schools of physicians, more precisely, to neutralize adherents of other traditions as well as outright quacks, by means of successfully conducted debates on medical topics and thus to counteract professional competition.

2.3 Following almost fifty years after the publication of Roth's paper in a German-language Orientalists' journal, the *Carakasamhitā* prominently appeared on the stage of non-medical scholarly literature in Satis Chandra Vidyabhusana's *History of Indian Logic — Ancient, Mediaeval and Modern Schools*, which was published in 1921 from Calcutta just after the death of the great savant.¹⁷ Vidyabhusana (1870-1920) was a true pioneer in the investigation of the literature and history of Indian logic. He was aware of an amazingly broad range of sources and often was the first modern scholar to point them out; he referred not only to Brahminical philosophical literature, but also to Indian Buddhist philosophical literature, most of which was then only available in Tibetan translation, and to philosophical literature of the Jains. In 1909, Vidyabhusana edited for the first time the oldest preserved Jain work on logic, the *Nyāyāvatāra* by Siddhasena Divākara, who may have been a younger contemporary of Dharmakīrti.¹⁸ The Tibetan text of Dharmakīrti's *Nyāyabindu*, the well-known manual on epistemology and especially logic composed by this important philosopher of the so-called Buddhist epistemological–logical tradition, was also edited by him for the first time

in 1917; he further prepared a bilingual index (Sanskrit – Tibetan) to this work, in order to facilitate and stimulate the investigation of the Indian Buddhist epistemological–logical works preserved only in Tibetan translation.¹⁹ Moreover, Vidyabhusana edited and translated the text of the *Nyāyasūtra* (1913).

In his *History of Indian Logic*, Vidyabhusana collected evidence for the early history of Indian logic, whose very foundation under the name of *ānvīkṣikī* he ascribes, in partial reverence for the tradition, to the sage Medhātithi Gautama.²⁰ In this context, Vidyabhusana refers to various passages of the *Sūtrasthāna* and *Vimānasthāna* of the *Carakasamhitā*, namely, passages that he perceives as summaries or reproductions of what he styles “the principal doctrines of *Ānvīkṣikī*”; only a few technical terms, he says, may have been introduced by the redactor Caraka.²¹ This *Ānvīkṣikī* or “investigating [science]” was – according to Vidyabhusana – later on embodied or assimilated in the *Nyāyaśāstra* by the philosopher Akṣapāda,²² when the science of syllogism or inference, the *Nyāyaśāstra*, had already begun to develop as a special sub-discipline within the *ānvīkṣikī* and obtained a name of its own; this *Nyāyaśāstra* had even been shaped to a certain extent by Akṣapāda himself.²³ This assimilation of the

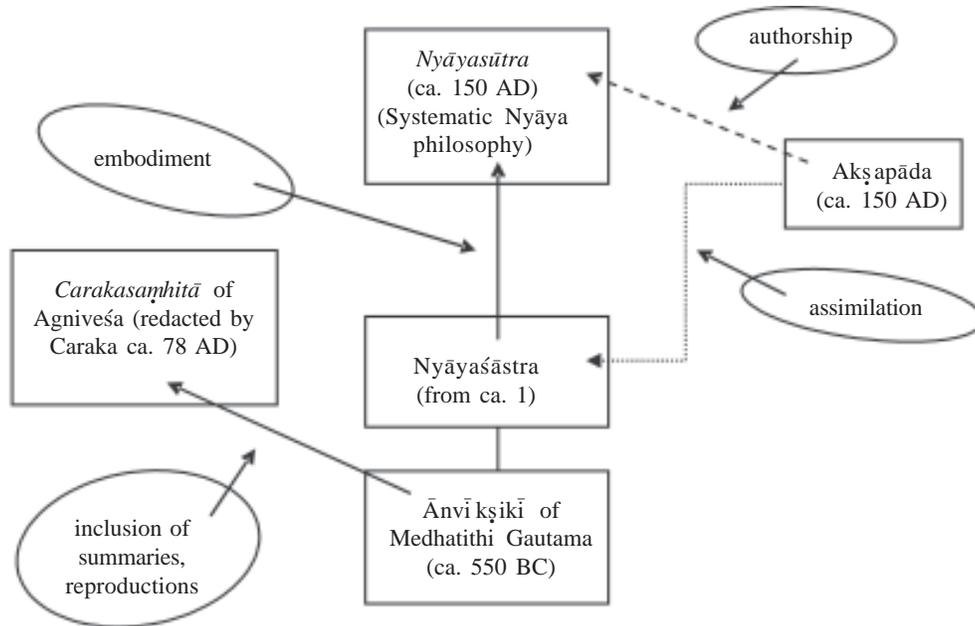


Fig. 1. The development of Nyāya according to Vidyabhusana

Ānvīkṣikī (or rather the *Nyāyaśāstra*) in the *Nyāyaśāstra* supposedly happened less than a century after Caraka had achieved the redaction of Agniveśa's teachings, an event which Vidyabhusana dates towards the end of the first century.²⁴ The described process resulted – in Vidyabhusana's view – in the emergence of the “first regular work on the *Nyāyaśāstra*,”²⁵ i.e., the formation of the systematic philosophical tradition of Nyāya (Fig. 1).

3. Let us now take a look at the passages of the *Carakasamhitā* adduced by Vidyabhusana as the basis for his hypothesis. Vidyabhusana himself structured the material presented in them according to three heads; in his own words and supplied with Sanskrit key-words, they are

- 3.1 the aggregate of resources for the accomplishment of an action (*kāryābhi-nirvṛtti*),
- 3.2 the standard of examination (*parīkṣā*), and
- 3.3 the method of debate (*sambhāṣā* or *vāda-vidhi*).²⁶

Of these, the first topic²⁷ is not considered to have been part of Medhātithi's Ānvīkṣikī by Vidyabhusana; thus, only the second and third topics are of immediate relevance to the present issue. Because in Vidyabhusana's opinion the method of debate was the principal topic of Ānvīkṣikī,²⁸ I would like to turn to it first.

3.3.1 Vidyabhusana first summarizes in a close paraphrase the section on the purpose, merit and characteristics of a scholarly colloquy (*sambhāṣā*). This section involves the typological classification of colloquies already referred to above (cf. p. 3) and of their components in the broadest sense of the word, namely, the two participants and the attending assembly (*pariṣad*); it also offers various practical advice to the disputants, inclusive of the advance manipulation of the assembly (vide Table 1).²⁹

Table 1: The Section on Colloquies (*sambhāṣā*) in *Carakasamhitā* Vimānasthāna (8.15-26)

diverse usefulness of colloquies	15
two types of colloquies; three types of opponents (<i>para</i>); ³⁰ two types of assemblies (<i>pariṣad</i>)	16-21
admonitory verses on hostile colloquies	22-23
advance manipulation of the assembly and the setting of limits for the disputation (<i>vāda</i>)	24-26

Vidyabhusana then continues with an enumerative exposition of the altogether forty-four relevant points or topics (*pada*) to be understood for the purpose of knowing the way of disputation (*vāda*)^{31, 32}. These relevant topics, presented by Vidyabhusana under the slightly misleading term “categories,” are listed immediately after the section on colloquies briefly analyzed by me above.³³ Subsequently, they are characterized, further classified and exemplified, often with reference to medical topics and issues belonging to the realm of philosophy of nature.³⁴

3.3.2 This section on disputation (*vāda*) appears to be composed in a strikingly different, austere style of language and with a more systematic mind when compared to the preceding lively section on colloquies (*sambhāṣa*). From a stylistic point of view, this latter section may even be perceived as concluded with text (segment 67), which occurs in a similar style immediately after the more rigorous exposition of the forty-four relevant topics.³⁵ Segment 67 is harmoniously followed by an extensive excursus – actually taking up the sizeable rest of the chapter – which is basically written in the same style and occasioned by the concluding reference to the significance of debate for successful medical practice. This excursus may be entitled “How to act successfully” and starts out from the presentation of a scientific methodology involving ten topical complexes (*prakaraṇa*) that lead to success in acting in general and should be known by physicians before they embark on their task, so that they can accomplish it without overly great effort.³⁶ The general methodology comprising these ten topical complexes as something to be examined (*parīkṣya*) is then once more recommended to physicians³⁷ and its details expounded in the form of answers to nine questions – posed by a physician or lay-person to a physician – regarding this methodology when applied by a physician with a view to the five-fold therapy (*pañcakarma*) (vide Table 2).³⁸

Table 2: The Section on Disputation (*vāda*) in CS Vi 8 (27-66) and the Continuation of the Chapter

enumeration of forty-four topics (<i>pada</i> -s)	27
their characterization, sub-classification and exemplification	28-65
conclusion concerning the forty-four <i>pada</i> -s	66
concluding remarks on disputation/debate as such (<i>vāda</i>)	67
“How to act successfully”(ten topical complexes [<i>prakaraṇa</i>] / ten items to be examined [<i>parīkṣyā</i>])	68-151

The obviously composite nature of the entire passage on debate is also reflected in a corresponding change in terminology for the main issue, namely, the

shift from *sambhāṣā* (“colloquy”) to *vāda*, literally: “talk,” but also referring to “discussion” or “disputation.”³⁹ This shift is prepared in the closing text segments of what I will henceforth briefly call the “*sambhāṣā* section,” inasmuch as in these segments the word *vāda* is already introduced.⁴⁰ It may have been used here in its general, non-terminological sense and thus be part of the original wording of these segments; alternatively, the word may have been intended as a technical term and therefore be the trace of an effort by a redactor to smoothen the shift. The diverging term *vāda* also appears in the concluding text segment 67 already referred to above (p. 6) which comes after what I will now call the “*vāda* section.” In the summarizing verses of the chapter, the terminological discrepancy relating to the two sections is properly reflected.⁴¹

3.3.3 After this overview of the relevant passage in the context of *CS Vi 8*, I would like to take a look at the *vāda* section, in order to clarify and evaluate Vidyabhusana’s reasoning regarding his reconstruction of the development of Indian logic and the Nyāya tradition. Obviously, the list of forty-four *pada*-s⁴² shows a considerable closeness in terminology – also observable in some of the subsequent characterizations of individual items – to the sixteen dialectical–eristic items, listed in the *Nyāyasūtra (NS)* and called “relevant matters” (*padārtha*) in classical

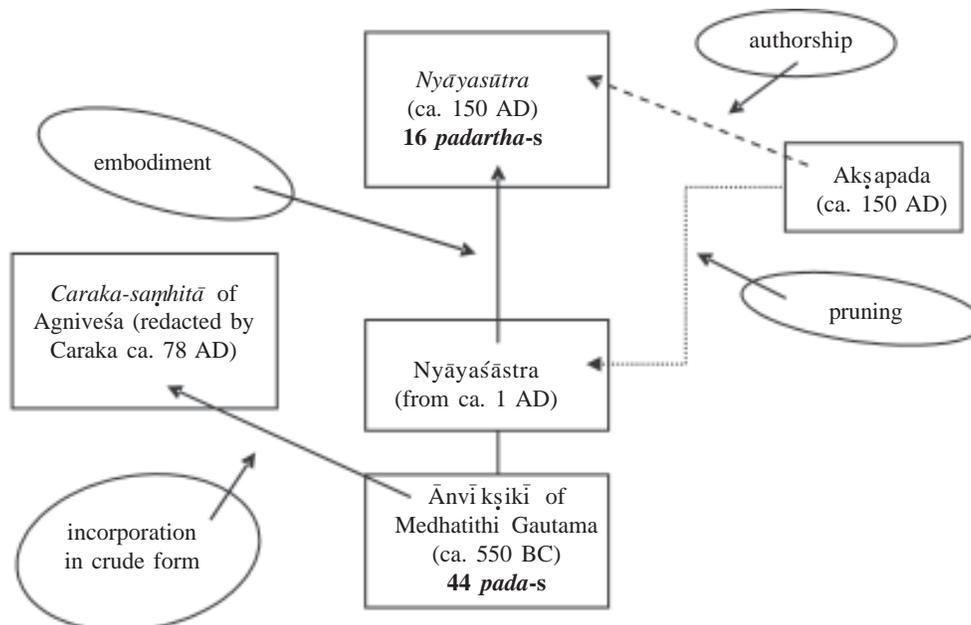


Fig. 2. The History of the List of Forty-four *pada*-s, according to Vidyabhusana

Nyāya⁴³ even though, as has been stressed by Halbfass,⁴⁴ the word *padārtha* is not yet used in the *Nyāyasūtra*. Together with their characterizations, these items form the programmatic and methodological backbone of the Nyāya philosophical tradition as presented in the core stratum of the *Nyāyasūtra* (Fig. 2). Thus, Vidyabhusana felt justified to claim the list of *pada*-s in the *Carakasamhitā* to be originally an essential part of the *Ānvīkṣikī* ascribed by him to Medhātithi Gautama and considered to have evolved into the *Nyāyaśāstra*, which is the foundation of the *Nyāyasūtra*. In a “crude form,” as he phrases it, this ancient list is preserved in the *Carakasamhitā*; however, it also found its way into the *Nyāyasūtra* after having been “pruned” by Akṣapāda, resulting in the classical list of sixteen *padārtha*-s.⁴⁵ According to Vidyabhusana, this process of pruning of the ancient topics and their “assimilation” in the *Nyāyasūtra* by Akṣapāda went together with Akṣapāda’s systematization of the concept of means of valid cognition and his introduction of the scheme of the five parts of a syllogism, as well as of the examination of other, rival positions.⁴⁶

A comparative and correlative historical exposition of all the topics involved was not presented by Vidyabhusana. Due to the complexity of the issues, the historical uncertainties and the many interpretative problems, such an exposition cannot be meaningfully attempted in the context of this paper; only a few exemplary cases will be briefly alluded to or presented below. For my present purpose a rough typological–analytical survey of Caraka’s crucial list of *pada*-s very well suffices and may also throw some new light on it, even without consideration of the characterizations or descriptions and exemplifications provided for each item in the text segments subsequent to the list.⁴⁷

3.3.4 In an overall tentatively systematic manner, the list presents, next to some ontological terms, a number of more or less technical terms relating to eristic debate, i.e., disputation (*vāda*), as well as to rhetorics and epistemology. Disputation itself is the very first item, followed by six ontological terms known from classical Vaiśeṣika and a group of terms loosely connected with the structure of argumentation and important types of statements in a disputation (Table 3).

