An Inquiry into the Definition of *tarka* in Nyāya Tradition and Its Connotation of Negative Speculation

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Abstract The technical term "tarka" in the Nyāya tradition is the object of the present investigation. Diverse texts including Buddhist ones exhibit a negative estimation of activities using tarka. In contrast, more often than not, later treatises dealing with logico-epistemic problems, especially certain Naiyāyika works, identify the methodological peculiarity of Nyāya with tarka. Such an ambivalent attitude toward tarka can be understood in a coherent way if the essential features of tarka that gave rise to it can be grasped. Starting from the Nyāyasūtra 1.1.40 and the explanation given in the Nyāyabhāsya on it, the present researcher sorted out three characteristic features of *tarka* in the early Nyāya tradition. These three features focus on the main feature of tarka: namely, reflective analysis without requiring further factual information on the object of investigation. Based on this, the present researcher critically reviewed what promoted an understanding of tarka as a reductio ad absurdum argument or an a priori reasoning. Furthermore, certain passages from the Nyāyamañjarī, Nyāyakalikā, and Tarkasangraha were examined to demonstrate that the present researcher's interpretative understanding of tarka was adequate for explaining the usage of this term in a broad sense, with positive connotations.

Keywords Tarka · Tarkin · Vibhāga · Nyāya

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Tarka

'Tarka' is a technical term that occupies a significant position in the logico-epistemological traditions in India. The exact technical meaning of it, however, especially in the early Nyāya tradition, remains unclear. A widespread negative attitude towards reasoning associates with it the blind tendency to rely exclusively on human intelligence and argumentation. Indeed, more often than not the unbridled trust connoted by the term 'tarka' is felt to be dangerous. The Buddhist tradition is no exception in its harbouring such an outlook. In the Brahmajālasutta, for instance, we find a negative evaluation of those who practise tarka (tarkin, Pāli: takkin). By contrast, some later Naiyāyika authors use this term in an obviously positive sense to represent their own tradition. Two good examples are the Tarkasangraha of Annambhaṭṭa and the Tarkabhāṣā of Keśavamiśra. Even a later Buddhist author, Mokṣākaragupta, and a Jaina author, Yaśovijaya, have chosen the title Tarkabhāṣā for their short introductory works on the philosophy of their own traditions.

The term itself has a complex history of development, which I shall not try to delineate within the limited scope of this paper. What I do hope to show is that there may be a core meaning to this term—despite its observable ambiguity—in the $Ny\bar{a}yas\bar{u}tra$ (= NS) and the $Ny\bar{a}yabh\bar{a}sya$ (= NBh), and other relevant texts in the early Indian debate traditions. If a core meaning of 'tarka' can be identified, one which shines through the divergent usages, it may be possible to gain some insight into why the term has become loaded with negative connotations but at the same time could be understood as the representative method of the Nyāya tradition by some later Naiyāyika-s.

Such historical clarification is urgently needed as a counterbalance to discussions that lack any serious consideration of textual material and ignore the historical backdrop against which the concrete meaning of this technical term in Indian philosophy must be viewed in order to be understood. In cases where the basic research into the history of Indian philosophy has still to be done (and such is the case with *tarka* in my estimation), there is a tendency to fill this lack with pseudological methods, seemingly using the terminology of modern logical and established philosophical concepts properly, but in incongruous contexts—owing to ignorance of the complexity of the given topics in both Indian and Western philosophy.⁴

⁴ Bharadwaja (1981a, pp. 533–534; 545 and 1981b, p. 504, n. 14), for example, seems unable to differentiate early Nyāya from Navya-Nyāya traditions, or to tackle the harder question of whom or what he means by "Nyāya thinkers," "Nyāya logicians" and "Nyāya literature." He has said in Bharadwaja (1981a, p. 532), that "... there are at least three features of tarka which each one of the Nyaya thinkers seems to have subscribed to: ..." and in (1981b, p. 501): "This possibility is considerable in the context of a philosophical discussion on the concept of tarka, for the word lacks any one generally agreed-upon usage, and it defies all attempts to translate it correctly into English."



¹ Halbfass (1988, pp. 279–280).

² Cf. DN I, 16 and MN I, 520 and Halbfass (1988, p. 279).

³ Mokṣākaragupta lived probably between 1050 and 1292, and only one single treatise by him is known; see Steinkellner and Much (1995, p. 106). I have found no passage dealing with the term 'tarka' in this Buddhist work. The Jain treatise with the same title, Tarkabhāṣā, composed by Yaśovijaya (seventeenth to eighteenth century) was not available to me. In these two introductory works, the authors seem to consider tarka not as a well-defined method of argumentation or deliberation, but rather as a generally applicable type of human intellectual activity not bound up with the Nyāya tradition.

Tarka in the Nyāyasūtra and Nyāyabhāsya

In NS 1.1.40 we can find an explanation of tarka:

avijñātatattve 'rthe kāraṇopapattitas tattvajñānārtham ūhas tarkaḥ

Deliberation is [a type of] reflection in which reasons are given [for assumptions] regarding an object whose [true] nature is not known in order to obtain knowledge of its [true] nature.

Ruben seems to take the main purpose of $\bar{u}ha$ in this $s\bar{u}tra$ as being expressed by $k\bar{a}ranopapattitas$:

"Überlegung" ist die Prüfung in Bezug auf einen Gegenstand, dessen Wesenheit [bislang] nicht erkannt ist, eben zum Zweck der Erkenntnis [seiner] Wesenheit unter dem Gesichtspunkt, ob dieser oder jener Grund zutrifft.⁵

Ruben apparently reads the suffix °tas in its locative sense. To better understand the meaning of this sūtra, we can consult a passage from NBh 1.1.1, in the general introduction, where tarka is explained:

tarko na pramāṇasaṅgṛhīto na pramāṇāntaram. pramāṇānām anugrāhakas tattvajñānāya kalpate.

tasyodāharaṇam: "kim idaṃ janma krtakena hetunā nirvartyate, āho svid akrtakena, athākasmikam" "ity evam avijñātatattve 'rthe kāraṇopapattyā \bar{u} hah pravartate.

. .

etasmiṃś ca⁹ tarkaviṣaye "karmanimittaṃ janma" iti pramāṇāni pravartamānāni tarkeṇānugṛhyante. tattvajñānaviṣayasya ca¹⁰ vibhāgāt tattvajñānāya kalpate tarka iti. so 'yam itthambhūtas tarkaḥ pramāṇasahito



⁵ Ruben (1928, p. 13).

⁶ Nakamura (1983, p. 196) seems to follow this translation.

⁷ NBh^T: utākasmikam.

In the following I consider and record mainly cases where the three most important manuscripts of the $NBh \, (NBh^{11}, NBh^{12} \, {\rm and} \, NBh^{\rm T})$ are strongly indicative of a reading substantially diverging from the *textus receptus*. On the manuscripts mentioned, see n. 19 below. In any case, the notation of variant readings will not be a complete and systematic one. My choices are rather arbitrary and sporadic.

⁸ NBh^T: om. evam avijñātatattve ... ūhah pravartate.

⁹ NBh^{J1} . NBh^{J2} and NBh^{T} : ca.

¹⁰ Textus receptus: om. ca.

vāde sādhanāyopālambhāya cārthasya bhavatīti¹¹ pṛthag ucyate prameye 'ntarbhūto¹² 'pīti.¹³

Tarka is not included among the means of valid cognition, nor is it a distinct means of valid cognition. [But] since it supports the means of valid cognition, it conduces to knowledge of the [true] nature.

An example of this: "Is rebirth brought forth by a created cause or perhaps by an uncreated one, or is rebirth not caused [at all]?" In this way reflection proceeds by furnishing persuasive reasons [for assumptions] regarding an object whose [true] nature is not known.

. . .

Regarding this object of deliberation, when the means of valid cognition are applied, they are supported by deliberation [in order to come to the conclusion that], "Deeds are the instrumental cause of rebirth." And the deliberation is conducive to knowledge of [true] nature, on the basis of distinctions made [regarding] the object of knowledge whose true nature [is sought]. This same kind of deliberation entails the proof or refutation of [some proposition about] an object [examined] discursively in tandem with [some] means of valid cognition, [as explained in *NS* 1.2.1]. [For this reason] it is mentioned separately, although it is included under the [heading of] what is to be proved [by means] of valid cognition.

