

The concept of *sādhana* in Chinese Buddhist logic*

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1. Introduction

In his article “More on *parārthānumāna*, theses and syllogisms” (1991),¹ Prof. Tom J. F. Tillemans gave us a brief account of the interpretation of *sādhana* (means of proof) in Dharmakīrti’s works as well as in the tradition following him. In this article, he showed us, on one hand, the corresponding development concerning this concept in Dignāga’s thoughts from NMu to PS, and on the other hand, insightfully explained the theoretical significance of this development through a comparison with the Aristotelian syllogism. In short, in Vasubandhu’s logical works as well as in Dignāga’s NMu, the *sādhana* was identified with the linguistic expression of the three members, i.e. the thesis (*pakṣa*), the reason (*hetu*) and the example (*dr̥ṣṭānta*). In Dignāga’s PS as well as in Dharmakīrti’s tradition, it was identified only with the reason and the example. In comparison with the Aristotelian syllogism, what was made clear in the exclusion of the thesis-statement from *sādhana* is the Buddhist conception of what is decisive for the acceptability of an argument. The decisive or probative factors in an argument, according to this new conception of *sādhana*, are the truths of premises but not merely the logical form of an inference.

The present paper, as an extended observation based on Tillemans’ above mentioned article and that of Prof. Inami, will show that in the Chinese tradition of Buddhist logic, the concept of *sādhana* (*neng li* 能立) was consistently interpreted as the reason-statement together with the positive and negative example-statements, or directly as the *trairūpya*, the triple characterization of a correct reason. This interpretation of *sādhana* was explicitly ascribed to Dignāga himself as one significant innovation with regard to masters before him. Although the Chinese tradition was presumably asserted as basing their theoretical exploration merely on NP and NMu, this new interpretation can only find its support in PS but not in the above mentioned two basic treatises. Like the tradition following Dharmakīrti, the Chinese scholars following Dignāga also took various hermeneutic strategies to harmonize this new interpretation with the old one as explicated in NP and NMu, as well as in various pre-Dignāgan Buddhist texts on logic.

Moreover, it was told that Indian Buddhist logicians after Dignāga also held this new interpretation instead of the old one. Accordingly, they interpreted the “incompleteness” (*nyūnatā*) of an argument as the incompleteness of the three characteristics instead of the incompleteness of the three statements. In light of this new interpretation of *nyūnatā*, the present paper at last tries to make sense again, “from a slightly different angle” than Tillemans, that the point at stake behind

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¹ Reprinted in Tillemans 1999: 69–87. A study preceding it is Inami 1991, where the author explained the status of *pakṣa* in an argument from Dignāga to Dharmakīrti in connection with the corresponding development in the theory of *pakṣābhāsa* (false thesis). My present study is based on these two articles.

this new interpretation is not only a terminological one, but also “about how logic works”² in Buddhist logic.

2. The twofold meaning of *sādhana* in NP and NMu

The literal meaning of *sādhana* is “means of proof.” As we know, *sādhana* is one of the eight topics in the basic framework of NP. The eight topics are: (1) demonstration (*sādhana*), (2) refutation (*dūṣaṇa*, *neng po* 能破), (3) false demonstration (*sādhanābhāsa*, *si neng li* 似能立), (4) false refutation (*dūṣaṇābhāsa*, *si neng po* 似能破), (5) perception (*pratyakṣa*, *xian liang* 現量), (6) inference (*anumāna*, *bi liang* 比量), (7) false perception (*pratyakṣābhāsa*, *si xian liang* 似現量) and (8) false inference (*anumānābhāsa*, *si bi liang* 似比量).³ Among them, the *sādhana* is the foremost one. The section on *sādhana* and that on *sādhanābhāsa* constitute the most extensive two in the whole text of NP. In this sense, the *sādhana* means a three-membered argument, and is in contrast with *dūṣaṇa* (lit. “means of refutation”) in that the former is aimed at proving some view while the latter at refuting some view. Therefore, we could translate the *sādhana* in this sense as “demonstration,” i.e. the linguistic expression of a proof.