Table 3: The Forty-four Topics (CS Vi 8.27) I

1	disputation (<i>vāda</i>)
2-7	basic ontological terms/categories (<i>dravya</i> , <i>guṇa</i> , <i>karman</i> , <i>sāmānya</i> , <i>viśeṣa</i> , <i>samavāya</i>)
8-16	terms relating to the structure of argumentation and types of statements in a disputation

The first six terms of the latter group of terms, namely, *pratijñā*, *sthāpanā*, *pratiṣṭhāpanā*, *hetu*, *upanaya* and *nigamana*, concern the most essential steps to be taken by a speaker to communicate his theses convincingly; only one of the listed steps, the *pratiṣṭhāpanā*, may be a step taken by his opponent. The demonstration or statement of proof (*hetu*) is central among these steps (Table 4).

Table 4: Terms Relating to the Structure of Argumentation and Types of Statements in a Disputation I

8	thesis (<i>pratijñā</i>) (1)
9	setting up one's thesis (<i>sthāpanā</i>) (2)
10	setting up the counter-thesis (<i>pratiṣṭhāpanā</i>) (3)
11	demonstrations / statements of proof (<i>hetu</i>) (4)
12	application (<i>upanaya</i>) (5)
13	conclusion (<i>nigamana</i>) (6)

Let me briefly add here that in the editions of the *Carakasamhitā* following Gangadhar Kaviraj's edition with his own commentary *Jalpakaḥpataru* – which include Jadavji Trikamji's edition that has attained the status of the standard text of the *Carakasamhitā* in the modern period⁴⁸ –, another item, *drṣṭānta*, occurs between *hetu* and *upanaya*. However, according to the evidence of the manuscripts available to the projects on the critical edition of the *Vimānasthāna*,⁴⁹ *drṣṭānta* has its “regular place” before the last term of the following sub-group, namely, *siddhānta*. This group of three terms also refers to statements – or the content of statements – that must have had their structurally determined place in a disputation.⁵⁰

Table 5: Terms Relating to the Structure of Argumentation and Types of Statements in a Disputation II

14	replies (<i>uttara</i>) (7)
15	generally acknowledged matters (<i>drṣṭānta</i>) (8)
16	fixed positions / presuppositions (<i>siddhānta</i>) (9)

3.3.5.1 Subsequently, the list of *pada*-s switches to epistemological terms relevant to disputation, terms denoting cognitive–psychological concepts obviously of relevance in a disputation, and terms somehow relating to the truth of statements uttered in a disputation (Table 6).

Table 6: The Forty-four Topics (CS Vi 8.27) II

17-21	epistemological terms
22-26	terms denoting cognitive–psychological concepts
27-32	terms relating to the truth of statements in a disputation

The first group comprises five items which elsewhere in early classical philosophical sources can be found subsumed under the well-known concept of means of valid cognition or means of knowledge (*pramāṇa*).⁵¹ In the following table (cf. Table 7) I have adopted as original the order of these items in the list that is found in all mss. of the Kashmiri recension of the *Carakasamhitā* (K) as well as almost all mss. belonging to the Bengali branch of the Eastern recension of the text (Q [-Q³¹])⁵²; the remaining mss. show the order adopted in Trikamji's standard edition.⁵³ The order of the subsequent text segments where the individual items are characterized or described and exemplified (Vi 8.38-42) corresponds to the original order established here, except in the case of the minor sub-group of mss. Q³¹ and ms. Ca^b.

Table 7: Epistemological Terms

17	verbal testimony (<i>śabda</i>) (1)
18	sense perception (<i>pratyakṣa</i>) (2)
19	comparison/analogy (<i>aupamya</i>) (3)
20	oral tradition (<i>aitihya</i>) (4)
21	inference (<i>anumāna</i>) (5)

The very appearance of these items in the present context suggests that the thinkers we encounter here were aware of the fact that speakers take recourse to different types of knowledge sources in the course of their argumentation.

The epistemological group is followed by a series of terms referring to a range of cognitive–psychological concepts or mental states of participants in a disputation. They may have had to be verbalized and clarified in the context of a disputation (Table 8).

Table 8: Terms Denoting Cognitive–Psychological Concepts

22	doubt (<i>saṃśaya</i>) (1)
23	motivation (<i>prayojana</i>) (2)
24	faltering (?) (<i>savyabhicāra</i>) (3)
25	inquisitiveness (<i>jijñāsā</i>) (4)
26	determination (<i>vyavasāya</i>) (5)

3.3.5.2 Now, according to the *Nyāyabhāṣya* (*NBh*) of Vātsyāyana, some scholars concerned with methodical thinking (*naiyāyika-s*) considered five additional elements of argumentation (*avayava*), next to the five elements thesis, etc., assumed in classical Nyāya; these additional elements probably preceded the latter in the resulting scheme of altogether ten elements.⁵⁴ Three or even four of the additional five elements are obviously related to *pada-s* in the present group by direct terminological correspondence and by possible factual identity in spite of terminological differences (Table 9).

Table 9: Terminological correspondence in *NBh* and *CS*

Ten Elements of an Argumentation I (<i>NBh</i>)	Corresponding Topics in <i>CS</i> Vi 8.27
inquisitiveness (<i>jijñāsā</i>) (1)	inquisitiveness (<i>jijñāsā</i>) (4) [25]
doubt (<i>saṃśaya</i>) (2)	doubt (<i>jijñāsā</i>) (1) [22]
possible attainment [of the aim] (<i>śākya-prāpti</i>) (3)	
motivation (<i>prayojana</i>) (4)	motivation (<i>prayojana</i>) (2) [23]
dispersal of doubt (<i>saṃśayavyudāsa</i>) (5)	determination (<i>vyavasāya</i>) (5) [26]

In the dialectical tradition of Sāṃkhya as presented in the *Yuktidīpikā* (*YD*) we also encounter these additional *avayava-s*.⁵⁵ Here they are not simply joined to the well-known five elements, but jointly considered as a *vyākhyāṅga* (“limb” [i.e., expedient] “of explanation”), preceding the fivefold *pratipādanāṅga* or *parapratyāyanāṅga* (“limb of making [the opponent] understand [one’s argument]”). The expression *vyākhyāṅga* clearly points at a situation of communication with others and thus verbalization. It should not be overlooked, however, that in the context of the *pada* list of the *Carakasamhitā* the group of five terms relating to cognitive–psychological concepts is separated from the relevant group of terms directly relating to the structure of argumentation (nos. 8-13) (cf. Table 4 above), namely, by the group of terms relating to types of statements made at specific stages of a disputation (nos. 14-16) (cf. Table 5 above) and the group of epistemological terms (nos. 17-21) (cf. Table 7 above). Let me add that the present group seems to imply a temporal sequence of its members as regards their relevance and position in the course of the entire process of argumentation right from its inception due to inquisitiveness; however, a sequence extending to and including the five elements that immediately follow in the tenfold scheme reported in the *Nyāyabhāṣya* and the *Yuktidīpikā* can hardly be construed.⁵⁶

3.3.5.3 A similarly diffuse picture, partially matching, partially not matching, results with regard to the group of terms relating to the structure of argumentation in the *pada* list on the one hand (nos. 8-13) (cf. Table 4 above), and the remaining five elements of argumentation in the larger scheme of ten elements according to the *naiyāyika*-s and the fivefold “limb of making the opponent understand one’s argument” (*pratipādanāṅga*) according to the Sāṃkhya scheme presented in the *Yuktidīpikā* on the other hand; the five elements of argumentation according to the *Nyāyasūtra*⁵⁷ clearly correspond to the five remaining elements of the *naiyāyika*-s, and there is a close similarity to the relevant Sāṃkhya set of terms.⁵⁸ However, from the point of view of the tenfold as well as the fivefold scheme the element *udāharaṇa* is missing in the pertinent *pada* group (Table 10).

Table 10: Elements of Argumentation

Nyāya (<i>NS</i>) (5)	<i>naiyāyika</i> -s (<i>NBh</i>) (10) ⁵⁹	Sāṃkhya (5) ⁶⁰ / (10)	<i>pada</i> -s (<i>CS</i> Vi 8.27) (nos. 8-13)
<i>pratijñā</i> (1)	<i>pratijñā</i> (6)	<i>pratijñā</i> (1) / (6)	<i>pratijñā</i> (1) [8] <i>sthāpanā</i> (2) [9] <i>pratiṣṭhāpanā</i> (3) [10] <i>hetu</i> (4) [11]
<i>hetu</i> (2)	<i>hetu</i> (7)	<i>hetu</i> (2) / (7)	
<i>udāharaṇa</i> (3)	<i>udāharaṇa</i> (8)	<i>dr̥ṣṭānta</i> (3) / (8)	
<i>upanaya</i> (4)	<i>upanaya</i> (9)	<i>upasaṃhāra</i> (4) / (9)	<i>upanaya</i> (5) [12]
<i>nigamana</i> (5)	<i>nigamana</i> (10)	<i>nigamana</i> (5) / (10)	<i>nigamana</i> (6) [13]

The element *udāharaṇa* may have its factual correspondence in the already mentioned *pada* “generally acknowledged matters” (*dr̥ṣṭānta*) which figures in the subsequent group of the three *pada*-s “replies” (*uttara*), *dr̥ṣṭānta* and “fixed positions” (*siddhānta*) (nos. 14-16) (cf. Table 5 above) which I consider to be a sub-group of the larger group of terms relating to the structure of argumentation and characterized as referring to types of essential statements that have a structurally determined place in a disputation. Such a rough correspondence in meaning, even though not necessarily in function and structural position within a disputation, is suggested by the fact that the subsequent characterization of *dr̥ṣṭānta* in the *Carakasamhitā* (Vi 8.34) is very similar to the characterization of the *padārtha dr̥ṣṭānta* in the *Nyāyasūtra*:

“What one calls a generally acknowledged matter is something with regard to which the understanding of simple-minded persons and *savants* is the same [and] which describes what is to be described.”⁶¹

NS 1.1.25 reads:

“A generally acknowledged matter is something with regard to which the understanding of normal people and those who thoroughly examine is the same.”⁶²

In the order of the sixteen items listed in NS 1.1.1⁶³ and later called *padārtha* in the Nyaya tradition, *dr̥ṣṭānta* appears rather early among the dialectical terms (no. 5); together with doubt (*saṃśaya*) (no. 3), motivation (*prayojana*) (no. 4) and fixed positions or presuppositions (*siddhānta*) (no. 6) it forms the group immediately preceding the term denoting the five elements of argumentation (*avayava*) (no. 7). According to the respective section title of the division of the *Nyāyasūtra* into sections technically called *prakaraṇa*-s, a division which is of uncertain date but certainly postdates Vātsyāyana, the three items *saṃśaya*, *prayojana* and *dr̥ṣṭānta* are called “limbs preceding methodical thinking / coherent logical argumentation” (*nyāyapūrvāṅga*); the title of the section treating the five elements of argumentation refers to these elements collectively as the “characterization of methodical thinking / coherent logical argumentation” (*nyāyalakṣaṇa*). The term *nyāyāṅga* appears already in the *Nyāyavārttika* (NV): Uddyotakara affirms in a discussion with other dialecticians that the purpose (*prayojana*) is indeed a “limb of methodical thinking” and thus also of relevance to the right procedure of thorough examination (*parīkṣāvidhi*): no consideration that lacks a purpose can be a “limb of methodical thinking,” and the purpose is even a major limb of the right procedure of thorough examination because it is its root.⁶⁴ Fixed positions or presuppositions (*siddhānta*), for their part, are the basis of methodical thinking / coherent logical argumentation (*nyāyāśraya*) according to the *prakaraṇa* title.

The position of generally acknowledged matters (*dr̥ṣṭānta*) in the structure of the argumentation – and maybe also their function – is thus a different one according to the *Nyāyasūtra* (and presumably the *naiyāyika*-s) and the *vāda* section of the *Carakasamhitā*. In the *Nyāyasūtra*, the concept of *dr̥ṣṭānta* is explicitly integrated into the five elements of argumentation inasmuch as exemplification (*udāharaṇa*) is said to be a generally acknowledged matter (*dr̥ṣṭānta*) that is characterized by the existence of the relevant property of the thing to be proved (*sādhya*) (i.e., by the existence of its property that is to be proved) because of its similarity with the thing to be proved (i.e., because it undoubtedly possesses also further properties that are similar to / common with properties of the thing to be proved, beyond the property adduced in the proof).⁶⁵

Exemplification also figures in the characterization of the statement of proof or demonstration, the second element of an argumentation according to the *Nyāyasūtra*.⁶⁶ In the Sāṃkhya scheme, however, the term *dr̥ṣṭānta* is used by itself to designate the exemplification in an argumentation (cf. Table 10 above).⁶⁷

3.3.5.4 Furthermore, also the other three members of the group of four items preceding the elements of argumentation in the enumeration of the *Nyāyasūtra*

Table 11: List of *padārtha*-s (*Nyāyasūtra* 1.1.1)

Items 1-7	
means of valid cognition (<i>pramāṇa</i>) (1) <i>prameya</i> ([soteriologically relevant] objects of valid cognition) (2) doubt (<i>saṃśaya</i>) (3)	limbs preceding methodical thinking (<i>nyāyapūrvāṅga</i> -s)
motivation (<i>prayojana</i>) (4) generally acknowledged matters (<i>dr̥ṣṭānta</i>) (5) fixed positions / presuppositions (<i>siddhānta</i>) (6)	basis of methodical thinking (<i>nyāyāśraya</i>) characterization of methodical thinking (<i>nyāyalakṣaṇa</i>)
elements of argumentation (<i>avayava</i>) (7)	

(nos. 3, 4 and 6) (cf. Table 11) have their terminological correspondences in the *pada* list of the *Carakasamhitā*. *Siddhānta* (no. 6) occurs right after *dr̥ṣṭānta* in the former enumeration, like in the *pada* list; however, in the latter the pair appears in this sequence in the second sub-group among the altogether nine terms relating to the structure of argumentation and types of statements in a disputation (cf. Table 5 above), after the first sub-group of such terms that comprises the sequential elements of an argumentation starting with the thesis (cf. Table 4 above). Thus, the occurrence of the term *siddhānta* raises similar issues to be discussed as does the term *dr̥ṣṭānta*, concerning its relative position and precise function in a disputation. And like in the case of the term *dr̥ṣṭānta*, the respective meanings of the term are nevertheless related; in this case, we even find an identical subdivision into four types of *siddhānta* in the *Nyāyasūtra*⁶⁸ and the text segment explaining this topic in the *Carakasamhitā*.⁶⁹

Saṃśaya and *prayojana* in the list of *NS* 1.1.1 (nos. 3 and 4), the first two “limbs preceding methodical thinking / coherent logical argumentation” (cf. Table 11), on the other hand, correlate, in this order, with the first two of the five cognitive–psychological concepts or mental states of participants in a disputation

(nos. 22 and 23) from the present discussion originated (cf. Table 8 above). And – just a reminder – they also appear, although separated by one item, among the first five items of the ten-membered scheme of elements of argumentation of the *naiyāyika*-s (nos. 2 and 4, cf. Table 9 above) and thus among the fivefold “limb of explanation” (*vyākhyāṅga*) of certain Sāṃkhya dialecticians (cf. p. 12 above). Among these five items, we find, as the final item (no. 5), the dispersal of doubt (*saṃśayavyudāsa*); would it therefore be legitimate to suppose that its equivalent in the group of five mental states of participants in a disputation according to the *Carakasamhitā* is the final item (no. 5), namely, “determination” (*vyavasāya*) (no. 26 in the *pada* list) (cf. again Table 8 above)? And what about the possibly corresponding Nyāya *padārtha*? Could it be the item “decision” (*nirṇaya*), although in the list of *NS* 1.1.1 this point appears much later in the order of items, as no. 9 after the elements of argumentation (no. 7) and reasoning (*tarka*) as an important method of reflection (no. 8)? (Table 12).