In the following I will discuss the meaning of 'tarka' in the NBh in terms of three important features of it identified by Vātsyāyana: $k\bar{a}ranopapatti$, avijnatatattve 'rthe and vibhaga.

Kāraņopapatti

The passage in the *NBh* "evam avijñātatattve 'rthe kāranopapattyā ūhaḥ pravartate" following the one example of tarka (tasyodāharanam: "kim idam janma kṛtakena hetunā nirvartyate, āho svid akṛtakena, athākasmikam" ity) calls for special attention. In this passage kāranopapattyā is in the instrumental case, indicating that ūhaḥ proceeds by furnishing persuasive reasons (kāranopapattyā).

¹⁴ The reader should note here the allusion to NS 1.2.1.



¹¹ Textus receptus: bhavatīty evam artham; NBh^{J1}, NBh^{J2} and NBh^T: bhavatīti.

 $^{^{12}}$ NBh^{11} reads prameye $ntarbh\bar{u}to$, and NBh^{12} reads prameye $n(?)tarbh\bar{u}to$. The textus receptus reads $prameya\bar{n}tarbh\bar{u}to$. But NBh^{T} seems to testify the reading $prama\bar{n}a\bar{n}tarbh\bar{u}to$ hi(?) confirmed by a Devanāgarī transcription in Chennai) $prama\bar{n}asahitop\bar{u}deyavad$ ista iti. The reading $prama\bar{n}a\bar{n}antarbh\bar{u}ta$ conflicts with the stance of Vardin to the passage of the <math>NBh explaining pramaya we find the passage pramayah the prameyantarbhuta prameya pramey

 $^{^{13}}$ $NBh(E_D)$, pp. 4, 19–5, 6 ad NS1.1.1. $NBh^{\rm J1}$ fol.2r15-2v5, $NBh^{\rm J2}$ fol.282v7-283r1 and $NBh^{\rm T}$ fol.2v4-9.

This sentence suggests that the following consideration of three possibilities, each backed by reasons, means that tarka, too, proceeds by furnishing persuasive reasons $(k\bar{a}ranopapatty\bar{a})$. According to this interpretation, the " $k\bar{a}ranopapatti$ " in NS 1.1.40 refers to the reasons furnished for each possibility. Provided that this interpretation is justified, the passage " $evam\ avij\bar{n}\bar{a}tatattve$ ' $rthe\ k\bar{a}ranopapatty\bar{a}\ \bar{u}hah\ pravartate$ " implies that $\bar{u}ha$, taken as the content of tarka, is generated by consideration of the reasons postulated for each possibility. This means in practical terms, first, that the reason for each assumption is, at least epistemologically, furnished before the tarka process begins, and, secondly, that the reasons $(k\bar{a}rana)$ relating to any concrete case are considered only after dealing with hypothetical cases. In this way we come to understand Jha's translation for 'tarka' as 'hypothetical reasoning'. tarka

Interestingly enough, the significant passage "evam avijñātatattve 'rthe $k\bar{a}$ raṇopapattyā \bar{u} haḥ pravartate" is omitted in manuscript NBh^{T} . Perhaps this passage was inserted between the examples of tarka with a slightly revised wording of NS 1.1.40 to make the interpretation given in the NBh more straightforward. If this is the case, this insertion likely took place in the earliest phase of the text transmission of the NBh, before the hypothesized divergence of NBh^{T} from NBh^{J} and the textus t19

Avijñātatattve 'rthe

The initial state of affairs is that the true nature (*tattva*) of the object to be investigated is not known in full. Here, *tattva* does not mean the truth in the sense of "unitary essence," but rather "suchness" (which is close to the literal meaning of the word) or "the condition that allows for valid representation [of the object] in

¹⁹ Any fruitful discussion of passages from the NBh requires some consideration of the transmission of the text of the NBh. The NBh text reproduced in numerous editions and preserved in the majority of the manuscripts and editions of the sub-commentaries on the NBh represents the line of the textual transmission I designate *textus receptus*. On the manuscript transmission of the NBh in general, see Muroya (2006a), and on the relation between the *textus receptus* and later commentaries see Muroya (2006b). During the process of collecting and evaluating all the available manuscript material for the new critical edition of the NBh mentioned in the acknowledgements below, we soon became aware that the manuscripts NBh^{11} and NBh^{12} from Jaisalmer and NBh^{T} from Trivandrum are very close to the archetype of the NBh, in contrast to all other manuscripts, most of which go to form the *textus receptus*. On the basis of dates given in manuscripts bound in the same bundles with NBh^{11} and NBh^{12} , we can estimate the date of NBh^{11} as *saṃvat* 1501 (~1444 A.D.) and that of the NBh^{12} as "saṃvat 1279 $bh\bar{a}drapada$ vadi 13 likhitam" (~5th September 1222 A.D). NBh^{12} is at present the oldest dated manuscript and very probably the oldest available manuscript of the NBh.



¹⁵ The last part of *NBh* 1.1.40 cited below supports this interpretation. I prefer the above translation to 'possibility' for '*upapatti*'. If one of the alternative possibilities is considered merely on the basis of some supporting reason, this reason is not a viable one within the framework of a *tarka*. It would be a viable reason only in the sense that it is not verbally formulated in a supporting argument (*parārthānumāna*)—a distinction not made in the *NS*. Accepting the difference formulated by Dinnāga would run a high risk of being anachronistic.

¹⁶ The mere possibility of some postulated reason will not in itself set a weighing of alternative possibilities in motion.

¹⁷ Jhā (1912–1919, p. 446).

¹⁸ *NBh*^T, fol.2v5.

thought and speech," in the epistemological context of Nyāya. Since the object of tarka is not fully known in detail, the given representation can be neither completely confirmed nor disproved; this is a necessary precondition for the application of tarka. The expression " $tattvajñānārtham \bar{u}has$ " in NS 1.1.40 implies that tarka aims at a cognition or representation corresponding fully with the object. In this context the last part of NBh 1.1.40, where Vātsyāyana explains the meaning of " $tattvajñānārtham \bar{u}has$," is very significant for our discussion:

katham punar ayam tattvajñānārtho na tattvajñānam eveti.

anavadhāraṇāt. anujānāty ayaṃ ekataraṃ dharmaṃ kāraṇopapattyā na tv avadhārayati na vyavasyati na niścinoty evam evedam iti. kathaṃ tattvajñānārtha iti.

tattvajñānaviṣayābhyanujñālakṣaṇād ūhād bhāvitāt prasannād anantaraṃ pramānasāmarthyāt tattvajñānam utpadyata iti.²¹

so 'yam tarkah pramāṇāni pratisandadhānah pramāṇānugrahād²² vāde pramāṇasahita upadiṣṭa²³ iti. "avijñātatattve 'rthe" iti yathā so 'rtho bhavati sa tasya²⁴ tathābhāvas tattvam aviparyayo yāthātathyam iti.^{25,26}

Why then is [tarka explained in NS 1.1.40] as [something engaged in] "in order to obtain knowledge of [an object's true] nature" and not as "knowledge of the [true] nature [itself]"? On account of undecidability. Tarka [in] this [understanding of it] accepts one of two qualities on the basis of a given reason, but does not decide, determine or ascertain [anything] in the form "This is such [and not otherwise]." Why [then] is it told "in order to obtain knowledge of the [true] nature"? The means of valid cognition being what it is, knowledge of [an object's true] nature follows directly from [a type of] reflection ($\bar{u}ha$) characterised by [its resulting in some] distinction being admitted concerning the object knowledge of whose [true] nature [is being sought].

This [understanding of] *tarka* enhances the means of valid cognition, for it accepts [what] the means of valid cognition [yields], and therefore, [in *NS* 1.2.1,] it is accounted on a par with the means of valid cognition in debate. "Regarding an object whose [true] nature is not known" refers to something of such and such a nature that does not deviate from its [true] nature—[in other words displays] a correspondence with this nature.

See *NBh* I, 1, 1 (Calc. S. S., p. 24): *kiṃ punas tattvam? sataś ca sadbhāvo 'sataś ca-asadbhāvah. Tattva* in this sense is the condition of the possibility of valid representation in thought and speech, and it indicates a fundamentally epistemological perspective on being.

See also the last sentence in the cited passage from NBh 1.1.40 below: so 'rtho bhavati sa tasya tathābhāvas tattvam aviparyayo yāthātathyam.

 $^{^{26}}$ $NBh(E_D)$, p. 37, 3–9; NBh^{J1} , fol.9r8-11; NBh^{J2} fol.292r4-7; NBh^{T} fol.14r1-4.