The three members or statements making up a *sādhana* are thesis (*pakṣa*, *zong* 宗), reason (*hetu*, *yin* 因) and example (*dr̥ṣṭānta*, *yu* 喻). The last one normally consists of two parts, positive example (*sādharmyadr̥ṣṭānta*, lit. “example by similarity,” *tong fa yu* 同法喻) and negative example (*vaidharmyadr̥ṣṭānta*, lit. “example by dissimilarity,” *yi fa yu* 異法喻). NP says:

NP 2: *tatra pakṣādivacanāni sādhanam / pakṣahetudr̥ṣṭāntavacanair hi prāśnikānām apratīto rthaḥ pratipādyata iti* // 此中宗等多言名為能立，由宗、因、喻多言開示諸有問者未了義故。

Here [among the eight topics,] the *sādhana* is the [three] statements consisting of the thesis and the other [two factors, i.e. the reason and the example], because the object [yet] unknown to the questioners is made known by these [three] statements consisting of the thesis, the reason and the example.⁴

NP 2.4: *eṣāṃ vacanāni parapratyāyanakāle sādhanam / tadyathā / anityaḥ śabda iti pakṣavacanam / kṛtakatvād iti pakṣadharmavacanam / yat kṛtakam tad anityam dr̥ṣṭam yathā ghaṭādir iti sapakṣānugamavacanam / yan nityam tad akṛtakam dr̥ṣṭam yathākāśam iti vyatirekavacanam // etāny eva trayo 'vayavā ity ucyante* // 如是多言開悟他時，說名能立。如說聲無常者，是立宗言；所作性故者，是宗法言；若是所作，見彼無常，如瓶等者，是隨同品言；若是其常，見非所作，如虛空者，是遠離言。唯此三分，說名能立。

The statements having these [factors, i.e. the thesis, reason and example,] on the occasion of convincing others are demonstration. For instance, that “sound is non-eternal” is the statement of thesis. That “because of being produced” is the statement of the property of the subject [, i.e. the statement of the reason]. That “whatever is produced is observed to be non-eternal, like a pot, etc.” is the statement of the positive concomitance with the *sapakṣa* [, i.e. the statement of positive example]. That “whatever is eternal is observed to be not produced, like ether, etc.” is the statement of negative concomitance (*vyatireka*) [, i.e. the statement of negative example]. Only these three members are stated [to be demonstration].⁵

² Tillemans 1999: 78, 81.

³ NP 1: *sādhanam dūṣaṇam caiva sābhāsam parasamvide / pratyakṣam anumānam ca sābhāsam tv ātmasamvide* // 能立與能破 及似唯悟他，現量與比量 及似唯自悟。“Demonstration (*sādhana*), refutation (*dūṣaṇa*) and their false form (*ābhāsa*) are for the understanding of others. Perception (*pratyakṣa*), inference (*anumāna*) and their false form are for the understanding of oneself.” Cf. Tachikawa 1971: 120.

⁴ Cf. Tachikawa 1971: 120.

⁵ Cf. Tachikawa 1971: 121–122. The phrase in the last square brackets is added in the Chinese translation.

Therefore, a three-membered *sādhana* can be written in its full form as follow:

	Sample (1)
Thesis:	Sound is non-eternal,
Reason:	for sound is produced.
Positive example:	Whatever is produced is observed to be non-eternal, like a pot;
Negative example:	Whatever is eternal is observed to be not produced, like ether (<i>ākāśa</i>).

NMu has the same idea of *sādhana* when drawing its basic framework. The three-membered *sādhana* together with its various false forms is also the foremost topic in NMu. NMu k.1a and its auto-commentary say:

NMu k.1a: *paṅśādivacanāni sādhanam* 宗等多言說能立。

The *sādhana* is the [three] statements consisting of the thesis and the other [two factors, i.e. the reason and the example].