Table 12: List of *padārtha*-s (*Nyāyasūtra* 1.1.1)

Items 1-9	
means of valid cognition (<i>pramāṇa</i>) (1) [soteriologically relevant] objects of valid cognition (<i>prameya</i>) (2) doubt (<i>saṃśaya</i>) (3)	limbs preceding methodical thinking (<i>nyāyapūrvāṅga</i> -s)
motivation (<i>prayojana</i>) (4) generally acknowledged matters (<i>dr̥ṣṭānta</i>) (5) fixed positions / presuppositions (<i>siddhānta</i>) (6)	basis of methodical thinking (<i>nyāyāśraya</i>) characterization of methodical thinking (<i>nyāyalakṣaṇa</i>)
elements of argumentation (<i>avayava</i>) (7)	
reasoning (<i>tarka</i>) (8) decision (<i>nirṇaya</i>) (9)	

3.3.5.5 From a consideration of the group of five cognitive–psychological concepts or mental states of participants in a disputation in the *pada* list of the *Carakasamhitā* (Table 8) we have thus moved on to the first five elements of argumentation according to some *naiyāyika*-s or the fivefold “limb of explanation” of the Sāṃkhyas (Table 9), and further to the remaining five elements of argumentation in the larger scheme of ten elements according to these *naiyāyika*-s, the fivefold “limb of making the opponent understand one’s position” according

to certain Sāṃkhya dialecticians, the five-membered argumentational scheme of the *Nyāyasūtra* and back to the first sub-group of terms relating to the structure of argumentation in the *pada* list of the *vāda* section of the *Carakasamhitā* (Table 10). From there we revisited the second sub-group of these terms, which may refer to types of essential statements in a disputation (cf. Table 5 above), and from there proceeded to the group of dialectical items immediately preceding the group of five elements of argumentation in the *Nyāyasūtra* (Table 11) which led us back to the five cognitive–psychological concepts or mental states of participants in a disputation according to the *Carakasamhitā* (cf. again Table 8), from which we returned to the list of dialectical items in the *Nyāyasūtra*, this time to an item following upon the group of five elements of argumentation (Table 12). And, as initially stressed, this is not at all an exhaustive treatment because the individual characterizations and exemplifications in *CS Vi 28-65* were hardly touched upon and further sources remained largely untapped. However, before we may get lost in this maze of probable and possible relationships, correspondences, affinities and transpositions of items in the two major sources for our knowledge of early Indian dialectics focussed upon here, I want to take you back to the *pada* list of the *vāda* section in the *Carakasamhitā*, refraining from further extensive comments on the remaining items and their possible interrelatedness with the Nyāya *padārtha*-s.

3.3.6 What seems to provide coherence to the difficult-to-grasp terms of the next group in the list of *pada*-s is the fact that they somehow concern the verity of statements uttered in a disputation and of their contents. They are *arthaprāpti*, the obtainment of the matter from another or some other facts, and *sam-bha-va*, the compatibility, appropriateness or conformity of a thing, or its possibility;⁷⁰ in both cases a certain degree of truth of the matter under discussion may be reasonably assumed. *Anuyojya* is something that may be critically questioned, *ananuyojya* its negative counterpart. The perceived degree of verity of statements and their contents is reflected in possible reactions to them; thus, according to the criterion of authorial association suggested by me for this group, the next items, critical questioning and counter-questioning (*anuyoga, pratyayanuyoga*), would follow cohesively (Table 13).

3.3.7 From here the list proceeds to rhetorics, again not without coherence, which is provided by the general connection of the last four items of the previous group to this sub-field or side-field of dialectics and eristics. The first two *pada*-s

Table 13: Terms Concerning the Verity of Statements and their Contents

27	obtainment of the matter (<i>arīhaprāpti</i>) (1)
28	compatibility/possibility (<i>sambhava</i>) (2)
29	something that is open to critical questioning (<i>anuyojya</i>) (3)
30	something that is not open to critical questioning (<i>ananuyojya</i>) (4)
31	critical questioning (<i>anuyoga</i>) (5)
32	critical counter-questioning (<i>pratyanuyoga</i>) (6)

concerning rhetorics are the items called “faults of speech” (*vākyadoṣa*) and “excellence of speech” (*vākya-praśaṃsā*), to which one can add the next item, namely distortion (*chala*), which relates to the clever twisting and misrepresentation of one’s opponent’s statements (Table 14).

Table 14: The Forty-four Topics (CS Vi 8.27) III – Rhetorical Terms

33	faults of speech (<i>vākyadoṣa</i>) (1)
34	excellence of speech (<i>vākya-praśaṃsā</i>) (2)
35	distortion (<i>chala</i>) (3)

A larger group of eight further terms centres around the issue of mistakes one may commit in the course of a disputation or charges one may become exposed to and the subsequent manoeuvres as reactions to them. The list is appropriately concluded with *nigrahasthāna*, a term that refers to situations in which one of the participants in the disputation can be stopped from further argumentation⁷¹ and which thus amount to his final defeat (Table 15).

Table 15: The Forty-four Topics (CS Vi 8.27) IV Terms Relating to Mistakes in a Disputation and Situations Decisive for Final Defeat

36	non-demonstrations / non-proofs (<i>ahetu</i>) (1)
37	[statements] for which the appropriate time has passed / been transgressed (<i>atītakāla</i>) (2)
38	censure (<i>upāmbha</i>) (3)
39	avoidance / shunning [censure] (<i>parihāra</i>) (4)
40	abandoning one’s thesis (<i>pratijñāhāni</i>) (5)
42	acknowledgement/recognition (<i>abhyanujñā</i>) (6)
42	different/further demonstrations/proofs (<i>hetvantara</i>) (7)
43	different/further matters (<i>arthāntara</i>) (8)
44	points of defeat (<i>nigrahasthāna</i>)

3.3.8 The above brief analytical survey should have made apparent the interface between debate and early philosophical thinking, more precisely, between the

serious inquiry into the principles of debate, on the one hand, and the development of epistemology, notably logic, on the other hand. As indicated above, another “pillar” of philosophy, namely, ontology – not considered to be a characteristic of philosophy by Scharfstein – also has its place in the list of topics relevant to disputation. However, even though ontological basics in the form of six concrete ontological terms appear very early in the *pada* list (nos. 2-7, cf. Table 3 above), they are probably assigned to this prominent position because of their methodological priority within debate,⁷² not because of their priority as regards the traditional and principal interests of the scholars who systematized and theorized the institution and practice of debate.⁷³ Therefore, this aspect will be passed over in the present context, for the sake of emphasis on the first “pillar” of philosophy, namely, epistemology which includes logic as a characteristic of philosophy.

Reflection on the criteria of a sound demonstration or statement of proof (*hetu*) must have first occurred in connection with this essential step in the formulation of one’s own reasoning vis à vis an opponent in a disputation (see Table 4 above). Similar considerations must have taken place in connection with the identification of flawed argumentations: two of the terms concerning mistakes one may commit in a disputation (cf. Table 15 above) explicitly address the demonstration, statement of proof or reason, namely, the term “non-demonstration/non-proof” (*ahetu*) (no. 1; no. 36 in the *pada* list). In the subsequent explanation of this topic, it is divided into three types,⁷⁴ and the “different/further demonstration/proof” (*hetvantara*) (no. 7; no. 42 in the *pada* list), that is, a modified or distorted or, possibly, an additional or accessory proof⁷⁵ which may have been impermissibly adduced on top of the proof already stated but not yet substantiated.⁷⁶ These are two contexts from which the conceptualization of a *logical* reason (*hetu*) and its counterpart, the fallacious reason (*hetvābhāsa*),⁷⁷ could develop. Another context is naturally that of inference (*anumāna*), one of the five sources of knowledge enumerated in the *pada* list (no. 5; no. 21 in the list) (cf. Table 7 above). Regarding this larger and primarily epistemological context, as opposed to the dialectical–eristic context of theoretical reflections on the proof provided in debate, the *Caraka-saṃhitā* offers additional evidence of great interest, some of which was already indicated by Vidyabhusana under his second heading, “*parīkṣā* – the standard of examination,” formulated by him to characterize another key doctrine of Medhātithi Gautama included by Caraka in Agniveśa’s compendium. I will thus turn to this issue now.

3.2.1 To convey the relevant doctrine, Vidyabhusana summarizes in a very condensed manner a few text segments of the eleventh chapter of Caraka's *Sūtrasthāna*. Everything in this world is classified there as twofold, namely, existent (*sat*) and inexistent (*asat*). Its examination (*parīkṣā*) is stated to be fourfold; this is followed by short explications and exemplifications.⁷⁸ For a better understanding, it is useful to present the larger context here, which deserves a brief sketch also for the additional reason that it permits a fleeting glimpse of the importance of the *Carakasamhitā* for our knowledge of another "pillar" of Indian philosophy in the early classical period, namely, metaphysics.

3.2.2 The larger context⁷⁹ is provided by the topic of three human pursuits,⁸⁰ the pursuit of life (*prāṇaicaṇā*), that is, of adequate living circumstances, undiminished vital force and exhaustion of the full life-span, the pursuit of wealth (*dhanaicaṇā*), and the pursuit of the so-called other world (*paralokaicaṇā*),⁸¹ that is, purposeful activity in view of a renewed existence in another setting,⁸² especially and foremost a heavenly existence.⁸³ The exposition of the third pursuit starts from the perennial question "Will we continue to exist after we have passed away from this world, or not?"⁸⁴ which throws basic doubt on the existence of the "other world" as a goal of human aspiration. This provides the author with the occasion to mention those who – relying on sense perception only and thus adopting the well-known epistemological position of most Indian materialist philosophers⁸⁵ – deny repeated existence (*punarbhava*);⁸⁶ he then presents, in a concise verse, different views on the single basic cause of human birth⁸⁷ that all amount to a rejection of repeated existence. In the following he refutes his first-mentioned opponents' premise, namely, that perception is the only reliable source of knowledge, which allegedly results in the claim that only that which is perceptible exists in this world.⁸⁸ Next, the author discusses, rejects and denigrates the different views on the cause of birth.⁸⁹ When he sketches the last position – explicitly labelled "heretic" (*nāstika*)⁹⁰ – that the cause of human birth is pure chance (*yadṛcchā*), and adduces some denials typical for proponents of this position,⁹¹ he stresses the fact that for this opponent neither examination (*parīkṣā*) nor an object to be examined (*parīkṣā*) exists.⁹² Thus, the transition to the fourfold examination of what exists and what does not exist is well prepared, and after a general characterization and exemplification of examination,⁹³ the author proceeds to apply examination to repeated existence as an object of examination, which – not unexpectedly – turns out to be something which indeed exists.⁹⁴

3.2.3 The general as well as the applied section on “examination” make it evident that *parīkṣā*⁹⁵ here refers to various means and modes of examination,⁹⁶ rather than to the act of examination as such. The four types of *parīkṣā* are accordingly called “measures” or “means of valid cognition” (*pramāṇa*) in the final text segment on the pursuit of the “other world,”⁹⁷ where the author proceeds, upon the establishment of repeated existence, to admonish his listeners/readers to be attentive with regard to the so-called portals of duty or portals to merit (*dharmadvāra*),⁹⁸ which comprise *inter alia* obedience to one’s teacher, studying, production of offspring, charity and composition/stabilization (*samādhi*) of the mind, and recommends to them all other activities not disapproved by good people that will eventually provide fame in this world and the attainment of heaven after passing away. Specifically, the four means or modes of examination are the instruction by or tradition of trustworthy persons, sense perception, inference and *yukti*.⁹⁹

Among them, *yukti* is a remarkable source of knowledge which may have been a special, innovative feature of the *Carakasamhitā* or a specific part of its tradition¹⁰⁰ and which is only treated here.¹⁰¹ It was specifically considered and criticized by Śāntarakṣita, the ninth-century Buddhist scholar in his survey of the major metaphysical and epistemological tenets of the classical philosophical traditions;¹⁰² in verse 1692b of the *Tattvasaṃgraha*, Śāntarakṣita expressly refers to the sage (*muni*) Caraka in this connection.¹⁰³ *yukti*, as presented in the context of the pursuit of the “other world,” can be characterized as a mode of reasoning which takes into consideration a multiplicity of diverse, but conjoined factors, and their adequacy and coherence vis-à-vis a specific outcome.¹⁰⁴ The well-known four means of valid cognition of classical Nyāya do not include *yukti*, but comprise comparison/analogy instead (*upamāna*), which is also found with a slightly diverging term (*aupamyā*) in the group of five epistemological terms in the list of *pada*-s (cf. Table 7 above).