²⁰ Halbfass (1992, p. 167, n. 115):

²¹ Textus receptus: ity evam tattvajñānārtha iti. NBh^{J1}, NBh^{J2} and NBh^T: iti.

²² NBh^{J1}, NBh^{J2} and NBh^T: pramānānugrahād; textus receptus: pramānābhyanujñānāt.

²³ Textus receptus: pramāṇasahito vāde 'padiṣṭa; NBh^{J1}, NBh^{J2} and NBh^T: vāde pramāṇasahita upadiṣṭa.

²⁴ Textus receptus: tasya; NBh^{J1}, NBh^{J2} and NBh^T: sa tasya.

²⁵ Textus receptus: om. iti; NBh^{J1}, NBh^{J2} and NBh^T: yāthātathyam iti.

The explanations given in NBh 1.1.40 for the most part agree with those given in the introductory part of the NBh, even if small differences are observable. Still, further detailed study and interpretation of the text are required.

Contrary or Contradictory

To advance the discussion we now examine the explanation given in *NBh* 1.1.40: avijñāyamānatattve 'rthe jijñāsā tāvat pravarttate²⁷ "jānīyedam²⁸ artham²⁹" iti. atha jijñāsitasya vastuno vyāhatau dharmau vibhāgena vimṛśati "kiṃ svid idam³⁰ āho svin nettham" iti.

vimṛśyamānayor dharmayor ekataraṃ kāraṇopapattyānujānāti, "sambhavaty asmin kāraṇaṃ pramāṇaṃ hetur." iti. "kāraṇopapattyā syād evam etan netarad." iti. 31

Regarding an object whose [true] nature is not known, therefore, there becomes the desire to know active: "I would like to know this object." Then the consideration in the form "Is this so or rather is it not so?" occurs, with a distinction being made between two [possible] contrary qualities of the object one desires to know.

One of the two qualities considered is accepted for the given reason [in the form,] "There is reason [to incline towards] this [quality]—[in other words,] a means of valid cognition or a cause." "On the basis of the given reason this [object] ought to be so and not otherwise."

The example of tarka given in NBh 1.1.40 is remarkably different from the one given in NBh 1.1.1. The example of tarka in NBh 1.1.40 represents an $\bar{u}ha$ relating to two mutually exclusive possibilities; that is, there are no other logical possibilities. This, however, does not seem to be the case in the example found in NBh 1.1.1. The question, though, is not which of the two is the more compelling. The example given in NBh 1.1.1 is a case involving the choice not among three contrary alternatives, but between only two alternatives, one of which breaks down into two contradictory sub-alternatives. Understood in this way, $\bar{u}ha$ in NBh 1.1.1 and 1.1.40 in the context of tarka announces two contradictory possibilities, which may unfold a further complex structure out of the contradictory alternatives. In any case, it seems to me reasonable to accept that the examples given in the NBh for tarka are idealized cases, for it would be senseless to confine the scope of tarka to cases entailing contradictory alternatives. But this point needs to be considered in close connection with the usage of the term ' $jijn\bar{a}s\bar{a}$ ' in NBh 1.1.40.

In NBh 1.1.40, unlike in NBh 1.1.1, the explanation of tarka makes use of the term ' $jij\tilde{n}\bar{a}s\bar{a}$ '. This term is generally associated with a situation in which a decision

³¹ $NBh(E_D)$, p. 36, 6–9; NBh^{J1} fol.9r2-3; NBh^{J2} fol.291v8-9; NBh^{T} fol.13v4-6.



²⁷ Textus receptus: jāyate; NBh^{J1}, NBh^{J2} and NBh^T: pravarttate.

 $^{^{28}}$ NBh^{J1} , NBh^{J2} and NBh^{T} : $j\bar{a}n\bar{t}yedam$; textus receptus: $j\bar{a}n\bar{t}yemam$.

²⁹ NBh^{J1}, NBh^{J2}: om. artham; NBh^T: ittham.

³⁰ NBh^{J1}, NBh^{J2} and NBh^T: idam; textus receptus: ittham.

is called for, inasmuch as the given possibilities exclude each other. Here $jij\tilde{n}\bar{a}s\bar{a}$ implies that the investigation has been forced by circumstances and is indeed carried out. The fact that $jij\tilde{n}\bar{a}s\bar{a}$ is involved in the example given in NBh 1.1.40 may imply that tarka there was understood by Vātsyāyana as a deliberation between contradictory alternatives in its typical form. Provided this interpretation of $jij\tilde{n}\bar{a}s\bar{a}$ is right in the context of tarka, $vibh\bar{a}ga$ can be understood, in its basic meaning at least, as the act of differentiating: the tarkin (the one who engages in practising tarka) associates one quality with the object of cognition and weighs two contradictory possibilities corresponding to the quality.

Vibhāga

In the two passages NBh 1.1.1 and 1.1.40 we observe the explicit formulation that $vibh\bar{a}ga$ is a procedure used under tarka to enhance $tattvaj\bar{n}\bar{a}na$: $etasmim\acute{s}$ ca $tarkavi\check{s}aye$ "karmanimittam janma" iti $pram\bar{a}n\bar{a}ni$ $pravartam\bar{a}n\bar{a}ni$ $tarken\bar{a}nug-rhyante$. $tattvaj\bar{n}\bar{a}navi\check{s}ayasya$ ca $vibh\bar{a}g\bar{a}t$ $tattvaj\bar{n}\bar{a}n\bar{a}ya$ kalpate tarka iti^{33} (NBh1.1.1); and atha $jij\bar{n}\bar{a}sitasya$ vastuno $vy\bar{a}hatau$ dharmau $vibh\bar{a}gena$ $vimr\acute{s}ati$ "kim svid idam $\bar{a}ho$ svin nettham" iti^{34} (NBh1.1.40). This is an important point, one that, as far as I know, has been generally overlooked by scholars. 35 Tarka is a means of sizing up a certain state of affairs: all the given factual or logical possibilities are differentiated, and the logical and theoretical implications of them are drawn. It is not explicitly stated in the NBh that the deliberations under the $vibh\bar{a}ga$ are part of the tarka itself, but the formulation there suggests as much. If the weighing of the given possibilities involves not only logical but also epistemological considerations, the means of valid cognition $(pram\bar{a}na)$ can be introduced into tarka. The following passage from tarka tark

vimṛśyamānayor dharmayor ekataraṃ kāraṇopapattyānujānāti, "sambhavaty asmin kāraṇaṃ pramāṇaṃ hetur." iti. "kāraṇopapattyā syād evam etan netarad." iti. 36

 $^{^{36}}$ *NBh*(E_D), p. 36, 8–9.



 $^{^{32}}$ NBh 1.2.7 is another passage where $jij\tilde{n}\tilde{a}s\bar{a}$ is used not in the sense of 'desire to know' but in that of 'unavoidable consideration', in other words, 'unavoidable choice [between]' two contradictory possibilities: NBh 1.2.7 in NBh(E_D), p. 44, 6–8:

vimarśādhiṣṭhānau pakṣapratipakṣāv ubhāv anavasitau prakaraṇam. tasya cintā vimarśāt prabhrti prān nirnayād yat samīkṣaṇam, sā jijñāsā yatkrtā sa nirṇayārtham prayukta ubhayapakṣasāmyāt prakaraṇam anativartamānah prakaraṇasamo nirṇayāya na prakalpate.

^{&#}x27;Topic' (prakaraṇa) [in sūtra 1.2.7] refers to both, namely the position and the counter-position, which have been set forth for deliberation upon but not yet judged. The thought (cintā) devoted to this [topic], that is, the investigation that [proceeds] from deliberation to ascertainment, represents a wish to know [the truth]. The thought of which the deliberation consists is directed towards achieving ascertainment, but is not successful in bringing about ascertainment, for it cannot rise above the topic, given the commonality of the two positions [as topics].

³³ $NBh(E_D)$, p. 5, 3–4.

³⁴ $NBh(E_D)$, p. 36, 6–8.

The translations given in TSI vol. 2, p. 114a and Jha (1912–1919), p. 447 miss this point.

One of the two qualities considered is accepted for the given reason [in the form,] "There is reason [to incline towards] this [quality]—[in other words,] a means of valid cognition or a cause." "On the basis of the given reason this [object] ought to be so and not otherwise."