NMu 1.1: 由宗、因、喻多言，辯說他未了義故，此多言於《論式》等說名能立。又以一言說能立者，為顯總成一能立性(*sādhanam iti caikavacananirdeśaḥ samastasādhanatvakyāpanārthaḥ*)⁶，由此應知隨有所關名能立過。

Since the object [yet] unknown to another one is made evident [to him] by these [three] statements consisting of the thesis, the reason and the example, these [three] statements are said in the *Vādaividhāna* and other [logical works of Vasubandhu] as *sādhana*. Now, the expression “*sādhanam*” [here in k.1a] is in singular form so as to show that the *sādhana* is a united [whole, though comprised of three statements]. Thus it should be understood that lack [of any of these statements] is called a fault of the *sādhana*.⁷

In all the passages cited above, the grammatical phenomenon that the word *vacana* (statement, *yan* 言) appears in plural form (*vacanāni/vacanaḥ*, *duo yan* 多言) betrays the view of NP and NMu that a *sādhana* is of more than two members, say three members.

In both NP and NMu, the *sādhana* can also refer properly to the reason(-property), i.e. the predicate of the reason-statement, the “producedness” or “being produced” (*kṛtakatva*) in the above sample. Now, the *sādhana* is in contrast with *sādhyā* (*suo li* 所立), the property to be proved or the inferable property, the “non-eternal” in the above sample, in that the former property possesses the force of proving and the latter property is to be proved by it to be present on the subject, the “sound” in the above sample. In this sense, the *sādhana*, when used as a substantive, can be translated as “means of proof”; when used as an adjective, it can be translated as “proving.” The traditional translation of *sādhana* as *probans* and *sādhyā* as *probandum* is also suitable for the present context. This meaning of *sādhana* can be found in the NP classification of four contradictory reasons (*viruddha*, *xiang wei* 相違)⁸ and that of ten false examples (*dr̥ṣṭāntābhāsa*,

⁶ Inami 1991: 76, n. 33; cf. NPT 19,5–6.

⁷ Cf. Tucci 1930: 5–6; Katsura [1]: 109–111; Tillemans 1999: 85, n. 14; Inami 1991: 76–77.

⁸ NP 3.2.3: *viruddhaś catuḥprakāraḥ / tadyathā / (1) dharmasvarūpaviparītasādhanah / (2) dharmaviśeṣaviparītasādhanah / (3) dharmisvarūpaviparītasādhanah / (4) dharmiviśeṣaviparītasādhanāś ceti //* 相違有四，謂法自相相違因，法差別相違因，有法自相相違因，有法差別相違因等。“The contradictory [reasons] are of four kinds as follow: (1) the [reason] proving the opposite of the own nature of the [inferable] property, (2) the [reason] proving the opposite of [some] characteristic attribute of the [inferable] property, (3) the [reason] proving the opposite of the own nature of the property-possessor, and (4) the [reason] proving the opposite of [some] characteristic attribute of the property-possessor.” Cf. Tachikawa 1971: 125.

si yu 似喻).⁹

In the Chinese translation of the name for each contradictory reason, the word *sādhana* is consistently rendered as “reason” (*yin* 因). The Indian commentator Haribhadra also follows the same technique in glossing this word as *hetu* (reason). When commenting on the first kind of contradictory reason, i.e. the *dharmasvarūpaviparītasādhana*, he says:

NPT 39,4–5: *atra dharmasvarūpaṃ nityatvam / ayaṃ ca hetus tadviparītam anityatvaṃ sādhayati tenaivāvinābhūtatvāt /*

Here the own nature of the [inferable] property is eternity. Now, this reason (*hetuḥ*) proves (*sādhayati*) the opposite (*viparīta*) of that [own nature of the inferable property (*dharmasvarūpa*)], i.e. non-eternality, because [it] is invariably concomitant with that [opposite property].

When commenting on the word *sādhanadharmāsiddha* as the name leading the NP list of false examples, Haribhadra says:

NPT 44,5–11: *sādhanadharmo hetur asiddho nāstīti bhāṣyate / tataś ca sādhanadharmo 'siddho 'smiṃ so 'yaṃ sādhanadharmāsiddhaḥ / ... evaṃ sādhyobhayadharmāsiddhāyor api bhāvanīyam /*

That is to say, **the proving property**, the reason, **is not found**, i.e. does not exist. Hence, this *sādhanadharmāsiddha* is that in which the proving property is not found. ... In regard to the *sādhyadharmāsiddha* and *ubhayadharmāsiddha*, it should be also thought in this manner.