Table 16: Epistemological Items

CS Sū 11.17 (<i>parīkṣā</i> -s) ¹⁰⁵	NS 1.1.3 (<i>pramāṇa</i> -s)	CS Vi 8.27 (<i>pada</i> -s 17-21) ¹⁰⁶
instruction by trustworthy persons (<i>āptopadeśa</i>)	sense perception (<i>pratyakṣa</i>)	verbal testimony (<i>śabda</i>)
sense perception (<i>pratyakṣa</i>)	inference (<i>anumāna</i>)	sense perception (<i>pratyakṣa</i>)
inference (<i>anumāna</i>)	comparison/analogy (<i>upamāna</i>)	comparison/analogy (<i>aupamyā</i>)
<i>yukti</i>	verbal testimony (<i>śabda</i>)	oral tradition (<i>aitihya</i>) inference (<i>anumāna</i>)

Vidyabhusana is therefore uncertain whether the fourfold “standard of examination” as found in *CS Sū 11* or the corresponding three knowledge sources plus comparison, as found in *CS Vi 8*, represent the epistemology of Medhātithi Gautama as adopted in the *Carakasamhitā* (Table 16).¹⁰⁷

3.2.4 A word is due here on the term *śabda*. When Vidyabhusana briefly treats the above two relevant passages of the *Caraka-samhitā* on the sources of knowledge in his *History*, he clearly understands *śabda* (literally: “word”) in the *pada list* (*Vi 8.27*) in the sense of verbal testimony, equating it with instruction by trustworthy persons (*āptopadeśa*) in the *paralokaicaṇā* section (*Sū 11.17*), and does not refer to *aitihya* (“oral tradition”), which occurs in penultimate position in the relevant group of five epistemological terms in the *pada list*.¹⁰⁸ A little later, however, in the context of his brief exposition of the forty-four *padas*, he renders *śabda* with “word,”¹⁰⁹ explained by him as “a combination of letters.” Vidyabhusana consequently understands *aitihya* to refer to a fourth (and not fifth) means of knowledge here, in addition to sense perception, inference and comparison/analogy,¹¹⁰ which is to be equated with *āptopadeśa* in the *paralokaicaṇā* section of *Sū 11*.¹¹¹ The listing of the term “word,” however, would be contextually inappropriate here and Vidyabhusana’s interpretation as well as his explanation of the term as referring to “a combination of letters” seems to be based on a misunderstanding of the subsequent explanation of the term *śabda* in the *vāda* section itself.¹¹² Furthermore, the harmonization and mutual adjustment of the two passages attempted by Vidyabhusana in this way is, in my view, not necessary, or even unjustified, if one generally acknowledges the possibility of additions to the core text of the *Carakasamhitā* and specifically assumes that the *vāda* section is an interpolation in *CS Vi 8* (cf. above, 3.3.2).

Even so, it is necessary to reflect on the precise difference between *śabda* (No. 17) and *aitihya* (No. 20)¹¹³ in the *pada list*. It may well be that in the first case an author or individual agent of the statement is involved, i.e., a concrete speaker who is the source or transmitter of the verbally conveyed knowledge, whereas in the second case the list refers to oral tradition, i.e., statements of a less personal nature and authority, such as the statements constituting the Vedic corpus proclaimed by superhuman speakers.¹¹⁴ This would amount to a distinction between individual reliable human statements, perhaps including also tradition-based statements, and the authoritative tradition of legendary or mythical speakers as

two separate sources of knowledge.¹¹⁵ As is well known, according to the *Nyāyasūtra* these are the two types of the means of knowledge there called “verbal testimony” (*śabda*). Intriguingly, in their respective characterization as “having a seen object/content” (*dr̥ṣṭārtha*), i.e., an object/content that is accessible in this world by way of normal human experience, and “having an unseen object/content” (*adr̥ṣṭārtha*), i.e., an object/content that is inaccessible in this way,¹¹⁶ we re-encounter the terms used to designate the first two types of verbal testimony, or more precisely, of human statements as such, in the already mentioned explanation of the term *śabda* in the *vāda* section of *CS* Vi 8.¹¹⁷ Furthermore, the verbal testimony of the *Nyāyasūtra* is basically characterized as being the instruction by trustworthy persons (*āptopadeśa*), which is the term used to designate the first means of examination according to *CS* Sū 11.17. According to Vātsyāyana, these trustworthy persons (*āpta*-s) may be ordinary human beings and seers,¹¹⁸ something which may also be implied in the characterization of *āptopadeśa*, under the heading *āptāgama* (“tradition of trustworthy persons”), in *CS* Sū 11.27, when this means of examination is applied to the problem of repeated birth, even though in this text segment the involved group of ordinary human beings is limited to *savants*.¹¹⁹ Such a dual division of agents of instruction, however, does not occur in the general characterization of trustworthy persons provided instead of a characterization of *āptopadeśa* in *CS* Sū 11.18-19.¹²⁰ *aitihya*, for its part, figures as the first item in the brief discussion and rejection of possible further means of valid cognition beyond the accepted four at the beginning of the second *adhyāya* of the *Nyāyasūtra* (*NS* 2.2.1-2); there, *aitihya* is not considered as an additional source of knowledge because it is nothing but verbal testimony (*śabda*) according to the Nyāya understanding.¹²¹ The same argumentation can be found in some classical Sāṃkhya sources, foremost among them the *Yuktidīpikā*.¹²²

The terminological relationship between the three main sources for our knowledge of the relevant means of knowledge adduced and treated above may thus be presented as follows (Fig. 3):

In the light of the above consideration of the relationship between the three sources from the point of view of content and meaning, however, it becomes clear that the relationship between the relevant text segments in *CS* Sū 11 and the *Nyāyasūtra* is much closer than that between either source and the relevant segments in *CS* Vi 8 (Table 17).

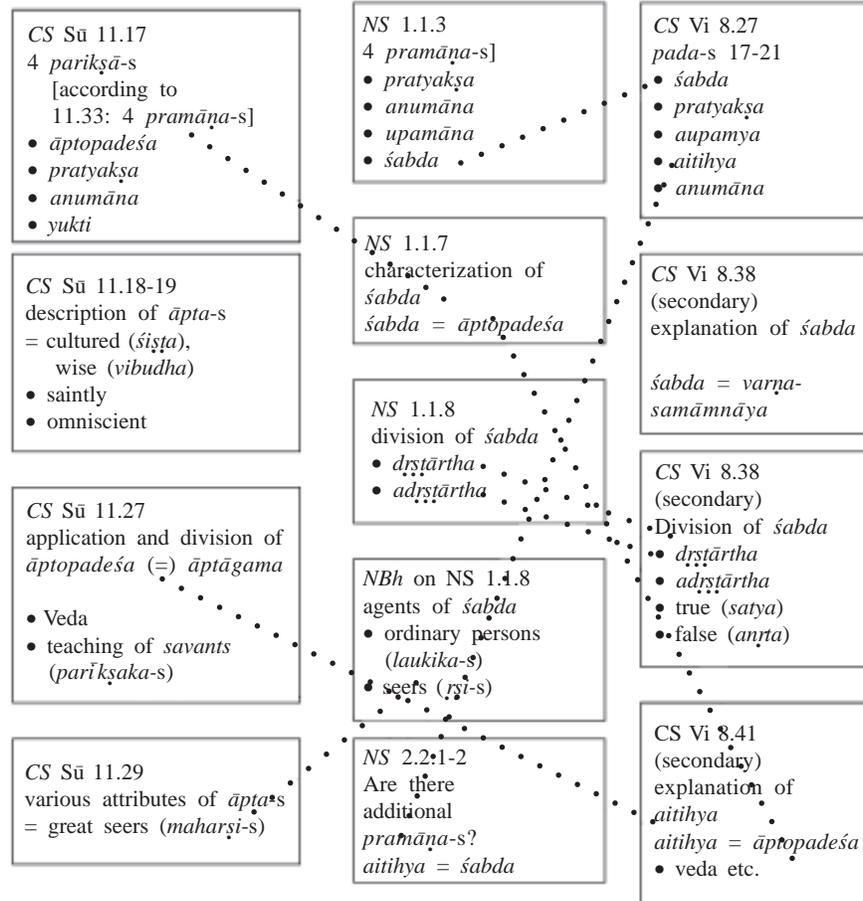


Fig. 3. The Terminological Criss-Cross Concerning “Instruction by Trustworthy Persons” and “Verbal Testimony” in CS Sū 11.17-19, 27 and 29, CS Vi 8.27,¹²³ 38 and 41,¹²⁴ and the NS

The epistemological concept under discussion as referred to in the list of *pada*-s in CS Vi 8.27, on the other hand, may possibly¹²⁵ be characterized as follows (Table 18):

Both sources presented in Table 17 would thus reflect a consolidation of related notions under one diversified concept.

3.2.5 In passing, I would like to add that in NS 2.2.1-2 we re-encounter another term from the *pada list* which there does *not* occur in the context of the sources of knowledge; this is *sambhava*,¹²⁶ a term which, guided by the context (cf. Table

Table 17: Relationship between *Carakasamhitā* & *Nyāyasūtra*

<i>Carakasamhitā</i> Sūtrasthāna 11	<i>Nyāyasūtra</i>
instruction by / tradition of trustworthy persons (<i>āptopadeśa</i> , <i>āptāgama</i>) division into <ul style="list-style-type: none"> • Veda • teachings by means of / in the form of expert bodies of knowledge (<i>śāstravāda</i>) agents • cultured (<i>śiṣṭa</i>) and wise (<i>vibudha</i>) persons (saintly, omniscient), great seers (<i>maharṣi-s</i>) • savants (<i>parīkṣaka-s</i>) 	verbal testimony (<i>śabda</i>) division into verbal testimony <ul style="list-style-type: none"> • having an “unseen” object/content (<i>adr̥ṣṭārtha</i>) (2) • having a “seen” object/content (<i>dr̥ṣṭārtha</i>) (1) agents (according to the NBh) <ul style="list-style-type: none"> • seers (<i>ṛṣi-s</i>) • ordinary human beings (<i>laukika-s</i>)

Table 18: Epistemological concepts

CS Vi 8.27	<i>Nyāyasūtra</i>
<i>śabda</i> (No. 17) personal communication individual human speakers	<i>aitihya</i> (No. 20) oral tradition legendary/mythical speakers

13 above), I have tentatively rendered with “compatibility,” “appropriateness” or “conformity,” or more generally, “pos-sibility,” of a thing (cf. above, p. 17). Literally meaning “being together,” this additional means of knowledge suggested by some opponent(s) in *NS* 2.2.1 is differently explained by Vātsyāyana in his commentary on this *sūtra*, namely, as the grasping of the existence of one thing on account of the grasping of the existence of another thing that is invariably connected with it; the example provided by Vātsyāyana points to the idea of inclusion.¹²⁷ Furthermore, the term referring to the possible additional means of knowledge mentioned just before *sambhava* in *NS* 2.2.1, implication or circumstantial evidence (*arthāpatti*), a well-known typical feature of Mīmāṃsā epistemology, is reminiscent of the term *arthaprāpti* (“obtainment [of the matter] from [another / some other] fact(s)”), which also precedes *sambhava* as a *pada* in the context of the terms concerning the verity of statements uttered in a disputation and of their contents (see again Table 13); depending on whether one assumes a transitive or intransitive meaning of the word *prāpti* (“obtainment”), *arthaprāpti* may be understood more precisely as the intellectual attainment / following of one thing from another / some other fact(s).¹²⁸

3.2.6 Let me return to the means of knowledge referred to in the *Carakasamhitā*. As we have seen, there are two different sets of them appearing in two different contexts. Furthermore, means of knowledge figure in the context of diagnostics. One short text segment is found in the part of CS Vi 8 following upon the list of forty-four *pada*-s, in the long excursus that may be entitled “How to act successfully” and concludes this chapter (CS Vi 8.68-151; cf. Table 2 above). Before the author proceeds to explain in much detail ten topical complexes (*prakaraṇa*) as items to be examined (*parīkṣya*) by a physician before he begins his treatment, he briefly introduces the means or modes of examination. As in CS Sū 11, the relevant expression here is *parīkṣā*. However, the means of examination mentioned in this context are basically just two, sense perception and inference, supplemented by instruction (*upadeśa*).¹²⁹ The distinctive means of knowledge called *yukti* is missing here,¹³⁰ and instruction by others, even though not completely lacking, is in the back seat in the present context, probably because it is not directly involved in the actual process of diagnostic examination. This interpretation is suggested by a further passage found at the beginning of the fourth chapter of the *Vimānasthāna* which is devoted to the diagnosis of diseases. The term initially used here is *rogaviśeṣavijñāna*, where the word *vijñāna* has to be understood as referring to *means* of in-depth knowledge, not to the process, similar to the special usage of the word *parīkṣā* in CS Sū 11 and Vi 8.83 (cf. above, p. 20). These means are three: instruction by trustworthy persons, sense perception and inference.¹³¹ The order is explained a little later on from the clinical point of view: Instruction by trustworthy persons indeed comes first; only thereafter examination (*parīkṣā*) by means of sense perception and inference is possible. For how could a person who examines something by means of sense perception and inference know, i.e., understand, this thing if he has not been instructed on it before?! Therefore the means of examination (*parīkṣā*) is in fact twofold for knowledgeable persons: sense perception and inference, or threefold, together with the preceding instruction.¹³² Three subsequent text segments explain and exemplify the acquisition of medical knowledge by means of instruction, sense perception and inference.¹³³ In the conclusion of the segment on sense perception, the actual order of means of examination established at the end of the explanation from the clinical point of view is confirmed: In spite of the primacy of instruction, in the context of actual examination sense perception and inference come first.¹³⁴

The “2+1 model” (Table 19) may actually be a modernization and streamlining of the model of four sources of knowledge presented in CS Sū 11

Table 19: The “2+1 Model” of Means of Knowledge in the *Carakasamhitā*

Vi 8.83	Vi 4.3	Vi 4.5 and 7
means of examination (<i>parīkṣā</i>)	means of in-depth knowledge of specific diseases (<i>rogaviśeṣajñāna</i>)	means of examination (<i>parīkṣā, parīkṣaṇa</i>)
sense perception (<i>pratyakṣa</i>)	instruction by trustworthy persons (<i>āptopadeśa</i>)	sense perception (<i>pratyakṣa</i>)
inference (<i>anumāna</i>) + instruction (<i>upadeśa</i>)	sense perception (<i>pratyakṣa</i>) inference (<i>anumāna</i>)	inference (<i>anumāna</i>) + instruction (<i>upadeśa</i>)

(cf. Table 16 above) because some unspecified notion of *yukti* is integrated as an essential factor in the characterization of inference in CS Vi 4,¹³⁵ which also found its way almost *verbatim* into the *vāda* section of CS Vi 8 as the characterization of inference as *pada* no. 20.¹³⁶ The order of the (remaining) three items in Vi 4.3 may still reflect the order in the metaphysical context of the *paralokaicaṇā* section of CS Sū 11, even though for identical contextual reasons, i.e., to acknowledge the practical, clinical context, it was changed in Vi 4.5 and 7 as well as in the short passage Vi 8.83.