If such is the case, how can one demarcate the boundary between tarka and $pram\bar{a}na$ (or some other epistemological or dialectical methodology)? I suggest an interpretation of NBh 1.1.40 under which the main characteristic of tarka, as understood by Vātsyāyana, consists in the differentiating or analyzing procedure $(vibh\bar{a}ga)$ itself. The decision as to what combination of possibilities should be accepted for further consideration should be made on the basis of the reasons used to justify each possibility. To be sure, further logical reasons or new information can always be considered if the matter at hand admits of them. But in any case, the division into alternative possibilities should be carried out at the beginning, as part of the tarka. This analytic work need not wait upon additional factual information; indeed, it represents a coming to terms with the readily available information. This, in my opinion, defines the essence of the tarka.

A priori

The above-mentioned characterization of tarka given by Vātsyāyana is ambiguous enough to force readers to puzzle over its exact meaning. The explanation given in the $Ny\bar{a}yav\bar{a}rttika$ (= NV) adds nothing essential to what is offered in the NBh. This is a case where the meaning of a term is not immediately transparent. The reason for this blurred conceptual demarcation of tarka from other technical terms given in the NS is the historical circumstance that the editor(s) of the NS simply adopted unaltered the terms as they were generally accepted in the early debate traditions in ancient India. An additional circumstance hindering the interpretation of tarka is that although almost all technical terms in NS 1.1.1 are mentioned or explained (more often than not in variant forms) in other texts documenting the early debate traditions in ancient India (e.g. the Vādamārgapada section of the Carakasamhitā in CaS Vi. 8.27-66 or 方便心論 (=*Upāyahrdaya)), 'tarka' is a term which is neither mentioned by name nor otherwise alluded to.³⁷ In view of this, the explanation given in the NBh takes on greater importance. The important task for us is to clarify what is intended by the explanation of tarka given in the NS and NBh, so as to be able to understand later developments in the Naiyāyika and related traditions. Without any doubt, vibhāga was a term used by Vātsyāyana to mean analyzing the conceptual content of a tarka. I do not insist that the original meaning of tarka can only be understood and explained on the basis of this concept. But this latter occurs in the earliest available commentary on the NS, which occupies a

An overview of terms can be found in Kajiyama (1984, pp. 6–8). It is important to note, however, that the identicalness of terms does not imply that the same meaning is intended by them, or vice versa.



 $^{^{37}}$ This does not mean that tarka was generally unknown to or considered unimportant by other debate traditions in ancient India than the one attested to in the NS; confer n. 38 below. This seems to me to imply that it was its unstable meaning and status that led to the exclusion of tarka from the list of important terms, most of which were on their way to becoming established technical terms.

crucial place in the whole Nyāya tradition. Thus *vibhāga* as the conceptual scheme underlying a *tarka* is of considerably greater importance, at least in an historical sense, than other, later ones. We have, moreover, good reason to assume that Vātsyāyana understood *tarka* in the conventional meaning of his time and simply tried to offer an acceptable explanation of it. If that is so, his explanation affords easy access to the term, and will prove to be more than of merely minor historical value. The term '*tarka*' was not invented by Vātsyāyana, but he does offer a good conceptual grounding of the characteristic framework within which the term was used in Nyāya and other relevant traditions.³⁸

In consideration of these facts, it seems to me advisable to review some concepts used by modern authors to explain *tarka*. One widespread interpretational scheme for philosophical terminology is that of Matilal. Matilal holds that *tarka* as explained in the *NS*, *NBh* and *NV* "is a reasoning based only upon some *a priori* principle, or what comes closest in the Indian tradition to something *a priori*." ³⁹

The next component of the Nyāya method is called 'tarka', which takes the form of a supportive argument but unlike the previous one (scil. avayava-s), it is not directly based upon empirical evidence. The real nature of tarka (literally, 'reasoning', 'argument') has been the subject-matter of controversy among Indian philosophers throughout history. It transpired later in the history of Indian philosophy that we must understand by it some sort of a reductio ad absurdum, where an appeal to some absurdity or absurd consequence (prasanga) is made in order to lend an indirect support to a positive thesis. . . .

- ... For whatever a *tarka* is, it is not an inference based upon some empirical evidence. It is rather an argument where we use generally the *a priori* principles only, or what may be closest to the *a priori* principles in the Indian tradition. ...
- ... This indirect reasoning, which is called *tarka* in the Nyāya method, and which I am inclined to call *a priori* reasoning, is described under *Nyāyasūtra* 1.1.1 as that which is employed for the sake of the knowledge or truth but does not lead to a truth all by itself. Vātsyāyana and Uddyotakara explain that it cannot impart empirical knowledge by itself for it cannot generate the required certainty. Purely *a priori* certainty is not an acceptable certainty in a properly empirical philosophy!



³⁸ It should be clear that Vātsyāyana was in almost the same hermeneutical position in his time as we are at present. Concerning the broader usage of the term '*tarka*', especially in works of Śańkara, note the following useful remark in Halbfass (1991, pp. 134–135):

On the side of "reason," yukti and tarka are the most conspicuous and significant terms. Śańkara does not formally define these terms, nor does he use them in a strictly technical sense. He alludes to, but does not commit himself to, the technical meanings which the terms, in particular tarka, may have in other systems. In Nyāya, tarka, if used in a technical sense, is not a "means of knowledge" (pramāṇa) in the full sense, but rather an auxiliary method of hypothetical or circumstantial reasoning which is supposed to contribute to the elimination of doubt and to bring about some kind of conditional certainty. The definition given in Nyāyasūtra I, 1, 40 (avijñātatattve 'rthe kāranopapattitas tattvajñānārtham ūhas tarkaḥ) has been open to a variety of interpretations that often emphasize the negative, reductive functions of tarka, consisting in the elimination of false views rather than the establishment of truth. Although Śańkara must have been familiar with the Nyāya definition of tarka, other less technical uses were probably more significant to him. The word is already used, indicating various degrees of human "independence" or even of opposition to the sacred texts, in the Upaniṣads, the Mahābhārata, and other ancient texts. More specifically, Bhartrhari's usage of tarka (including the compound śuṣkatarka and puruṣatarka) seems to have had its impact upon Śańkara.

³⁹ Matilal (1998, p. 46). Earlier, in Matilal (1986, p. 79), he had formulated his understanding of *tarka* as follows:

The term 'a priori' is a Latin phrase that literally means 'from what is before'. The terms 'a priori' and 'a posteriori' (the opposite term), in philosophical usage, concern two different types of knowledge, namely ones that are respectively independent and dependent upon experience. This usage has been extended to apply to different types of arguments or other forms of justification (nowadays, for instance, even in the context of genetic research). This complex distinction has gone through numerous phases of development within the history of Western philosophy and is still open to further ones. 40 Roughly speaking, a priori is used in the Aristotelian tradition to denote the cognition resulting from preceding factors (πρότερον), in a much wider sense than used in Kant's philosophy. After some traces of a change in meaning in the writings of Jungius and Leibniz, the now common distinction that the origin of the cognition in question lies in pure reason (a priori) as opposed to experience (a posteriori) was established in the 18th century, especially in German-speaking countries. Kant's understanding and usage of this term in his transcendental philosophy determined its usage and meaning in the following period. The programme of Kant's transcendental philosophy—in its core part, the clarification of the possibility of cognition a priori—endows this term with extraordinary significance. Since the time of Kant it has generally been accepted that the distinction between a priori and a posteriori is a purely epistemological one. This means that it must not be confused with the distinction between the necessary and the contingent, which is a metaphysical one, or with that between the analytic and the synthetic, which is a semantic distinction.

In the characterization of *tarka* given in the *NBh*, it is obvious that the procedure called for by *tarka* does not rely on further perceptual or other experiential data, but it may involve expanded cognition of previously established facts. We should keep in mind that the reasons for each possibility considered within the framework of a *tarka* can be supplied by any means of valid cognition (*pramāṇa*); that is, not simply *a priori* cognition is admitted. Furthermore, what is crucial is the fact that the cognition that initiates the whole procedure of *tarka* is itself a perceptually based one, albeit one that is insufficiently informative. If this initiating cognition is counted as part of a *tarka*, one will run into serious problems manoeuvring *tarka* anywhere near to *a priori*-based cognition. If we want to interpret the explanation given in the *NBh* to mean that the *tarka* is epistemologically void of all experiential cognition, then the only way to do so would be to constrict the procedure so

One of the two qualities considered is accepted for the given reason [in the form,] "There is reason [to incline towards] this [quality]—[in other words,] a means of valid cognition or a cause." "On the basis of the given reason this [object] ought to be so and not otherwise."