He analyzes the *sādhanadharmāsiddha* as a *bahuvrīhi* compound, and equates the *sādhanadharmā* (proving property) with *hetu* (reason).¹⁰ On this *sādhanadharmā*, The NPVP explains further that: “This is both *sādhana* and property. Thus *sādhanadharmā*. What does it mean? The reason.”¹¹ Here, the *sādhanadharmā* is analyzed as a *karmadhāraya* compound. It means the property which is appealed to as the means of proof (*sādhana*) in an argument and therefore possesses the force of proving in that argument. When commenting on the NP 3.3.1.(4) on *ananvaya*, Haribhadra directly glosses *sādhana* as *hetu*. He says:

NPT 46,7–9: *vinānvayena vinā vyāptidarśanena sādhyasādhanayoḥ sādhyahetvor ity arthaḥ sahabhāva ekatravṛttimātram / pradarśyate kathyate ākhyāyate / na vīpsayā sādhyānugato hetur iti /*

The meaning is that **without [the statement of] positive concomitance**, i.e. without the presentation of

⁹ NP 3.3–3.3.2: *dr̥ṣṭāntābhāso dvidvidhaḥ / sādharmaṃyena vaidharmaṃyena ca // tatra sādharmaṃyena tāvad dr̥ṣṭāntābhāsaḥ pañcaprakāraḥ / tadyathā / (1) sādhanadharmāsiddhaḥ / (2) sādhyadharmāsiddhaḥ / (3) ubhayadharmāsiddhaḥ / (4) ananvayaḥ / (5) viparītānvayaś ceti // ... vaidharmaṃyenaṇāpi dr̥ṣṭāntābhāsaḥ pañcaprakāraḥ / tadyathā / (1) sādhyāvyāvṛttaḥ / (2) sādhanāvyāvṛttaḥ / (3) ubhayāvyāvṛttaḥ / (4) avyatirekaḥ / (5) viparītavyatirekaś ceti // 似同法喻有其五種：一、能立法不成，二、所立法不成，三、俱不成，四、無合，五、倒合。似異法喻亦有五種：一、所立不遣，二、能立不遣，三、俱不遣，四、不離，五、倒離。 “The false examples are of two kinds, by similarity or by dissimilarity. Of them, first, the false examples by similarity are of five kinds as follow: (1) [an example where] the proving property (*sādhanadharmā*) is not found, (2) [an example where] the inferable property (*sādhyadharmā*) is not found, (3) [an example where] both [properties] are not found, (4) [an example] without [the statement of] positive concomitance and (5) [an example where] the positive concomitance is reversed. ... Second, the false examples by dissimilarity are of five kinds as follow: (1) [an example where] the inferable property is not excluded, (2) [an example where] the proving property is not excluded, (3) [an example where] both [properties] are not excluded, (4) [an example] without [the statement of] negative concomitance and (5) [an example where] the negative concomitance is reversed.” Cf. Tachikawa 1971: 126–127.*

¹⁰ See also NPT 47,9, 47,18: *sādhanadharmo hetuḥ /*

¹¹ NPVP 109,21–22: *sādhanaṃ cāsau dharmāś ca sādhanadharmāḥ / ka ity āha – hetur iti /*

pervasion, [only] **the co-occurrence**, i.e. only the appearing in one place, **of the inferable and the *sādhana***, i.e. of the inferable and the reason (*hetu*), **is indicated**, i.e. is stated or announced, [but] not the reason as followed by the inferable in accordance with the requirement of pervading.¹²

In the NMu classification of false example, the name *sādhanadharmāsiddha* is replaced by *sādhanāsiddha*, hence *sādhanadharmā* by *sādhana*. Here, the *sādhana* is also in the sense of reason(-property). This NMu passage reads:

NMu 5.3: 「餘此相似」(k.11d) 是似喻義。何謂此餘? 謂於是處所立、能立及不同品, 雖有合、離而顛倒說。或於是處不作合、離, 唯現所立、能立俱有, 異品俱無。如是二法或有隨一不成、不遣, 或有二俱不成、不遣。

That “all other [kinds of example] different from them are false” means the false examples. Which are those other [kinds] different from them? They are [examples] where there is [the statement of] the positive concomitance or [of] the negative concomitance with regard to *sādhya*, *sādhana* or *asapakṣa* (i.e. an individual used as negative example¹³), nevertheless, it is stated in reversed manner; or [examples] where only the co-occurrence of *sādhya* and *sādhana* or [only] the co-absence [of *sādhya* and *sādhana*] from *vipakṣa* is indicated, [but] without the statement of the positive concomitance or of the negative concomitance. [False examples also include such cases where] with regard to these two properties [i.e. the *sādhya* and the *sādhana*], either (*anyatara*) [of them] is not found (*asiddha*) or not excluded (*avyāvṛtta*), or both (*ubhaya*) are not found or not excluded.¹⁴

The word *sādhana* (*sgrub pa/sgrub par byed pa/sgrub byed*) does not occur in the corresponding PS IV kk.13–14, nor in the PSV on them.¹⁵ It has been completely replaced by the word *gtan tshigs* (*hetu*) or *rtags* (*liṅga = hetu*), just as the above cited NPT 46,7–9 shows that they are synonymous. The PS IV kk.13–14 run as follow:

The false form of that [i.e. example] is [an example where] the reason (*gtan tshigs*), the *sādhya* or both is not found, or is not excluded from the *asapakṣa* (*mi mthun phyogs*), or [where] the concomitance is reversed in two ways [, i.e. in either positive or negative fashion], or [where] the concomitance is absent. (k.13)

[An example where] the [inferential] sign (*rtags*) is not found and so on, or [where] the positive concomitance or the other [i.e. the negative concomitance] is reversed, is not a [correct] example. The [mere] aggregation [of two properties in one place] is not [logical] connection, because the [logical] connection is [yet] not explicated. (k.14)¹⁶

Therefore, we can see that the *sādhanadharmā*, *sādhana* and *hetu* are interchangeable in the sense that all of them refer to the reason-property. In NMu, there is another word relating to *sādhana*. That is the *sādhanahetu* (*neng li yin* 能立因).

¹² Cf. Tachikawa 1971: 127.

¹³ Cf. Kitagawa 1965: 277–278, n. 615.

¹⁴ Cf. Tucci 1930: 40–41; Katsura [4]: 67–68.

¹⁵ See Kitagawa 1965: 527,12–529,9, 277–281.

¹⁶ K 152a5–6, 152b4–5: *gtan tshigs bsgrub bya gñis ldan min // rjes 'gro ltog pa gñis dag ste // de'i mi mthun phyogs bsal dan // rjes 'gro med pa der snañ ba'o //* (k.13) *rtags med sogs dan rjes 'gro sogs // phyin ci log pa dpe ma yin // ñe bar bsdu ba ma 'brel ba // 'brel pa rab tu ma bstan phyir //* (k.14); V 63a3–4, 63a7–b1: *gtan tshigs bgrub bya gñis ka med // mi mthun phyogs las med ma byas // rjes 'gro phyin log rnam pa gñis // ltar snañ rjes 'gro med pa'an yin //* (k.13) *rtags med sogs dan dpe med dan // rjes 'gro phyin ci log la sogs // 'brel par ma bstan pa yi phyir // ñer 'jal 'brel pa can ma yin //* (k.14) (Kitagawa 1965: 527,12–15, 529,5–8)

NMu 8: 「餘所說因生」(k.15b¹⁷)者，謂智是前智餘。從如所說能立因生，是緣彼義。

The sentence “[the inference (*anumāna*),] which is different [from perception,] is derived from the reason as presented [above in the discussion of *sādhana*]” means that the [inferential] cognition is different from the above [perceptual] cognition. It is derived from the *sādhanahetu* as presented above. That is to say, it is based on that [*sādhanahetu*].¹⁸