We can thus conclude that the *Carakasamhitā* offers us three epistemological models¹³⁷ indicative of the observational–rational attitude of early classical Indian medicine;¹³⁸ even though one of them, the model found in the *vāda* section of CS Vi 8, may have been taken over from another, possibly non-medical source, its explanations and exemplifications point to their origin in the medical setting and it can thus be included in this judgement. None of these models precisely matches the model – i.e., the number and order of knowledge sources and the terminology employed in their designation, characterization and division – known from the *Nyāyasūtra*. In addition to Table 20 below, diagrams visualizing the criss-cross of terminological correspondences, similar to the one drawn above for the concept of instruction by trustworthy persons / verbal testimony (cf. Fig. 3), would make this aspect and the complex relationship between all these models and their variants more than clear. The model that comes closest to the model of the *Nyāyasūtra* from one point of view may be the model found in the *vāda* section of CS Vi 8, in the list of forty-four *padas* together with the subsequent text segments devoted to the individual terms and items. This model includes comparison or analogy (*aupamya*), which – although regularly employed in medical reasoning – does not have a place in the other models.¹³⁹ The contextually problematic enumeration of four sources of knowledge

Table 20: Epistemological Models in the *Carakasamhitā* and *Nyāyasūtra*

CS Sū 11.17	means of examination/knowledge (<i>parīkṣā</i> , <i>pramāṇa</i>)	Vi 4.3	means of in-depth knowledge of specific diseases (<i>roga-vi-śe-ca-jñāna</i>)	Vi 4.5 and 7	means of examination (<i>parīkṣā</i> , <i>parīkṣaṇa</i>)	Vi 8.83	means of examination (<i>parīkṣā</i>)	CS Vi 8.27	items (<i>pada</i> -s) no. 17-21 ¹⁴⁰	CS Vi 8.33	division of item (<i>pada</i>) no. 11 (<i>hetu</i>)	NS 1.1.3	means of knowledge (<i>pramāṇa</i>)
	instruction by trustworthy persons (<i>āptopa-dēśa</i> ; <i>āptāgama</i>)		instruction by trustworthy persons (<i>āptopa-dēśa</i>)		sense perception (<i>pratyakṣa</i>)		sense perception (<i>pratyakṣa</i>)		verbal testimony (<i>śabda</i>)		sense perception (<i>pratyakṣa</i>)		sense perception (<i>pratyakṣa</i>)
	sense perception (<i>pratyakṣa</i>) inference (<i>anumāna</i>)		sense perception (<i>pratyakṣa</i>) + instruction (<i>upa-dēśa</i>)		sense perception (<i>pratyakṣa</i>) + instruction (<i>upa-dēśa</i>)		sense perception (<i>pratyakṣa</i>) + instruction (<i>upa-dēśa</i>)		sense perception (<i>pratyakṣa</i>) comparison/ana-logy (<i>aupamya</i>)		sense perception (<i>pratyakṣa</i>) oral tradition (<i>aitihya</i>)		inference (<i>anumāna</i>) comparison/analogy (<i>upamāna</i>)
	<i>yukti</i>								oral tradition (<i>aitihya</i>)		comparison/analogy (<i>aupamya</i>)		verbal testimony (<i>śabda</i>)
									inference (<i>anumāna</i>)				

as causes of cognition (*upalabdhihetu*) under the item *hetu* (“demonstration / statement of proof”) in Vi 8.33,¹⁴¹ which is also included in Table 20 below, is confirmed by the new critical edition of CS Vi 8 and comes even closer in this respect: Sense perception is followed by inference, oral tradition (*aitihya*) and comparison/analogy (*aupamya*).¹⁴² From other points of view, i.e., the terminology and order of the last two items, this enumeration also differs from the model of the *Nyāyasūtra*; it is closer to the model of CS Vi 8.27 with regard to the term used for comparison/analogy, namely, *aupamya*, instead of *upamāna* in the *Nyāyasūtra*, and on account of the employment of the identical term *aitihya*, which, however, at the same time points to a discrepancy between these two models because *aitihya* according to CS Vi 8.33 probably encompasses what is meant by the two separate items *śabda* and *aitihya* according to CS Vi 8.27, a point which moves the model of CS Vi 8.33 again closer to the *Nyāyasūtra* model, as does the order of the first two items in both these models and the overall number of their means of knowledge.

The epistemological models found in the *Carakasamhitā* may be augmented by means of further materials from the classical medical literature. It may be pointed out that in the edited text of the *Suśrutasamhitā* four sources of knowledge are mentioned in still another, unusual order: sense perception, tradition (*āgama*), inference and comparison/analogy (*upamāna*).¹⁴³ The editor records here a variant reading to this order according to which tradition occupies the primary position,¹⁴⁴ a feature also to be noted in the otherwise diverging model of the *paralokaicaṇā* section of CS Sū 11 and the unmodified, initial sequence of the model of CS Vi 4, although the model of SS Sū even according to this variant reading differs in other ways from both these models of the *Carakasamhitā*. Dalhaṇa comments on the first sequence as follows, unambiguously revealing an empiricist ideology: Tradition is more excellent because it is the result of perception; thus, the author, i.e., Dhanvantari, has specified it before inference.¹⁴⁵ The *Aṣṭāṅgasaṅgraha*, however, records a statement of Suśruta in which he mentions only three means of knowledge, namely, tradition (*āgama*), sense perception and inference, in this order, as in the model of CS Vi 4.3.¹⁴⁶

As regards the determination of the aspect of the precise *nature* of the individual knowledge sources according to the various models, merely a first start in this direction has been made above with the analytic, mainly structural examination of “instruction by trustworthy persons” and “verbal testimony” (see 3.2.4).

3.2.7 From the above exposition, elaboration and discussion of Vidyabhusana's original hypothesis on the early development of Indian logic (cf. Figs 1 and 2 above) with the help of some examples taken from the area of dialectics and epistemology, and with only very few selected references to other (early) classical sources for our knowledge of these areas, it should have become obvious that in spite of a number of resemblances with a varying degree of closeness and of various kinds (to which further ones could be added), the evidence offered by the *Carakasamhitā* is far too varied and complex in itself to allow a definite determination of the interesting and certainly intriguing relationship in the area of dialectics and epistemology between this earliest classical medical *samhitā* and the later *Nyāyasūtra*, or rather the traditional background of the latter, namely, the hypothetical *Nyāyāsāstra* and a part of the still earlier *Ānvīkṣikī* assigned to Medhātithi Gautama (which both would have to be reconstructed on the way), as suggested by Vidyabhusana.

In continuation and conclusion of this paper, the diametrically opposed hypothesis by Surendranath Dasgupta will be presented, discussed and evaluated, followed by an update on the most important scholarship outside India and in more recent times on the issue, and some methodological considerations concerning future research into it.

NOTES

1. Research on this paper was generously supported by the FWF (Austrian Science Funds), Projects No. P14451-SPR ("Debate in the Context of the History of Indian Medicine"), P17300-G03 ("Philosophy and Medicine in Early Classical India") and P19866-G15 ("Philosophy and Medicine in Early Classical India II"). Thanks to the cooperation and kind assistance of many institutions in India and Europe, copies of some fifty mss. of the *Carakasamhitā* have become available to the last-mentioned current project. I am immensely grateful to all of them, especially to the institutions that own the mss. explicitly referred to in the present contribution (Ca^b, L1^d, L2^d, T1^d, T2^d, T3^d, V2^b, V3^b): the Trinity College Library, Cambridge, the British Library, London, the Universitätsbibliothek (University Library) Tübingen, and the Sarasvati Bhavana Library, Varanasi.
2. Cf. Scharfstein 1997, esp. pp. 235-239 and 256-267.
3. The word *nyāya* is frequently translated as "logic." However, it is often forgotten that its meaning is first of all "right manner" or "right way." From this the meaning "suitable method" is derived, i.e., a method or rule which lets one reliably achieve one's aims. According to Pāṇini's (P) *sūtra* 3.3.37 (*parinyor nīyor dyūtābhreṣayor*), the suffix

ghaṇ (cf. P 3.3.16), which refers to the instrument (*karaṇa*) or substratum (*adhikaraṇa*) (cf. P 3.3.120, with P 3.3.118 and 117), is added to the verbal root “*i* in combination with the preverb *ni-* in the sense of “non-deviation/aberration.” *nyāya* is thus the means used to arrive at a certain goal without fail or deviation, i.e., the proper way or right manner, and may consequently also refer to a method or rule/maxim. Similarly, the word *pariṇāya*, literally means by which one moves tokens or figures around in a board game, refers to a move in such a game. Eventually, the word *nyāya* came to be used to specifically refer to methodical and systematic thinking, that is, coherent and correct logical reflection and argumentation. See Preisendanz 2009 for further details on this development. For the sake of brevity only, I will use the expression “logic” in the following.

4. Roth 1872 (p. 441f.) mentions this edition as the first attempt to edit the text. It was published in fascicles by the Samvadajnanaratnakara Press, Calcutta, in Bengali and Nagari letters respectively; the year of the actual completion of this first edition remains to be documented. In 1878, it was republished (and possibly completed) by Dharanidhar Ray Kaviraj in Berhampore, Saidabad (Pramadabhanjana Press) (cf. also CS[SGAS] 1949: 14f., item no. 3, where, however, the date of publication of the second volume [*saṃ* 1971, i.e., 1914] must be wrong). In the extensive bibliography of editions of the CS listed in Meulenbeld 1999: IB, pp. 3-6, both editions are mentioned under “c” (p. 3). The earliest edition according to this bibliography, i.e., the edition by Narendranath Sengupta and Balaichandra Sengupta (Calcutta 1849-1855), which was not seen by Meulenbeld (p. 3, labelled “*a”), is actually an edition which appeared in 1927-1933 and is identical with Meulenbeld’s edition “w” (p. 4f.; cf. also CS[SGAS] 1949: 14f., item no. 3); obviously, the *śaka* years were mistaken for years of the common era. The second oldest edition mentioned by Meulenbeld (p. 3) is an edition by a certain Shankar Shastri (Nirnaya Sagar Press, Mumbai 1867) (labelled “*b”); in Preisendanz 2007: 635, n. 39, I still considered this edition to be the *editio princeps*. However, as was noticed by one of my colleagues in the current project mentioned in n. 1, Dr. Philipp Maas, the date 1867 appearing on the title page of the book is *not* the date of publication of this edition, but refers to the year when the copyright law applying to it was passed. The book is obviously a re-edition – without the Marathi translation and notes – of Shankar Daji Shastri Pade’s edition by his son Shankar Shastri; the original was published in fourteen fascicles in Mumbai from 1897 to 1898 by the bookseller Yajñeshvar Gopal Dikshit (Meulenbeld’s “i2,” p. 3). For some reason, Meulenbeld, who did not see *b, refers under this item to a reprint of this 1897-1898 edition with translation, published in 1926 by the same bookseller, now located in Pune, and printed in Pune at the Hanuman Press; it was edited by Krishna Shastri Kavade (cf. also CS[SGAS] 1949: 16f., item no. 13). The copy of *b available to the above-mentioned project is owned by the library of the Institute for South Asian and Central Asian Studies, University of Leipzig, Germany, and part of the personal library of the late Friedrich Weller (call number W/Fae 2); it does not contain a date of publication (cf. also the undated Nirnaya Sagar Press edition by Shankara Shastrin referred to in Filliozat 1993: 104, n. 13). However, in the library’s card catalogue the date

of publication is given as 1903. Interestingly, the old card catalogue of the library of the famous Karl Sudhoff Institute for the History of Medicine, University of Leipzig, also refers to an edition of the *Carakasamhitā* published from Bombay in 1903; the editor is said to be a certain Candaravastrin, a strange name indeed. In early 2009, the book (call number II 8253) could not be located in the library any longer; however, it may eventually be identical with the other Leipzig copy (W/Fae 2), and “Candaravastrin” a faulty transliteration of the reference to the editor “Śaṅkara Śāstrin” on the Devanāgarī-script title page of the book.

5. On Gangadhar Kaviraj see Chakravarti 1929-1930: 254f. and Gupta 1976: 371f.; more recently, a small monograph was devoted to him by Chattopadhyay (Chattopadhyay 1995, mainly relating to the manuscripts of Gangadhar’s works preserved in the library of the Calcutta Sanskrit College). See also Meulenbeld 1999: IB, p. 287f.
6. On the different editions of the *Jalpakaḷpataru*, see again Meulenbeld 1999: IB, p. 287f.
7. Cf. von Stietencron 2003: 77f.; see also Zeller 2003: 111, with n. 39, on an acquisition trip to India by Roth’s former student Richard Garbe and on Aurel Stein, another of Roth’s students, who send some birch-bark manuscripts from Kashmir to Roth still in the final year of Roth’s life.
8. Ms. I. 458, no. 141 in Garbe 1899: 62f. (T1^d). See Preisendanz 2007: 635, n. 36, for details. This ms. contains many marginalia and corrections by a second hand, which may be that of Roth himself; in one case (CS Vi 8.144) a note with variant readings on *āmrāsthyaṃbāñthakī* is clearly relying on the reading in a CS ms. of the India Office Library, London (Sanskrit mss. 335 and 1535, no. 2637f. in Eggeling 1896: 923-925) (L1^d), where during the years 1843-1845, immediately after he had received his Ph.D. degree, Roth did extensive research (cf. von Stietencron 2003: 80 and Zeller 2003: 92). He may have copied this ms., or extracts from it, already at this time, as he did with many other Sanskrit mss. preserved in Paris, London and Oxford (cf. von Stietencron, loc. cit.). A further ms. of the *Carakasamhitā* owned by the University Library, Tübingen, was copied later, in 1873, commissioned and procured by Hoernle in the same year (Ms. I. 459, no. 142, in Garbe 1899: 63) (T2^d). Another one, which is incomplete (Mss. I. 460 and 474, nos. 143 and 152 in Garbe 1899: 63 and 65f.) (T3^d) and written by the same hand, may also have reached Tübingen at this time, that is, only after Roth had already written his seminal paper published in 1872.
9. Ms. no. R. 15. 85 in Aufrecht 1869: 21-24 (Cab). See Preisendanz 2007: 635, n. 37, for further details.
10. CS Vi 8.1-26 and, as a conclusion written in comparable style, 67 (cf. below, p. 6).
11. Cf. Roth 1872. On the initiation of the medical student according to Caraka see the recent study Preisendanz 2007.
12. CS Vi 8.15. On the entire section Vi 8.15-26 see the translation and extensive annotation, interpretation and discussion in Kang 2003.