⁴⁰ For a further discussion of *a priori*, confer Boghossian and Peacocke (2000), especially the introduction.

⁴¹ Once again I allude to the passage in the NBh(E_D), p. 36, 8–9: vimrsyamānayor dharmayor ekataram kāranopapattyānujānāti, "sambhavaty asmin kāranam pramānam hetur." iti. "kāranopapattyā syād evam etan netarad." iti.

narrowly as to include the logical analysis (*vibhāga*) of the given two alternative possibilities but to exclude any cognitive method for supplying factual data that support either of the two. But in any case this does not keep the basic data underlying the *tarka* from being epistemologically grounded in experience.

Tarka and Indirect Proof

In the early debate traditions in India, the term 'tarka' stands in a neat net of related terms with fluctuating meanings. For example, in Carakasaṃhitā (= CaS) Vi. 8.40 we find an explanation of inference (anumāna) in terms of 'tarka'. 42 The examples given in the NBh demonstrate that the distinctions made when engaging in tarka are intended to clarify the whole span of logical or factual possibilities, and so to exclude a number of possibilities from consideration. Thus tarka is used to root out false views and, in so doing, establish the truth only in an indirect way. The question remains whether tarka can be distinguished from other varieties of indirect proof widely known in ancient India. An argumentative strategy that first provides all alternative possibilities and then begins eliminating them one by one as unacceptable, until left with the last remaining possibility as the sole logical possibility applicable is what I shall designate as 'modus tollendo ponens'. The description of tarka given in NBh cited above shows strong parallels to this paradigm. 43 Obviously tarka is very similar to indirect argument. Indirect argumentation (this can be subdivided into theoretical and historical varieties) is commonly found in works of

 $^{^{43}}$ Readers may have noticed that I have been treating the epistemological context and the argumentational one promiscuously with regard to tarka. Already in the NS the focus of interest shifted from the argumentational ($v\bar{a}da$) to the epistemological ($pram\bar{a}na$). Numerous topics mentioned in the NS took on new connotations or were subjected to new interpretations vis-à-vis early $v\bar{a}da$ traditions. Vātsyāyana faced this as his starting point for his systematic interpretation of the NS, and he strengthened the tendency to focus on $pram\bar{a}na$ -s and other epistemological topics in the NBh. But this shift happened gradually, without any considerable theoretical upheaval, and this is reflected, in my estimation, by the fact that analyses subject to epistemological constraints often display very strong parallels with those subject to logical ones. A clear conceptual demarcation between epistemological and argumentational procedures was first drawn by Dinnāga, through his distinction between $par\bar{a}rth\bar{a}num\bar{a}na$ and $sv\bar{a}rth\bar{a}num\bar{a}na$, and it made itself felt in subsequent philosophical discourse. I will not take a theoretical stance regarding this distinction. But the lack of this distinction in my reading the NBh is intended both to avoid an anachronism and to reflect Vātsyāyana's way of thinking more accurately.



⁴² CaS Vi 8 40:

athānumānam – anumānam nāma tarko yuktyapekṣaḥ. Inference: What is called 'inference' is deliberation that meets the demands of logical and factual coherence.

^{&#}x27;Yukti' in the CaS probably means argumentation based on implication which cannot properly be conceived as mono-causal; cf. Kang (2003, p. 112). See also n. 47 below.

Nāgārjuna and in both Nyāya⁴⁴ and Sāṅkhya circles.⁴⁵ There are numerous texts that report that the indirect argument occupies an important position within the debate traditions in ancient India. But the relation as it was conceived between the different kinds of indirect arguments and *tarka* cannot be assessed on the basis of our present knowledge of these complex themes. The topic of indirect argument and proof in Indian philosophical traditions requires a detailed discussion, one beyond the scope of the present discussion. What can be undertaken here is to review the understanding of *tarka* as a *reductio ad absurdum* argument.

Reductio ad absurdum means literally 'reduction to absurdity' and denotes a type of logical argument used to refute a claim by pointing out contradictory or absurd consequences from one or more of its premises. Historically it goes back to Aristotle's phrase $\dot{\eta}$ $\varepsilon i \zeta$ $\ddot{\alpha} \tau o \pi o v$ $\dot{\alpha} \pi \alpha \gamma \omega \gamma \dot{\eta}$ ('reduction to the absurd'). It is used in modern symbolic logic in a rather strict sense, but in a looser one it denotes any argument which leads to a conclusion that everyone will accept as absurd. Identifying tarka with reductio ad absurdum argument is to go astray, for a tarka does not prove the absurdity of some given hypothesis but rather demolishes one of several alternative possibilities in order to make some other alternative more compelling. While the proposition rejected by the reductio—granting that tarka could be a reductio argument in the looser sense—is one of possible alternatives, it is not always the contrary of the presumption. Only in cases where only two alternative possibilities are considered in a tarka, and these two have mutually contradictory truth values, could we interpret tarka as a reductio argument. The distinguishing features are that, first, tarka can be applied to alternative possibilities which do not logically exclude each other, and that, secondly, the given alternative possibilities are considered with their justifying or falsifying reasons for each on its own merits—something that would have no place in the analytic scheme of tarka as a reductio argument. Thus it is plausible enough to assume that the tarka was not originally intended to weigh two contradictory alternatives, even though the

⁴⁵ For example, the *Sastitantra*, which belongs to the Sānkhya tradition, describes it. Frauwallner reconstructed the Sanskrit text in Frauwallner (1958, p. 125); a translation is provided on pp. 128–129.



⁴⁴ Oberhammer (1963) has already noticed this point in pp. 91–92:

Eine Definition des *tarkah* begegnet erstmalig in den Nyāyasūtren: *avijnātatattve 'rthe kāraņopapattitas tattvajnānārtham ūhas tarkah*. Eine ausführliche Deutung dieses Sūtram finden wir bei Pakṣilasvāmin; dabei ist bemerkenswert, daß bei ihm zwischen der Deutung des *tarkaḥ* und jener der fünf zusātzlichen Beweisglieder eine überraschende Übereinstimmung besteht: *avijnāyamānatve 'rthe jijnāsā tāvaj jāyate ... evam etan netarad iti*. Die Gliederung des *tarkaḥ* besteht daher in *jijnāsā* und *vimarṣaḥ*, welcher von Pakṣilasvāmin auch als *saṃṣsayaḥ* wiedergegeben wird, sowie der *kāranopapattiḥ*, wobei *kāraṇam* hier von Pakṣilasvāmin wohl im Gegensatz zu den Sūtren als *pramāṇāni* gedeutet wird, und schließlich dem Feststellen, daß etwas so und nicht anders ist.

What Oberhammer calls "die fünf zusätzlichen Beweisglieder" is the five parts of argumentation not included in the $pa\bar{n}c\bar{a}vayava$ -s (or rather, to be exact, $pa\bar{n}ca$ $bh\bar{a}g\bar{a}h$, as recorded in NBh^{11} , NBh^{12} and NBh^T in contrast to the textus receptus reading $pa\bar{n}c\bar{a}vayav\bar{a}h$ printed in $NBh(E_D)$, p. 4, 13–14) in NBh. They display a strong parallelism with other topics explained in relevant texts, for example in the $Yuktid\bar{n}pik\bar{a}$ (= YD) and the CaS; cf. Kang (2006, pp. 159–160). In the $Yuktid\bar{n}pik\bar{a}$ we find explanations of these 'additional five members' associated with the $pa\bar{n}c\bar{a}vayava$ -s shortly after the explanation of indirect proof, but the text does not explicitly relate them to indirect proof. See YD, p. 89 and Oberhammer (1963, p. 92).

examples given in the NBh seem to indicate that it was. The choice of examples in the NBh was intended, in my view, to illustrate an ideal type of tarka argument. Generally, the term ' $prasa\dot{n}ga$ ' is used in the history of Indian philosophy in a way very near to a reductio argument in the strict sense: to denote an argument that undermines an assumption taken for granted by demonstrating the absurd consequences it leads to. Considering all these essential differences, Matilal's equation of tarka and $prasa\dot{n}ga$ simply overshoots the mark.

A separate attempt to track back the meaning of tarka in association with the term ' $\bar{u}ha$ ' in NS 1.1.40 is not much more promising. ' $\bar{U}ha$ ' is also a word with a wide range of meanings. In Pūrvamīmāṃsā, ' $\bar{u}ha$ ' is used in the meaning 'the modifications of ritual detail accepted on the basis of estimation'. Often ' $\bar{u}ha$ ' is used as a synonym of 'yukti'.⁴⁷ But the occurrence of ' $\bar{u}ha$ ' in NS 1.140 does not imply that the use of terms like 'tarka' was influenced by Sāṅkhya circles concerned with the tantrayukti.⁴⁸

Tarka in the Nyāyamañjarī and Nyāyakalikā

As a representative text of later Naiyāyika treatises, I will take the passage on tarka in Jayanta Bhaṭṭa's $opus\ magnum$, the $Ny\bar{a}yama\tilde{n}jar\bar{\iota}$ (= NM). The NM is worth considering not only on account of its significant position in later Nyāya tradition, but also because it is a rather independent treatise, reorganizing as it does topics dealt with in the NS in a way quite untypical of commentaries. In the NM we find somewhat different elucidations of a number of characteristics of tarka from those found in the NBh, but interestingly enough, some essential features of tarka noted in the NBh are otherwise retained.

avayavānantaram prathamasūtre tarkasyoddeśāt uddeśānukrameṇa tasya laksanam āha:

avijñātatattve 'rthe kāraṇopapattitaḥ tattvajñānārtham ūhas tarkaḥ. [NS 1.1.40]

⁴⁸ The discussion offered in Oberhammer (1963, pp. 93–94) seems to be based on rather implausible speculation.



⁴⁶ Tarka as explained in later Naiyāyika texts—for example, in Nyāyakusumāñjali III.7, mentioned in Matilal (1986, p. 79, n. 10)—is of a different character. If the relation of logical implication is subjected to a tarka, the latter is restricted to acting as a means of proving the validity of the presupposed implicative relation (vyāpti).

⁴⁷ Halbfass (1991, p. 184, n. 15):

^{...} another important term with a wide range of connotations – from "conjectural modification" (in Mīmāṇṣā) to "reasoning" in the sense of *yukti* – is *ūha* (sometimes combined with *apoha*; e.g. Vyāsa and Vācaspati on Yogasūtra II, 18; Medhātithi on Manu II, 6; ed. J.H. Dave, I, 163; already *Avadānaśataka*, ed. J.S. Speyer, I, 209).

In his commentary on CaS Sū. 11.25, Cakrapāṇidatta equates yukti with $\bar{u}ha$: $\bar{A}yurvedad\bar{v}pik\bar{a}$ in CaS, p. 72a, 8–9:

evam anena bhavitavyam ity evam rūpa ūho 'tra yuktiśabdenābhidhīyateh sā ca....

"avijñātatattve 'rthe" iti sāmānādhikaraṇyanirdeśāt artha eva anyapadārtho na puruṣaḥ, puruṣo hi ṣaṣṭḥyā niradekṣyata "avijñātaṃ tattvaṃ asya" iti.

tattvapadopādānena dharmiņah sāmānyadharmamātraviśiṣṭasya⁴⁹ vijñ-ātatvaṃ sūcayati. "kāraṇopapattitaḥ" iti

saṃśayajñānollikhyamānapakṣadvayānyatarapakṣotthāpanānukūlakāraṇāvalokanaṃ tarkasyotthāpakam⁵⁰ āha. ata evāvijñātatattve 'rthe bhavantāv api bubhutsāvimarśau na tarkatāṃ prāpnutaḥ. "tattvajñānārtham" iti sākṣāt pramāṇatām asya nirasyati. pramāṇānugrahan tu viṣayapariśodhanadvāreṇa⁵¹ vidadhat tattvajñānāya kalpate. "tarka ūhaḥ" iti paryāyopādānasya⁵² prayojanaṃ vakṣyāmaḥ.

tenāyam sūtrārthah: avijñātatattve sāmānyato jñāte dharminy ekapakṣānukūlakāraṇadarśanāt tasmin sambhāvanāpratyayo bhavitavyatāvabhāsah, taditarapakṣaśaithilyāpādānena⁵³ tadgrāhakam pramāṇam anugṛhaṇat⁵⁴ sukham pravartayan, "tattvajñānārtham ūhas tarkaḥ" iti. yathā vāhakelipradeśādau⁵⁵ ūrdhvatvaviśiṣṭadharmidarśanāt puruṣeṇānena bhavitavyam iti pratyayaḥ.⁵⁶

Tarka (deliberation) is mentioned in the first $s\bar{u}tra$ of the NS, immediately after the members [of the five-membered argumentation form]. Whence, following the [customary] order in which [such things are] mentioned [in the $s\bar{u}tra$], a characterization of tarka is [next] stated:

Deliberation is [a type of] reflection in which reasons are given [for assumptions] regarding an object whose [true] nature is not known in order to obtain knowledge of its [true] nature. (NS 1.1.40)

"Regarding an object whose [true] nature is not known" [here]—as [the $s\bar{u}tra$], [presupposing] a common objective reference [of the two words 'avij $n\bar{a}tatattve$ ' and 'arthe' in the $s\bar{u}tra$], teaches—"object" in this passage [refers to] categories other than "person." For if a person were intended [by the word 'avij $n\bar{a}tatattve$ ', it would have been formulated] in the genitive case:



⁴⁹ $NM(E_M)$: sāmānyadharmamānnaviśiṣṭasya.

⁵⁰ $NM(E_V)$: tattvasyotthāpakam.

⁵¹ $NM(E_V)$: viśesapariśodhanadvārena.

⁵² $NM(E_M)$: paryāyapadopādānasya.

⁵³ $NM(E_V)$: -āpādane; $NM(E_M)$: -āpādanena.

⁵⁴ $NM(E_V)$: anugrhya tān.

⁵⁵ $NM(E_V)$: $b\bar{a}hya$ -. But $NM(E_V)$ shows in other passages the reading with $v\bar{a}hakeli$ -, for example, $v\bar{a}hakeliprade\acute{s}avi\acute{s}e\acute{s}adar\acute{s}anam$ in p.108, 16, as in $NM(E_M)$ II, p. 586, 09; further, $v\bar{a}hakeli$ - in $NM(E_V)$, p. 108, 24; 109, 2; 109, 4 etc.

⁵⁶ $NM(E_V)$ III, p. 107, 1–14; $NM(E_M)$ II, pp. 584, 3–585, 2.

"the [true] nature is not known to him". ⁵⁷ The use of the term 'tattva' indicates that the bearer of [some] quality is known as a specific [representative of that quality] only in virtue of [its being] a common quality. "The reasons [for assumptions] are given" refers to the educing function of tarka, namely its surveying of adequate reasons for educing, of two [alternative] positions, the one marked as subject to doubt. For this reason, although there are two [alternative] considerations [prior] to recognizing an object whose [true] nature is not known, these two do not constitute a tarka. [The phrase] "in order to obtain knowledge of the [true] nature" obviously deprives this [tarka] of the status of a means of valid cognition. Serving, though, as it does, as a support for [some] means of valid cognition, in virtue of its clarifying the object (viṣaya), [tarka] contributes to the cognition of the true nature. The motivation for using the synonymous words [in the phrase] "deliberation is [a type of] reflection" we will explain below.

Hence the meaning of the *sūtra* is the following: In the case where—once [some underlying] reason which favours one [of two conflicting] positions has been detected—[an object] whose [true] nature is not known is cognized on the basis of [some] generality it [manifests as] the bearer of a quality, there is confidence in the appropriateness [of asserting that quality] in it. This is a manifestation of the stringency—governing the [ultimate] understanding of that [bearer of the quality]—with which the means of valid cognition is supported, inasmuch as the ineffectualness of the [other] position rules [this latter] out. [After this elucidation] it is easy to continue [with the passage] "Deliberation is [a type of] reflection [applied] to obtain knowledge of [true] nature of the object."

It is of the following [sort]: The bearer of [some] quality having been observed to be specified by its uprightness in a place where there is [also] a coachmen's stick etc., [there is] confidence [in one's judgment] that "this must be a person."