13. The peaceful colloquy is also called “favourable/agreeable colloquy” (*anuloma-sambhāṇa*) (cf. the conclusion of CS Vi 8.17).
14. Cf. CS Vi 8.16 and 18.
15. Cf. *sandhi* (“alliance,” “treaty”) and *vigraha* (“conflict”) in the context of the complex of six expedients or policies (*śāguṇya*) of a ruler according to AŚ 7, especially 7.1; further on this see Scharfe 1989: 206-209. See also n. 31 below.
16. Cf., e.g., PT III, first story; the six expedients are listed p. 135,2-3 and subsequently discussed, with a focus on *sandhi* and *vigraha*, by King Meghavarṇa’s five ministers. Cp. also the names of the third and fourth section of the *Hitopadeśa*.
17. Cf. Vidyabhusana 1921: 25-35. For a review of this book, see Randle 1926.
18. Cf. Balcerowicz 2001: iii-xxxiv, who dates the *Nyāyāvātāra* between 620 and 800.
19. Further Buddhist works in Tibetan translation edited by Vidyabhusana, partly with translation, are the *Prātimokṣasūtra* and the *Lalitavistara* (twelfth chapter) (both 1912). Moreover, Vidyabhusana edited the *Sragdharā(tārā)stotra* of Sarvajñamitra (1908) and two of the songs of Milarepa (1912), both widely spread in Nepal. With his edition of the Tibetan translation of the *Amarakośa* (1911-1912) Vidyabhusana also turned to non-Buddhist literature in Tibetan translation. Little known is his monograph on Tibetan scrolls and images from Gyantse (1905), as are his articles on historical topics.
20. Cf. Vidyabhusana 1921: 17-21. In the introduction of his 1913 edition and translation of the *Nyāyasūtra*, Vidyabhusana still identifies Gotama/Gautama and Akṣapāda; cf. Vidyabhusana 1930:ii-xi. Harsh criticism of this change in opinion is expressed by Nanda Lal Sinha in his introduction (pp. v-ix) to his revised edition of Vidyabhusana’s edition and translation.
21. Cf. Vidyabhusana 1921: 25-35, quotation at p. 25. On the items possibly inserted by Caraka according to Vidyabhusana cf. n. 51 below.
22. Cf. Vidyabhusana 1921: 26 and 50.
23. Cf. Vidyabhusana 1921: 39-45, especially p. 40.
24. Cf. Vidyabhusana 1921: 27 and 50.
25. Cf. Vidyabhusana 1921: 46.
26. Cf. Vidyabhusana 1921: 26.
27. Cf. also n. 37 below.
28. Cf. Vidyabhusana 1921: 27.
29. Cf. Vidyabhusana 1921: 28-31 on CS Vi 8.15-26. See also the summaries in Solomon 1976: 74-77 and Frauwallner 1984: 68-69.

30. The types are: *pravara* (superior), *pratyavara* (inferior) and *sama* (equal); cf. *CS* Vi 8.19. Also in the context of the *Arthaśāstra*'s six expedients, which include *sandhi* and *vigraha*, the other/opponent kings are classified into three types: *sama* (equal), *jyāyas* (superior) and *hīna* (inferior); cf. especially *AŚ* 7.3.1-20.
31. Cf. *CS* Vi 8.27 and 66.
32. Cf. Vidyabhusana 1921: 31-35.
33. Cf. *CS* Vi 8.27, quoted in n. 42 below.
34. Cf. *CS* Vi 8.28-65.
35. See *CS* (crit. ed.) Vi 8.67: *vādas tu khalu bhiṣajām vartamāno vartetāyurveda eva, nānyatra, tatra hi vākya-prativākya-vistarām kevalāś copapattayaṃ sarvā dhikaraṇeṣu. tāṃ sarvāṃ samyag avekṣyāvekṣya vākyaṃ brūyāt, nāprak[ta]kam aśāstrakam aparīkṣitam asādhakam ākulam ajñāpakam vā. sarvaṃ ca hetumad brūyāt. hetumanto hy akaluṣām sarva eva vādavigrahāś cikitsite kāraṇabhūtāṃ praśasta-buddhi-var dhakatvāt; sarvāram-bha-siddhiṃ hy āvahaty anupahatā buddhiṃ.* (Wavy underlining marks uncertain readings.)
36. See *CS* Vi 68-78. This is the topic called *kāryābhinirvṛtti* in Vidyabhusana 1921: 26 and 27.
37. See *CS* Vi 8.79.
38. See *CS* Vi 8.80-151. For a detailed topical and structural analysis of *CS* Vi 8 see Preisendanz 2007: Appendix 3.
39. On different terminologies for debate and its various classifications on the basis of the evidence of *CS* Vi 8 and the *Nyāyasūtra*, see Preisendanz 2000: 232f. See furthermore Kang 2003: 17-42 where additional material is considered and discussed.
40. Cf. *CS* Vi 8.24-26.
41. Cf. *CS* Vi 8.152 (*sambhāṇāvidhi*) and 153 (*vādamārgapadāni*).
42. See *CS* Vi 8.27 (crit. ed.): *imāni khalu padāni vādamārgajñānārtham adhigamyāni: vādo dravyaṃ guṇāṃ karma sāmānyaṃ viśecaṃ samavāyaṃ pratijñā sthāpanā pratiṣṭhāpanā hetur upanayo nigamanam uttaram d[ic]mānta siddhāntaṃ śabdaṃ pratyakam aupamyam aitihyam anumānaṃ saṃśayaṃ prayojanaṃ savyabhicāraṃ jijñāsā vyavasāyo 'rthaprāptiṃ sambhavo 'nuyojyam ananuyojyam anuyogaṃ pratyanuyogo vākya-doco vākya-praśamsā chalam ahetavo tītakālam upālabham parihāraṃ prati-jñāhanir abhyanuññā hetvantaram arthāntaraṃ nigrasthānam iti.*
43. See especially *NS* 1.1.1.
44. Cf. Halbfass 1992: 85, n. 39.
45. Cf. Vidyabhusana 1921: 26. For a brief characterization of this hypothesis, see also Filliozat 1990: 43.

46. Cf. Vidyabhusana 1921: 49-50.
47. See CS Vi 8.28-65. For a paraphrase see Solomon 1976: 78-86. On the nature of the explanatory text segments, see. n. 111 below and, for a specific case, p. 27.
48. There are three editions of this book published by the Nirnaya Sagar Press: first edition 1933, second edition 1935, third edition 1941. To my knowledge, the various modern reprints are produced from the third, augmented edition.
49. Cf. n. 1 above.
50. Vidyabhusana (1921: 27) considers that the whole group of nine terms starting with *pratijñā* and ending with *siddhānta* may have been inserted by Caraka into the *vāda-mārga* when he redacted the *Samhitā* in the first century AD because Medhātithi Gautama may not have been familiar with these terms in their technical sense.
51. On the sources of knowledge as presented in CS Vi 8 and other related early sources, see Kang 2007: 64-84.
52. Ms. L2^d (owned by the India Office Library, London, Sanskrit ms. 881, no. 2640 in Eggeling 1896: 926f.) also has this sequence. Q³¹ comprises two mss. owned by the Sarasvati Bhavana Library, Varanasi: V2^b (acc. no. 107465, no. 108824 in DCSSUV 1996) and V3^b (acc. no. 108221, no. 108685 in DCSSUV 1996). V2^b was personally written, partly with a commentary, by Gangadhar Kaviraj in *śaka* 1760, i.e., 1838/1839 AD; see also the paper by Cristina Pecchia in the present volume.
53. This order corresponds to the order of the four epistemological items, excluding *śabda* and beginning with sense perception, that is found in the subsequent text segment characterizing the item *hetu* (see Table 4 above); cf. Vi 8.33 addressed below, p. 27. This sequence is unanimously confirmed by the manuscript tradition.
54. Cf. *NBh* 30,8-9 on NS 1.1.32. Cf. also *Nyāyamañjarī* (NM) II 553,16-17 and *Sārasaṅgraha* (SāS) 183,7-184,2 on *Tārikarakṣā* 69; I am indebted to Mr. Hisataka Ishida, PhD student at the University of Vienna, for the latter reference. A variation of this list of ten elements is mentioned by Dharmakīrti's commentator Prajñākaragupta in his commentary on *Pramāṇavārttika* (PV) 4.19ab; see Tillemans 1984: 76, n. 9. For a diverging list of ten elements of an argumentation in early Jain dialectics, see Ui 1917: 83, with nn. 3 and 4, and Kang 2007: 49.
55. Cf. *YD* (Yuktidipika) 89,16-18, followed by a long discussion extending up to *YD* 97,5, and the summary in *YD* 4,6-8; see also Frauwallner 1984: 77. Further reference to the ten-fold scheme, without a clear identification of its proponents, is made in Vibhūticandra's notes on the manuscript of the PV with Manorathanandin's commentary (reference by Mr. Hisataka Ishida); cf. the gloss on the first sentence of the commentary on PV 4.19ab (p. 420, gloss no. 2). A scheme of additional elements of argumentation termed "expedients" (**anīga*), starting with inquisitiveness, was also known to Dignāga; cf. his own commentary on *Pramāṇsamuccaya* (PSV) 4.6 (fol. 65b 6: *des na gzan gyi śes par 'dod pa la sogs pa' i yan lag...*), referred to already in Tucci 1930:45, n.81.

56. For an extensive critical discussion of the ten elements, their functions and relations, including the descriptive and exemplificatory text segments of all involved items in CS Vi 8 and the *Nyāyasūtra*, see Kang 2007: 16-49.
57. Cf. the enumeration in NS 1.1.32 and the following *sūtra*-s 33-41 on the individual elements.
58. The five elements are already explicated as elements of the statement of a direct reason (*vītahetu*) in Vārṇagaṇya-s *śaṣṭitantra*, to which the author of the *Yuktidīpikā* most probably refers to in this context even though the additional five elements may not have been part of Vārṇagaṇya's scheme (see the remarks in YD 5,4-8 where it is stated that Vindhyaśāsin, who was a disciple and commentator of Vārṇagaṇya, and other masters taught the elements of argumentation starting with inquisitiveness which are jointly called "limb" (i.e., expedient) "of inference" [*anumānāṅga*] in this context). Cf. also Śiṃhasūri's *Nyāyāgamānusārīṇī* (NĀA) 313,8-6 and Jinendrabuddhi's *Pramāṇasamuccayamṭīkā*, quoted and analyzed towards the reconstruction of the relevant passage in the *śaṣṭitantra*, in Frauwallner 1958: 88-94 (translation p. 128f.).
59. It can be presumed that the terminology of the *naiyāyika*-s for the remaining five elements of argumentation making up the set of ten elements was the same as the terminology for the five elements of argumentation in the *Nyāyasūtra*, because Vātsyāyana does not mention any discrepancy in this regard.
60. Cf. n. 59 for the fivefold scheme probably held by Vārṇagaṇya.
61. Cf. CS Vi 8.36 (crit. ed.): *dr̥ṣṭānto nāma yatra mūrkhaviduṣāṃ buddhisāmyam, yo varṇyaṃ varṇayati*. [...]
62. Cf. NS 1.1.25: *laukikaparīkṣakāṅgāṃ yasminn arthe buddhisāmyaṃ sa dr̥ṣṭānta*. See also the early quotation of this *sūtra* in the introductory comments on **Vaidalyaprakaraṇa* (*VP) 28 (*VP p. 33,10-11) and the reference in the commentary on **VP* 9 (*VP p. 25,3-8, translation p. 62); on the latter passage, see Pind 2001: 161f. (relating to section no. 8, following Kajiyama's enumeration; see Pind's n. 2, p. 149).
63. Cf. n. 44 above.
64. Cf. NV 97,4-6 on NS 1.1.24: *yad api prayojanaṃ nyāyasyāṅgaṃ na bhavati ti* (cf. the opponent in NV 96,18-19: *na cānena [scil. prayojanena] kiñcīti parīkṣāvidheṃ kriyā itī nyāyāṅgabhāvo nāstīti*) *tad api na yuktam. yā khalu niṣprayojanā cintā nāsau nyāyasyāṅgam itī. parīkṣāvidhes tu pradhānāṅgaṃ prayojanam eva tanmūlatvāt parīkṣāvidher itī*.
65. Cf. NS 1.1.36: *sādhyasādharṃyāt taddharmabhāvī dr̥ṣṭānta udāharaṇam*.
66. See NS 1.1.34: *udāharaṇasādharṃyāt sādhyasādhanam hetuṃ*.
67. In YD 90,21 (*udāharaṇam tu tannidarśanam dr̥ṣṭāntaḥ; tad-* refers to *sādhanasya sādhyena sahabhāvī-tvam*, cf. YD 90,18 and the following explanation), the initial phrase *udāharaṇam tu* is probably an interpolation (see 93,2 and NĀA 314,5) to clarify that

function and position of *dr̥ṣṭānta* are identical with those of the element of argumentation *udāharaṇa* according to the Nyāya scheme. Similarly, in YD 91,4, *upanaya* may have been added to the characterization of *upasaṃhāra* (see NĀA loc. cit.), even though later on in the discussion of the altogether ten items and their characterizations, the term *upanaya* may have replaced the typical *upasaṃhāra* several times already in the original text of the *Yuktidīpikā*. On the function and place of the item *dr̥ṣṭānta* in the context of the forty-four *pada*-s and other relevant early sources, and on its relation to *udāharaṇa*, see the extensive discussion in Kang 2007: 87-143.

68. See NS 1.1.27: *sa* (scil. *siddhāntaṃ*) *caturvidhaṃ sarvatantrapratitantrādhikaraṇā bhyupa-ga-masaṃsthityarthā-ntarabhāvāt*.
69. See CS Vi 8.37 (crit. ed.): [...] *sa* (scil. *siddhāntaṃ*) *coktaś caturvidhaṃ sarvatantrasiddhāntaṃ pratitantrasiddhānto dhikara-a-siddhānto 'bhyupagamasiddhānta iti*. [...]
70. More on these two topics may be found in 3.5.2 below.
71. For this interpretation of the term, cf. Filliozat 1968: 443.
72. That is, there has to be an understanding about the ontological presuppositions common to the participants in a debate and thus about the possible range of topics of debate.
73. According to Vidyabhusana (1921: 27), the six ontological terms were borrowed from early Vaiśeṣika and inserted into the *vādamārga* by Caraka himself. On the six Vaiśeṣika categories and their “relatives” in the *Carakasamhitā* see especially Sūtrasthāna (Sū) 1.28-29 and 44-52. For a rather detailed exposition see CS[SGAS] 1949: 466-469 and the critical discussion in Narain 1976: 106-110, for a survey of the most important secondary literature on this topic, Comba 1987: 42; see also Meulenbeld 1999: 10f., with a summary of Comba’s discussion of Surendranath Dasgupta’s position (Dasgupta 1922) in Comba 1990, which focuses on the concepts of *sāmānya* and *viśeṣa*, and with further references.
74. See CS Vi 8.57: *prakaraṇasama, saṃśayasama, varṇyasama*. On CS Vi 8.57 and the problem of the precise meaning of the term *ahetu* see further Kang 2009: 86-91.
75. Cf. Filliozat 1968: 443.
76. According to the explanation in CS Vi 8.63, the “different demonstration / statement of proof” is one that relates to a different topic or matter. See CS Vi 8.63 (crit. ed.): *hetvantaraṃ nāma prakṛtihetau vāṣye vikārahetum āha*. Frauwallner (1984: 70), relying on the printed text of the *Carakasamhitā* (*hetvantaraṃ nāma prakṛtahetau vāṣye yad vikṛtahetum āha*), translates the term as “verfehlte Begründung” (proof that fails its purpose / proof beside the mark), which may correspond to Vidyabhusana’s “shifting the reason” (cf. Vidyabhusana 1921: 35).
77. See the use of this term in the explanation of censure (*upālabha*) in CS Vi 8.59.