What stands out in this passage from the NM is the explanation that tarka supports the means of valid cognition $(pram\bar{a}na)$ through its clarification of the object $(viṣaya-pariśodhana-dv\bar{a}rena)$. What is meant by 'clarification of the object'? The crucial point about the function of a tarka is, following the formulation of Jayanta Bhaṭṭa, that [it generates] 'confidence in the appropriateness [of asserting a quality] $(sambh\bar{a}van\bar{a}pratyaya)$ ', after considering the reasons which make the acceptance

This passage recapitulates the interpretational problem posed by the compound $avij\bar{n}\bar{a}tatattve$ in NS 1.1.40, as discussed in the NV (in $NV(E_D)$, p. 131, 10ff.) in detail: whether the passage should be analysed (vigraha) as $avij\bar{n}\bar{a}tam$ tattvam yena (the tarka concerns a person who does not cognize the [true] nature of an object) or $avij\bar{n}\bar{a}tam$ tattvam yasya (the tarka concerns an object whose [true] nature is not known). Jayanta Bhaṭṭa gives a remarkably different explanation: A hypothetical formulation with the genitive case in NS 1.1.40 (" $avij\bar{n}\bar{a}tam$ tatvam asya") would imply that artha relates to a person who does not cognize the true nature of some matter. This goes against Uddyotakara: A construction with the genitive case (" $avij\bar{n}\bar{a}tam$ tatvam yasya") would imply that the tarka is to be understood as pertaining to an object (" $avij\bar{n}\bar{a}tam$ tattvam yasya tad $vastvavij\bar{n}\bar{a}tatattvam$, tasminn $avij\bar{n}\bar{a}tatattve$ iti $sasth\bar{v}vigrahen\bar{a}tiyuktam$ etat."), not to a person who does not truly cognize the object. The whole difference stems from the different antecedent of the genitive pronoun. Uddyotakara relates it to tarka, and Jayanta Bhaṭṭa to the cognizing person. This difference is reflected in the choice of pronoun: Uddyotakara chose the relative pronoun yad; Jayanta Bhaṭṭa, the demonstrative pronoun idam.



of one of the two alternative possibilities compelling. ("This is a manifestation of the stringency—governing the [ultimate] understanding of that [bearer of the quality]—with which the means of valid cognition is supported, inasmuch as the ineffectualness of the [other] position rules [this latter] out.") In this way the one remaining alternative seems to be the one called for. This, as explained in the NM, is how tarka supports the $pram\bar{a}na$ -s. And such support is termed 'clarification of the object'. The variant reading given in $NM(E_V)$, visesaparisodhanadvarena suggests that one scribe took the main purpose of a tarka to be to clarify the difference between the two alternative possibilities. In any case, the important point is, in my opinion, that the characteristic feature of tarka—defined on the basis of the concept ' $vibh\bar{a}ga$ '—is still highlighted in the formulation 'visayaparisodhanaa'.

Some further explication of how Jayanta Bhaṭṭa understood tarka can be found in the $Ny\bar{a}yakalik\bar{a}$ (= NKali), which is probably one of his works:⁵⁸

avijñātatattve dharmiņi ekatarapakṣānukūlakāraṇadarśanena⁵⁹ tasmin sambhāvanāpratyayarūpa ūhas tarka ucyate. yathā vāhakelipradeśe ūrdhvatvadarśanāt puruṣeṇānena bhavitavyam iti sambhāvanāpratyayaḥ. na cāyaṃ saṃśayaḥ aśvakelipradeśe puruṣavat sthāṇor asambhāvyatvena samakakṣyatayā sthāṇutvapuruṣatvayor anullekhāt. na ca puruṣanirṇayo 'yam rātrāv api sthāṇunikhananasambhāvanayā⁶⁰ tatpakṣasya

sarvātmanānapanodanāt. puruṣaniścayahetūnām ca śiraḥpāṇyādiviśeṣāṇām apratibhāsāt. sa cāyam tarka ekatarapakṣaśaithilyajananena dvitīye pakṣe pravartamānam nyāyam viṣayaśodhanadvāreṇānugṛhṇātīti pṛthag ucyate. 61

Regarding the bearer of a quality whose [true] nature is not known, the reflection distinguished by confidence—based on an insight of reason which educes one of two positions—in the appropriateness [of asserting a quality] in the [bearer of that quality] is called deliberation. This is like the confidence in the appropriateness [of asserting], where there is a cane of a coachman, and its raised position is observed, "There must be a person [wielding it]". And this is not a [case of] doubt (saṃśaya). For it is not clear whether it is a tree trunk or a person rather than a cane [to urge on] a horse [with], given the inappropriateness [of recognizing] any common quality between standing on a shrub and a tree trunk [that is] similar to a person. It is not a case [either] of ascertainment that [the object is] a person, for it is reasonable that this is an [erect branch] of a buried tree trunk, [seen] at night, and that such a position



⁵⁸ Marui (2008) has established as plausible that the *NKali* is one of Jayanta's works alongside the *NM*.

⁵⁹ The conjecture *ekatarapakṣānukūlakāraṇadarśanena* is based on the corresponding passage in the NM cited above. This conjecture, which I prefer, was kindly suggested by Prof. Hiroshi Marui when he has provided me a copy of $NKali(E_B)$; it is my pleasant obligation to express my gratitude for his great help and further interpretational advices. Maybe the word *-darśana* led to the variant reading *-arthadarśanena*. In the NBh I know of no occurrence of the compound *kāraṇadarśana*, but in the NV it appears several times in the context of the three kinds of *anumāna* mentioned in NS 1.1.5: see $NV(E_D)$, p. 43, 19ff. But *kāraṇa* in these lines of the NV has the sense of cause in the pair $k\bar{a}raṇa$ and $k\bar{a}rya$, which is remote from the reason in the context of logical reflection.

⁶⁰ $NKali(E_B)$ shows a misprint of this word: $sth\bar{a}nunirava$ -.

⁶¹ *NKali*(E_B), p. 13.5–14.

(i.e. point of view) has not been completely eliminated. Furthermore, no reasons for identifying [the object] as a person, namely the distinction on the basis of head and hand etc., have appeared. And this deliberation (tarka) points up the ineffectualness of one of the two positions (points of view) and in so doing activates reasoning ($ny\bar{a}ya$) in regard to the other position. [In this way tarka] supports [the means of valid cognition] by clarifying the subject matter. [This is the reason why tarka] is explained separately [in the $Ny\bar{a}yas\bar{u}tra$].

What deserves our attention in this passage is the formulation of the first sentence, "avijñātatattve dharmiņi ekatarapakṣānukūlakāraṇadarśanena tasmin sambhāvanāpratyayarūpa ūhas tarka ucyate," which is an indirect gloss of NS 1.1.40. What is peculiar is the formulation ekatarapaksānukūlakāranadarśanena explaining the first two words in NS 1.1.40, namely avijñātatattve 'rthe. This passage of the NKali points out that it is the reason (kārana) that is grasped, not any additional quality (dharma) of the object. This means that the purpose of the tarka is the ascertainment of one of two possibilities; it is not a search for an observed additional quality as factual support for one or the other possibility, but merely one which does not obviously support one of the two. 62 In the case of the concrete example given in the NKali, we can easily understand that the rightness of something observed is not dependent on additional information obtained through perception. Such information is already given in advance of the tarka. What actually takes place in the cognizer is the reflection on the adequacy of the alternative possibilities; this accords with the explanations given by Vātsyāyana in the NBhregarding the essential feature of the tarka. Regardless of the interpretation offered by Jayanta Bhatta of how tarka should be understood in contradistinction to samśaya and other relevant terms, it is obvious that he intends to demonstrate that the tarka does not require or postulate further factual information, in other words, some observed additional quality of the object that is the subject of the tarka. This is in line with my interpretation based on the explanations given in the NBh. No information about the object perceived furnishes a reason for any supposition. For anything to be a reason, it should cover the whole given context being evaluated, to see if it provides any stringent grounds for the acceptance of one possibility. This conceptual procedure is carried out without further factual data from the outside. This feature of tarka is, so far as I understand, what is pointed out by Vātsyāyana and Jayanta Bhatta with the aid of the terms 'vibhāga' and 'viśayapariśodhana'.

Tarka in the Tarkasangraha

The conceptual procedure described by Vātsyāyana and Jayanta Bhaṭṭa is indicative of the fact that for them *tarka* is a mental weighing of alternative possibilities

⁶² Doubt will hardly be cast upon this interpretation by accepting the reading *ekatara-pakṣānukūlārthadarśanena*, given that the word *artha* need not to be taken in the meaning of a concrete physical object, while the word *darśana* can be understood in the meaning of 'understanding' or 'cognizing'.



without the interference of further factual data. But this characterization is not specific enough to distinguish tarka from other concepts dealt with in the Nyāya tradition and to justify regarding tarka as a key term in NS 1.1.1—central enough to warrant separate treatment of it as such in the following tradition. In any case, the characterization of tarka as a procedure based on reason and not on any additional perceptual information has been confirmed. This loose understanding would have allowed for a much more general usage of the term 'tarka' so as to include all objects examined with human reason.