78. Cf. Vidyabhusana 1921: 28 relating to *CS Sū* 11.17-25 and 32.
79. See also the cursory exposition in Dasgupta 1922: 405-408 and the structural survey as well as detailed paraphrase and treatment, with consideration of Cakrapāṇidattas's commentary, in Filliozat 1993. Meindersma (1989-1990: 266f.) also provides a brief analysis of *CS Sū* 11.2-33. His hypothesis and conclusion that the whole section constitutes a "quite separate" treatise on the proof of rebirth (*paralokasiddhi*) inserted here (pp. 266 and 271-273), however, is not convincing because the section is well embedded in the chapter and connects with other sections of the core *sthāna*-s of the *Carakasamhitā* from a terminological, stylistic and conceptual point of view. Roṣu rightly characterizes the examination of the "other world" as an exemplary expression of the rational attitude of the Indian medical scientists applied here to substantiate a doctrine that was not developed on rational grounds (1978a: 79); see similarly Filliozat 1990: 34. See n. 94 below on a diametrically opposed Marxist view about this section.
80. On the derivation and meaning of the word *ṇaṇā* see Filliozat 1993: 94f.
81. Cf. *CS Sū* 11.3. The pursuit of life is treated in *CS Sū* 11.4, the pursuit of wealth in 11.5. This triad may be an adaptation of the older concept of three human pursuits (*putreṣṇā*, *vittesaṇā*, *lokeṣṇā*) found in the *Bṛhadāraṇyaka-Upaniṣad (BrU)* (3.5.1 and 4.4.22). Cf. Filliozat 1993: 96 and, though inconclusive, Das 1993: 36-38; Roṣu (1978b: 258f.) speaks of a "résonance upaniṣadique" when he discusses the integration of the three human goals (*trivarga*) into the three human pursuits of *CS Sū* 11.3, which he considers as the basic values of medical philosophy. The continuing importance of the concept of three pursuits is documented by the fact that in a formula employed in the context of undertaking *saṃyāsa*, the renouncer states that he has "risen from" these three pursuits, i.e., distanced and emancipated himself from them; cf., e.g., the two quotations from the *Viśveśvarapaddhati* and Kapila in the early-modern *Yatidharmaparakāśa (YP)* (p. 46,1-2 and 19-20).
82. See also Filliozat's remarks on the usage of *paraloka* in the present context (1990: 34). See further Steinkellner 1984: 87 on the term *paraloka* from a historical perspective that can also be applied with slight adjustment to its usage in the non-Buddhist traditions.
83. For a discussion of the meaning of *paraloka* in the context of *CS Sū* 11.3 in combination with 11.33, see Das 1993: 35f.
84. Cf. *bhaviṣyāma itaś cyutā na veti* in *CS Sū* 11.6; the treatment of *paralokaisaṇā* continues until *Sū* 11.33.
85. Cf. also Meindersma 1989-1990: 270 and 1992: 301.
86. Cf. the quotation in 90 below.
87. See *CS Sū* 11.6: *mātaraṃ pitaraṃ caike manyante janmakāraṇam / svabhāvaṃ paranirmāṇam yadṛcchāṃ cāpare janāṃ //*. On the causes *svabhāva* and *yadṛcchā*, cp. the verse *Śvetāśvatara-Upaniṣad (ŚU)* 1.2 which answers, *inter alia*, to the question "From what were we born?" (*kutaṃ sma jātāṃ*) (further on this famous verse

see Oberlies 1995: 79f., with references). See also *Suśrutasaṃhitā* (SS) Śā 1.11-12 (referred to in Dasgupta 1922: 372 and 410), which addresses further first causes also mentioned in *ŚU* 1.2.

88. See *CS* Sū 11.7-8. On the causes for the non-perception of existent and in principle perceptible things listed in text segment 8, see Preisendanz 1994: 530-540.
89. See *CS* Sū 11.9-16.
90. Cf. also the abstract noun *nāstikya* in the earlier sentence *santi hy eke pratyakṣaparāṃ paroṣatvāt punarbhavasya nāstikyam āśritāṃ* (*CS* Sū 11.6) and in 11.7, and the expression *nāstikagraha* immediately afterwards in 11.15cd (a passage considered a demonstration of “abject servility” of the doctors to the “law-givers” in Chattopadhyaya 1977: 375).
91. In the context of *CS* Sū 11.14-15, the term *nāstika* is described by means of reference to the negation of ideas and concepts that are mainly of relevance in traditional or “orthodox” belief and pertain to ethics and soteriology (cf. the keywords *kartikāraṇa*, *karman* and *karmaphala*) as well as mythology and legendary tradition (cf. the reference to *deva*-s, *ṛṣi*-s and *siddha*-s).
92. Cf. *CS* Sū 11.14a.
93. See *CS* Sū 11.18-26c.
94. See *CS* Sū 11.26d-32. On the section starting with the classification of all that exists as *sat* and *asat*, and on the subsequent general treatment of the means of examination, see Dasgupta 1922: 373-377 (with extensive reference to Cakrapāṇidatta’s commentary) and 398-401, and Biarreau 1964: 444-446. On the section where examination is applied to repeated existence, see Dasgupta 1922: 406-408.

Chattopadhyaya considers the section *CS* Sū 11.3-33 as an example of a discussion that does not have a legitimate place in a medical work; it is an “alien element” and has “the nature of a ransom offered to the counter-ideology without which it is not easy for the doctors to save their science” from the attacks by orthodox “law-givers,” even though this strategy results in the crippling of the science by its opposite; in Chattopadhyaya’s marxist–materialistic perspective, the “concession to the metaphysics of the soul” as evidenced in *CS* Sū 11.3-33 goes “against the fundamentals of medical science” and means “the rejection of the methodology of science,” according to which the primary epistemological position belongs to direct perception or empirical knowledge (Chattopadhyaya 1977: 375-378). For a diametrically opposed judgement cf. below, p. 27.

95. Literally: “looking all around”; on this etymology cf. Preisendanz 1994: 693.
96. Filliozat interprets *parīkṣā* as an “attitude of mind” (1993: 102) and speaks of it as a “faculty” that is “a characteristic of man, which he uses in normal conditions of health” (ibid., p. 110).

97. Cf. *CS Sū* 11.33: *evaṃ pramāṇaiś caturbhir upadiṣṭe punarbhave ...*; see also Roṣu's implicit observation regarding this important terminological issue (1978a: 88) which has been neglected by practically all other scholars concerned with the topic (for an exception, cf. Filliozat 1990: 34) who speak about the concept and number of the *pramāṇa*-s, etc., in the *Carakaśāhitā*, as if this generic term were well established there.
98. This may refer to a specific genre of teachings; cf. *CS Sū* 11.28. Cp. also the description of trustworthy persons (*āpta*) as *dharmadvārāvahita* in *CS Sū* 11.29.
99. *CS Sū* 11.17: ... *āptopadeśaṃ pratyakṣaṃ anumānaṃ yuktiś ceti*; in 11.27 the first knowledge source is termed *āptāgama*.
100. Cf. also Filliozat 1990: 45.
101. Cf. also Filliozat 1990: 38.
102. See *TS* 1691-1697. Cakrapāṇidatta was well aware of Śāntarakṣita's reference and criticism, as well as of Kamalaśīla's comments on these verses in his extensive commentary on *CS Sū* 11.25 he quotes *TS* 1691-1692, 1695 and 1697.
103. On Śāntarakṣita's exposition and criticism of *yukti* see Dasgupta 1922: 375f.; see also Filliozat 1993: 109 and especially 1990: 39-44, which includes a careful and well-reasoned criticism of Dasgupta's exposition, interpretational approach and final judgement.
104. See *CS Sū* 11.23-25: *jalakarṣabījartusayogāt sasyasambhavaṃ / yuktiṃ-dhā-tu-saṃyogād garbhāṇāṃ sambhavas tathā // mathyamantha-kamanthāna-saṃyogād agnisambhavaṃ / yuktiyuktā catuṣpādasampad vyādhinibarhaṇī // buddhiṃ paśyati yā bhāvān bahukāraṇayogajān / yuktis trikālā sā jñeyā trivargam sādhyate yayā //*; on these verses, see especially Filliozat 1990: 34-36. See further the exemplification of *yukti*, by way of application to the issue of repeated existence, in text segment 32, discussed in Filliozat 1990: 37 and, more extensively, in Filliozat 1993: 108-110: *yuktiś caiṣā dhātusamudayād garbhajanma, kartkaraṇasaṃyogāt kriyā, kṛtasya karmaṇ phalaṃ nākṛtasya, nāṅku-rot-pattir abījāt, karmasadrṣaṃ phalam, nānyasmād bījād anyasyotpattir iti yuktiṃ* (see also Roṣu 1978a: 84). My interpretation of *yukti* is close to that by Pierre-Sylvain Filliozat (see especially his paraphrase in Filliozat 1990: 35) and eventually concurs with Jean Filliozat's sensitive understanding of *yukti* as the attitude of mind of a practising physician, which is outlined on the basis of oral tradition in Filliozat 1993: 111 and, in more detail, in Filliozat 1990: 44 (see also Filliozat 1968: 441: "le traitement synthétisant de l'information"); Roṣu characterizes *yukti* as "l'idée d'un concours de plusieurs éléments qui, par ajustement rationnel, aboutissent à une représentation cohérente d'un phénomène (Roṣu loc. cit.; similarly Filliozat 1968: 440f.), which echoes and synthesizes further translation equivalents, or elements of them, suggested by Jean Filliozat (cf. Filliozat 1990: 44). Larson's evaluation of *yukti* as "heuristic reasoning" and referring to "an empirical

and, indeed, experimental scientific (in the modern sense) approach to reality and experience” (cf. Larson 1987: 250f.), which reminds one of Filliozat’s further understanding of *yukti* as referring to the establishment of a theory (Filliozat 1990: 44), also catches some of the “flavour” of *yukti*, even though his treatment of CS Sū 11.23-25 is quite unsatisfactory. On other usages of the word *yukti*, which is frequently used in the *Caraka-saṃhitā*, in a technical and non-technical sense, see Filliozat 1990: 37f.; Filliozat rightly stresses that it would be a mistake to look for one common character of these usages, beyond the broad etymological link, and unify the underlying notions (1990: 45).

For a study of the term *yukti*, with a focus on its employment in Buddhist literature, see Scherrer-Schaub 1981, where *inter alia* reference is made – in reliance on Biardeau’s treatment (cf. n. 94 above) – to the means of investigation called *yukti* in CS Sū 11 (p. 192). On the different types of *yukti* or “reasoning” in the *Abhidharmasamuccaya* and its commentary, see Prets 1994: 343-345.

105. *pramāṇa*-s according to Sū 11.33; cf. n. 97 above.
106. On the sequence of these *pada*-s adopted here, cf. p. 10 above.
107. Cf. Vidyabhusana 1921: 27. As Vidyabhusana himself is doubtful whether the doctrine that he summarizes under his first heading (“the aggregate of resources for the accomplishment of an action”) (cf. p. 5 above) is at all to be connected with Medhātithi Gautama’s “investigating [science]” (cf. Vidyabhusana loc. cit.), there is no need to enter into it here.
108. See Vidyabhusana 1921: 27.
109. Cf. Vidyabhusana 1921: 33 (followed, e.g., by Hedge 1976: 18, Solomon 1976: 80 and Sharma 1994: 362). See also, e.g., Filliozat 1968: 442 (“parole”) and Sharma and Dash 1994: 232 (“words”).
110. Thus the order adopted by Vidyabhusana. I could not yet clarify on which edition of the *Caraka-saṃhitā* Vidyabhusana based his research. However, this order is found in three early editions published in Kolkata accessible to the projects mentioned in n. 1, namely, the second edition of Jivananda Vidyasagara Bhattacharyya’s edition (Narayan Press 1896), and the editions with translations into Bengali by Avinash Chandra Kaviratna Kaviraj (Vidyaratna Press 1884/1885) and Yashodanandan Sarkar (second edition; Vangavasi Electro Machine Press 1910-1911). It is less probable that Vidyabhusana relied on the edition, with Marathi translation and notes, by Shankar Daji Shastri Pade (Mumbai: Yajneshvar Gopal Dikshit, Bookseller 1897-1898, with three further editions printed by various presses in Mumbai and Pune during 1901 and 1914).
111. See similarly Filliozat 1968: 442.

112. See CS Vi 8.38 (crit. ed.): *śabdo nāma varṇasamāmnāyaṃ. sa dr̥ṣṭārthaś cādr̥ṣṭārthaś ca satyaś cānr̥taś ceti. tatra dr̥ṣṭārthaṃ: tribhir hetubhir doṣāṃ prakupyanti, cabhir upakramaiś ca praśāmyanti, śrotrādisadbhāve śabdādigrahaṇam iti. adr̥ṣṭārthaṃ punaḥ: asti pretyabhāvaṃ, asti mokṣa iti. satyaṃ satyo nāma: santy āyurvedopadeśāṃ, santy upāyāṃ sādhyānām, santy ārambhaphalānīti. satyaviparyayāc cān[taṃ].* In this explanation, I understand the term *varṇasamāmnāya* as meaning “the collocation of [articulate] sounds” (cf. Böhtlingk 1883-1886: s.v. *samāmnāya*, 1) ... “Zusammenstellung”); such a collocation, i.e., a statement, may be true, but also untrue, namely, in the case of erroneous personal statements and statements based on unaccepted, unauthoritative rival traditions. It seems that the explanation adduced here stems from another context where human statements as such are classified, and not human statements as a means of knowledge relevant in debate, because in this latter context it would be redundant to characterize one type as true (*satya*) – a means of knowledge is true by definition –, whereas the characterization of its diametrically opposed type as untrue (*anr̥ta*) would be out of place. For another case of a discrepant explication of an term in the *pada* list, see, e.g., the explication of the term *hetu* referred to in n. 54 above and addressed on p. 28 below. As already indicated by Frauwallner (1984: 70, n. 16), the explanations of the individual *pada*-s should not necessarily be considered as originally linked to the *pada*-s in the list; they are thus not necessarily authoritative as regards the interpretation of the listed terms.
113. On the numbering of this *pada* cf. again above, p.10.
114. Cf. the subsequent explanation in CS Vi 8.41 (crit. ed.) (on this segment numbering cf. above, p. 10): *aitihyaṃ nāmāptopadeśo vedādīṃ.*
115. Cf. also Frauwallner 1984: 70: “Mitteilung” and “Überlieferung.”
116. Cf. NS 1.1.7-8: *āptopadeśaṃ śabdaṃ. sa dvidvidho dr̥ṣṭādr̥ṣṭārthatvāt.*
117. See CS Vi 8.38, quoted above, n. 111.
118. See NBh 14,10-11 on NS 1.1.8: *yasyeha dr̥śyate rthaṃ sa dr̥ṣṭārthaṃ. yasyāmutra pratīyate so dr̥ṣṭārthaṃ. evam ṛ-lau-ki-kavākyānām vibhāga iti.*
119. See CS Sū 11.27: *tatrāptāgamas tāvad vedaṃ. yaś cānyo pi vedārthād aviparītaṃ parīkṣakaiṃ praṇītaṃ śiṣṭānumato lokānugrahapravṛtaṃ śāstravādaṃ sa cāptā gamaṃ. [...]* On this text segment see, e.g., Biarreau 1964: 445, Filliozat 1968: 441, Hedge 1976: 19, Chattopadhyaya 1977: 377, Roṣu 1978a: 92f. and Filliozat 1993: 102f. In the difficult characterization of trustworthy persons in the clinical context of diagnosis in CS Vi 4 (see below, p. 25), the term seems to be even further restricted to saintly persons whose knowledge is of a supernormal kind (see CS Vi 4.4; see also Filliozat 1968: 441 and Roṣu 1978a: 90).
120. See. CS Sū 11.18-19: *rajastamobhyaṃ nirmuktās tapojñānabalena ye / yesāṃ trikā lam amalaṃ jñānam avyāhataṃ sadā // āptāṃ śiṣṭā vibudhās te, teṣāṃ vākyam asaṃśayam / satyam, vakcyanti te kasmād asatyam nī rajastamāṃ //.* See also, e.g., Hedge 1976: 18 and Roṣu 1978a: 90f. on these verses.