An example of such a later radical usage of the term 'tarka' can be found in the Tarkasaingraha (= TS) of Annam Bhatta. The TS begins with the following prefatory verse (maingala) in TS I:

nidhāya hṛdi viśveśaṃ vidhāya guruvandanam | bālānāṃ sukhabodhāya kriyate tarkasaṅgrahaḥ ||⁶³ Bearing the lord of the universe in my heart [and] offering salutation to my teacher, for easy understanding among beginners I compose this *Tarkasaṅgraha*.

And on the title of his own work, Annambhatta gives explanations in his auto-commentary on TS, $Tarkasangrahad\bar{t}pik\bar{a}$ (= TSD):

"tarkasangraha" iti, tarkyante pratipādyanta iti tarkā dravyādisaptapadārthāh, teṣāṃ saṅgrahaḥ saṅkṣapeṇa svarūpakathanaṃ kriyata ity arthaḥ. kasmai prayojanāyeti, ata āha "sukhabodhāyā" iti. sukhena anāyāsena yo bodhaḥ padārthajñānaṃ tasmā ity arthaḥ. nanu bahuṣu tarkagrantheṣu satsu kim artham apūrvagranthaḥ kriyata iti, ata āha: "bālānām" iti. teṣām ativistṛtatvād bālānāṃ bodho na bhavatīty arthaḥ. grahaṇadhāraṇapaṭur bālaḥ, na tu stanandhayaḥ.

[Now] the passage "tarkasangrahaḥ" [in TS I]: The seven categories, namely substance etc., are tarka-s in the sense that they are deliberated upon [and] assented to; a sangraha of them means that an explanation of [their] essence is given in a condensed form. Toward what purpose? For easy understanding, it is stated. 'With ease' [means] without pain, the 'understanding' which [represents] the purpose [of this work means] the knowledge of categories. One objection could be made: For what purpose has this new work been composed, [considering] the numerous works on tarka already existing? It is stated: "[For the sake] of beginners" [in TS I]. This means that on account of their extreme elaborateness the understanding of beginners is not [sufficiently advanced]. One with ability to grasp and keep in mind [is what is meant by the word] ' $b\bar{a}la$ ' [in this passage], and not a suckling.

This explanation of the term 'tarka' in the auto-commentary is exceptional. All seven categories listed in the $TS \ \Pi^{64}$ are called tarka-s. The fact that the term

⁶⁴ TS II in TS, p. 2: dravyaguṇakarmasāmānyaviśeṣasamavāyābhāvāḥ sapta padārthāḥ.



⁶³ TS, p. 1, 5–6.

'tarka' designates not only the cognizing activity but also the object of such activity is not astonishing in itself.⁶⁵ But its usage here is very exceptional and calls for some explanation.

In the sub-commentary on the TSD, the $Prak\bar{a}sik\bar{a}$ of Nīlakanṭha we can find a further short explication:

tarkapadasyāropārthakatvabhramam vārayitum dravyādisādhāraṇatarkatvam nirvakti "tarkyante" iti.⁶⁶

To avoid any misunderstanding of the deliberateness with which the word 'tarka' [in TS I] is emphasized, the expression "tarkyante" is used [in the auto-commentary, the $Tarkasangrahad\bar{\iota}pik\bar{\iota}a$], pointing up the fact that the generality shared by substance etc. [partakes of] the nature of tarka, [by means of which these categories can be deliberated upon].

The point being made here is that the categories listed in *TS* II are called '*tarka*' because they are all objects arrived at by *tarka*. The indistinct character of *tarka*, at least in the explanation given by Nīlakaṇṭha, has seemingly contributed to the usage of the term '*tarka*' to denote all the topics (in the later syncretic Vaiśeṣika tradition, all the categories are termed '*tarka*'). In this sense, the term '*tarka*' can be taken to represent the whole system of Nyāya.

How a specific method of dealing with a given epistemological or logical problem, in this case *tarka*, came to stand for Nyāya methodology or the Nyāya tradition itself is a question with far-reaching consequences that I cannot deal with at present. It is possible that the self-understanding of Naiyāyika-s formulated around the concept of 'ānvīkṣikī' at the beginning of the *NBh* is cognate with the characteristic Nyāya methodology that takes the form of reflective deliberation. Such a reflective analytic character of the Nyāya tradition might be associated with the peculiar aspect of *tarka*, namely *vibhāga* (analysis). Thus the unconventional usage of the term '*tarka*' in the *TS* and the *TSD* is merely an extension of the meaning of this term as accepted by Vātsyāyana and Jayanta Bhaṭṭa.

The Hazards Inherent in Tarka

From the discussions above we have arrived at the position that the essential feature of *tarka*, at least as explained by Vātsyāyana, is its analytic approach (*vibhāga*) to the subject of discourse. This understanding of *tarka* is, as I have tried to demonstrate above, in accordance with Jayanta Bhaṭṭa's understanding as formulated in the words "clarification of the object" (*viṣayapariśodhana*). When we take this characteristic of *tarka* seriously, the fact that *tarka* was often loaded with a negative connotation, on the one hand, and considered as the characteristic feature of the

⁶⁶ Nīlakantha-Prakāśikā, pp. 95, 4–96, 2.



 $^{^{65}}$ Such a usage is common in Nyāya tradition for other terms as well, including 'pratyakṣa' and 'anumāna'.

Naiyāyika approach to epistemological and logical problems, on the other, can be better appreciated.

As a maieutic process, *tarka* does not resort to any additional perceptual information. It thus holds the door to solving any given problem open to everyone. Its argumentational appeal consists in the fact that the subject matter and possible states of affairs are differentiated in a seemingly exhaustive way, in the light of the available sum of information. It brings us a step forward, though it cannot offer us a definitive solution to the problem at hand, since all considerations weighed under it are valid only for the chosen hypothesis set forth under the limited factual information available. For the advocates of this method, *tarka* is a generally applicable method for all kinds of topics in cases where investigators are not provided with exact factual information (*tattva*) on the subject matter. In this sense it can be considered as the representative method of the Nyāya tradition.

However, this method can be utterly misleading. The universal applicability of tarka is its strong point, but at the same time it is a serious drawback. For any given object we can suggest alternative qualities seemingly applicable to that object, and ask which alternative is the suitable one. One good example would be the questions addressed to the Buddha (avyākata pañha) to which he refused to give either an affirmative or negative answer.⁶⁷ Such questions, depending on the interpretation and analysis of them, may lead to different kinds of mainly non-formal fallacy: the fallacy of many questions ('Are you still beating your wife?'), the false dilemma ('Are you a good man or a bad man?') or a category fallacy ('How many iron filings does a unicorn attract?'). When such a question has been put forward for a tarka, an argumentative or epistemological quandary is the guaranteed outcome, at least from the Buddhist standpoint. Any reasonable analysis of the logical or factual implications is beside the point, and a pseudo-analysis results. In such a way, tarka can become an easily misused quasi-formal method. The fact that it does not stand or fall on the basis of factual information was, I surmise, the reason for the widespread negative connotation of the term 'tarka'. The widespread reluctance against tarka in ancient Indian intellectual traditions including Buddhist disapproval of tarka as unreliable speculation could be understood on the bases of the analysis discussed in the present paper. It is not my intent, however, to propose or suggest a hidden chronological outcome in the sense that the tarka as analyzed by Vātsyāyana would have been the historical reason for its negative evaluation.⁶⁸ What I would like to establish is rather a mild thesis that the tarka as analyzed by Vātsyāyana could reveal the historically essential aspect of the tarka. An aspect which is supported by understandings found in later Naiyāyika texts that could help us understand and explain in a coherent way, the ambivalent estimation of tarka found in the Indian intellectual history.

⁶⁸ The negative estimations of *tarka* found in early Indian philosophical texts seem, in my view, to allude rather the attitude connected with *tarka* putting the given authority in question—it would have been the reason for criticizing *tarkin*—than the speculative reflection itself.



⁶⁷ I am not assuming any direct historical connection of avyākata pañha with tarka. Detailed discussions and analysis of this the theme, avyākata pañha, not to mention the diverse interpretations and theoretical developments in the history of Buddhism itself, exceed the scope of the present paper.

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