121. Cf. *NS* 2.2.1-2: *na catuṣṭvam aitihyārthāpattisambhavābhāvaprāmāṇyāt. śabda aitih-yānarthān-ta-ra-bhā-vāt ... apratiṣedham.*
122. See *YD* 71,3-6. Ruben (1928: 40) already refers to the parallel judgement in Gaudpāda's *Bhāṣya* on *Sāṅkhyakārikā* (SK) 4 (cf. *GPBh* 9,13). See similarly *Jayamaṅgalā* (JM) 69,23-24; for a summary of the same position in the short commentaries *Sāṅkhyasaptativṛtti* and *Sāṅkhyavṛtti*, see Solomon 1974: 11f. In the commentary on the *Sāṅkhyakārikā* translated into Chinese by Paramārtha, *aitihya* is not specifically mentioned, but certainly one among the six possible further sources of knowledge to be included in *āptavacana* ("statement of trustworthy persons" / "trustworthy statement"), the term employed in SK 4 for the means of knowledge under discussion here (see Takakusu 1904: 984).
123. For the order of the *pada*-s, cf. above, p. 10.
124. This numbering follows the order of the explanatory text segments established in the new critical edition of *CS* Vi 8; cf. above, p. 10.
125. This uncertainty is based on the doubtful status of the subsequent characterizations and exemplifications of the individual items in the list; cf. n. 111 above.
126. Frauwallner (1984: 72), who disregards the internal associative logic possibly at the basis of the order of terms in the *pada* list, simply assumes that *sambhava* (as well as the preceding item *arthaprāpti*) is part of a series of terms starting with *śabda* and referring to means of knowledge, even though other terms intervene.
127. See *NBh* 99,10-12: *sambhavo nāmāvinābhāvino rthasya sattāgrahaṇād anyasya sattāgrahaṇam. yathā droṇasya sattāgrahaṇād ṅhakasya sattāgrahaṇam ṅhakasya grahaṇāt prasthasyeti.* See on this characterization, also, e.g., Solomon 1976: 451. For further references to various characterizations, descriptions and illustrations of *sambhava* found in the classical literature, inclusive of the medical tradition, see Oberhammer et al. 2006: s.v. *sambhava*.
128. Oberhammer (1991: s.v. *arthaprāpti*) assumes that "judging from the linguistic form" (?) ("der sprachlichen Form nach") *arthaprāpti* is an older variant of the term *arthāpatti*. *prāpti* (intransitive) and *āpatti* (and other derivations of the underlying verbal root) are indeed used synonymously, although I would refrain from construing a historical priority of either one to the other.
129. Cf. *CS* Vi 8.83 (crit. ed.): *dvividhā parīkṣā jñānavatāṅ pratyakṣam anumānaṃ ca. etat tu dvayam upadeśaś ca parīkṣātrayam. evam eṣā dvividhā parīkṣā, trividhā vā sahopadeśena.*
130. See also Cakrapāṇidatta's remarks about the lack of the item *yukti* in Vi 4.5 (cf. below) and Vi 8 (specifically in the *pada* list) and his explanation of this situation in his commentary on *Sū* 11.25 (AD 72a,5-15), already pointed out in Filliozat 1990: 42.
131. Cf. *CS* Vi 4.3: *trividham khalu rogaviśecavijñānaṃ bhavati; tadyathā - āptopadeśam pratyakṣam anumānaṃ ceti.* See also, e.g., Biardeau 1964: 446f., Filliozat 1968: 440, Roṣu 1978a: 88 and Filliozat 1990: 33.

132. Cf. *CS Vi 4.5*: [...] *trividhe tv asmin jñānasamudaye pūrvam āptopadeśāj jñānam, tataṃ pratyakṣānumānābhyāṃ parīkṣopapadyate. kiṃ hy anupadicmaṃ pūrvam yat tat pratyakṣānumānābhyāṃ parīkṣamāṇo vidyāt. tasmād dvidihā parīkṣā jñānavatām - pratyakṣam anumānaṃ ca; trividhā vā sahopadeśena*. On this, see also, e.g., Filliozat 1968: 441 and Hedge 1976: 18.
133. See *CS Vi 4.6* for instruction, 4.7 for sense perception and inference, and 4.8, where further medically relevant things and conditions which are primarily known by means of inference are added. For a translation of the sequence *CS Vi 4.3-8* see also Chattopadhyaya 1977: 89-92.
134. Cf. *CS Vi 4.7*: [...] *pratyakṣato 'numānād upadeśataś ca parīkṣaṇam uktam*.
135. See *CS Vi 4.4*: [...] *anumānaṃ khalu tarko yuktyapekṣam*. On this, see also Hedge 1976: 18, Roṣu 1978a: 84 and Filliozat 1990: 38.
136. Cf. *CS Vi 8.42* (crit. ed.) (on this new numbering of the established text segments of *CS Vi 8*, see above, p. 10): *anumānaṃ nāma tarko yuktyapekṣam*. [...]
137. On the various schemes of *pramāṇa*-s in the *Carakasamhitā*, though interpreted in a different, synthetic manner, see also Hedge 1976. For a synthetic and ahistorical approach to the topic of means of knowledge in Āyurveda, with frequent references to the relevant passages in the *Carakasamhitā* (as well as other classical works) and consideration of the practical relevance for practitioners of Āyurveda, see, e.g., the exposition in Narasimhacharyulu's text book written according to the C.C.I.M. syllabus (Narasimhacharyulu 2004: 189-344).
138. See Roṣu 1978a: 77f. with reference to the distinction of three "schools" of Hippocratic medicine: philosophical, practical and observational–rational with scientific intentions.
139. On this point see also Filliozat (1968: 440) who assumes that analogy was denied the status of an independent means of proof by the physicians.
140. On the sequence of these *pada*-s, cf. again p. 10 above.
141. See also n. 111 above.
142. Cf. *CS Vi 8.33* (crit. ed.): *hetuṃ: hetur nāmopalabdihikāraṇam. tat pratyakṣam anumānam aīthyam aupamyam iti. ebhir hetubhir yad upalabhyate tat tattvam*. On *Vi 8.33* see further Kang 2007: 55-63.
143. See *SS Sū 1.16*: *tasya (scil. āyurvedasya) aṅgavaram ādyaṃ pratyakṣāgamānumānopamānair aviruddham ucyamānam upadhāraya*.
144. Cf. n. 2: *āgamapratyakṣānumānopamānaiṃ* instead of *pratyakṣāgamānumānopamānaiṃ*.
145. Cf. *Nibandhasaṅgraha (NiS) 4b,9-10*: *āgamasya pratyakṣaphalatvād varīyastvam. tenānumānāt pūrvam nirdiṣṭavān*.

146. See AS Sū 20, p. 193a,18-20 (= Sū 20.18 according to the edition by Ananta Damodar Athavale, Poona 1980): *suśrutam punam paṅhati: ... tad evam etāni vāyvādirūpakarmāṇ avahitam samyag upalakṣayed āgamapratyakṣānu-mānaiḥ*. I owe this reference to Dr. Ernst Prets, Vienna.

ABBREVIATIONS AND REFERENCES

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- Aś* *Arthaśāstra*, ed. in R. P. Kangle, *The Kauṭīlīya Arthaśāstra*. Part I. A Critical Edition with a Glossary. University of Bombay Studies – Sanskrit, Prakrit and Pali 1. Bombay 1960.
- AS* *Aṣṭāṅgasamgraha*, ed. in Govardhansharma Chhanganee, *Aṣṭāṅgasamgraha (Sūtrasthānam) by Shrimad-Bagbhatacharya (Based on Old Bagbhat) with Excellent 'Asthaprakashika' Commentaries*. Kashi Sanskrit Series 157. 7th ed. Varanasi 1991.
- ĀD* *Āyurvedadīpikā* of Cakrapānidatta, ed. in CS
- GPBh* *Gauḍapādabhāṣya*, ed. in Esnoul 1964
- JM* *Jayamaṅgalā*, ed. in Vishnu Prasad Sharma and Satkarisharma Vangiya, *Sāṃkhya-Kārikā of Śrīmad Īśvarakṛṣṇa ... and the Jayamaṅgalā of Śrī Śāṅkara*. Chowkhamba Sanskrit Series 296 (Work 56). 2nd ed. Varanasi 1970.
- CS* *Caraka-saṃhitā*, ed. in Vaidya Jadavji Trikamji Acharya, *The Carakasamhitā of Agniveśa. Revised by Caraka and Dṛhabala. With the Āyurveda-Dīpikā Commentary of Cakrapānidatta*. 3rd ed. Bombay 1941.
- CS* Text of CS Vimānasthāna 8 as critically edited in the projects mentioned in n. 1 (crit. ed.) above; publication forthcoming.
- TS* *Tattvasamgraha* of Śāntarākcita, ed. in Swami Dwarikadas Shastri, *Tattvasamgraha of Ācārya Shāntarākcita with the Commentary 'Pañjikā' of Shri Kamalashīla*. Vol. 1. Bauddha Bharati Series 1. Varanasi 1968.
- NĀA* *Nyāyāgamānusāriṇī* of Siṃhasūri, ed. in Muni Jambuvijayaji, *Dvādaśāraṇa Nayacakraṇ of Ācārya Śrī Mallavādi Kṣamāśramaṇa With the Commentary Nyāyāgamānusāriṇī of Śrī Siṃhasūri Gaṇi Vādi Kṣamāśramaṇa. Part I (1-4 Aras)*. Śrī Ātmānand Jain Granthamālā 92. Bhavnagar 1966.
- NiS* *Nibandhasamgraha* of Dalhaṇa, ed. in SS
- NBh* *Nyāyabhāṣya* of Vātsyāyana, ed. in Anantalal Thakur, *Gautamīyanyāyadarśana with Bhāṣya of Vātsyāyana*. Nyāyacaturgranthikā 1. New Delhi 1997.
- NM II* *Nyāyamañjarī* of Jayanta Bhaṭṭa, a, ed. in K. S. Varadacarya, *Nyāyamañjarī of Jayantabhaṭṭa, with Tīppaṇī Nyāyasaurabha by the Editor*. Vol. II. University of Mysore Oriental Research Institute Series 139. Mysore 1983.

- NV *Nyāyavārttika* of Uddyotakara, ed. in Anantalal Thakur, *Nyāyabhāṣyavārttika of Bhāradvāja Uddyotakara*. Nyāyacaturgranthikā 2. New Delhi 1997.
- NS *Nyāyasūtra*, ed. in Ruben 1928
- P Pāṇini's *Aṣṭ, ādhyāyī*, ed. in Böhtlingk 1887.
- PT *Pañcatantra*, ed. in M. R. Kale, *Pañcatantra of Viṣṇuśarman*. Bombay 1912. Reprint Delhi 1986.
- PV *Pramāṇavārttika* of Dharmakīrti, ed. in Rahula Sankrityayana, *Dharmakīrti's Pramāṇavārttika with a Commentary by Manorathanandin*. Appendix to *Journal of the Bihar and Orissa Research Society* 24-26 (1938-1940) (IV, 16, 531, 51 pp.).
- PSV *Pramāṇasamuccaya*[v] of Dignāga (*Tshad ma kun las btus pa'i 'grel pa*), translation by Vasudhararakcita and SeE rgyal, in Daisetz T. Suzuki (ed.), *The Tibetan Tripitaka. Peking Edition*. Vol. 130. Tokyo – Kyoto 1957, No. 5701.
- BṛU *Bṛhadāraṇyaka-Upaniṣad*, ed. in Olivelle 1998
- YD *Yuktidīpikā*, ed. in Albrecht Wezler and Shujun Motegi, *Yuktidīpikā. The Most Significant Commentary on the Sāṃkhyakārikā*. Alt- und Neu-Indische Studien 44. Stuttgart 1998.
- YP *Yatidharmaprakāśa*, ed. in Patrick Olivelle, *Vāsudevāśrama Yatidharmaprakāśa. A Treatise on World Renunciation. Critically Edited with Introduction, Annotated Translation and Appendices*. Vol. 1. *Text*. Publications of the De Nobili Research Library 3. Vienna 1976.
- *VP **Vaidalyaprakaraṇa*, attributed to Nāgārjuna, ed. in Tola and Dragonetti 1995.
- ŚU *Śvetāūvatara-Upaniṣad*, ed. in Olivelle 1998
- SāS *Sārasaṃgraha* of Varadarāja, ed. in Vindyeshvari Prasad Dvivedi, *Tārikarakṣā śrīmadācāryavaradarājaviracitā tatḥkṛtasārasaṃgrahābhīdhavyākhyāsaḥitā*. 2nd ed. Varanasi 1903.
- SK *Sāṃkhyakārikā*, ed. in YD and GPBh
- SS *Suśruta-saṃhitā*, ed. in Jadavji Trikamji, *Suśrutasaṃhitā of Suśruta with the Nibandhasaṃgraha Commentary of Śrī Dalhaṇāchārya*. 3rd ed. Bombay 1938.

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