Although I have found no Sanskrit material to confirm a *karmadhāraya* interpretation of this word, it is highly probable that the *sādhanahetu* is in the same construction with *sādhanadharmā* in that the former means a reason which possesses the force of proving and the latter a property which possesses the same force. Both refer to the reason(-property). PS has a corresponding definition of inference for oneself (*svārthanumāna*) as follow:

PS II k.1a–b: *svārthaṃ trirūpāl liṅgato ṛthadrk* /¹⁹
[Inference] for oneself consists in observing an object through a triply characterized sign.²⁰

Here, the *sādhanahetu* has been replaced by *liṅga*,²¹ and *liṅga* is just another name of *hetu*. Now, we have a series of synonyms, i.e. *sādhana*, *sādhanadharmā*, *sādhanahetu*, *hetu* and *liṅga*. All of them refer to the reason(-property) in this connection.

In the above discussion, we have almost exhausted all the occurrences of *sādhana* in NP and NMu. In both texts, the *sādhana* sometimes means a three-membered argument and at other times the reason(-property). There is no third option.

3. A new interpretation following PS

Therefore, it seems surprising or even strange to some critical thinkers²² that the *sādhana* is consistently proclaimed by Chinese classical commentators to be the reason-statement together with the positive and negative example-statements, or directly to be the *trairūpya* (*yin san xiang* 因三相), the triple characterization of a correct reason. Since the statements are three, and the characteristics of a correct reason are also three, the nature of *sādhana* as being three-membered is still perfectly preserved in this interpretation. Moreover, this interpretation of *sādhana* is ascribed to Dignāga himself as one significant innovation with regard to masters before him. Kuiji 窺基 (632–682 CE) says:

YMDS 37–38; 93a29–b2: 陳那能立，唯取因、喻，古兼宗等。…宗由言顯，故名能立。

The *sādhana* of Dignāga only includes the reason and the example, while in early times the thesis and others are also included. ... The thesis is elucidated through the statements [of the reason and two examples]. Therefore, [the reason-statement and two example-statements] are named *sādhana*.

¹⁷ Cf. Katsura [5]: 84, n. 2: *anyad nirdiṣṭalakṣaṇam*.

¹⁸ Cf. Tucci 1930: 52; Katsura [5]: 91.

¹⁹ Katsura [5]: 92.

²⁰ Cf. Hayes 1988: 231.

²¹ See also NP 4: *anumānaṃ liṅgād arthadarśanam / liṅgaṃ punas trirūpam uktam* / 言比量者，謂藉眾相而觀於義。相有三種。如前已說。‘Inference is the observation of an object through an [inferential] sign. The sign has been said [above] to have three characteristics.’ Cf. Tachikawa 1971: 128. The word *sādhanahetu* is also recurrent in NMu 10.14 on *prāptyaprāptisama* and *ahetusama*. In the corresponding PSV passage, it has been replaced completely by *gtaṃ tshigs* (*hetu*). Cf. Katsura [7]: 46, ns. 3–4.

²² Cf. Chen 1997: 4–12; Zheng 1996: 29–32, 173–176.

YMDS 50; 93c28–94a3: 古師又有說四能立，謂宗及因、同喻、異喻。世親菩薩《論軌》等說能立有三：一宗、二因、三喻。以能立者，必是多言。多言顯彼所立便足，故但說三。

The early masters also talk about four [members of] *sādhana*. They are the thesis, the reason, the positive example and the negative example. The Bodhisattva Vasubandhu in the *Vādaśāstra* and other treatises says that there are three [members of] *sādhana*, i.e. (1) the thesis, (2) the reason and (3) the example. Since the *sādhana* is necessarily comprised of more than two statements, and [the *sādhana* of] more than two statements is already adequate for elucidating that which is to be proved (*sādhya*²³). Therefore, only three [members] is asserted [by him].²⁴

YMDS 52; 94a14–17: 今者陳那因、喻為能立，宗為所立。自性、差別二並極成，但是宗依，未成所證。合以成宗，不相離性，方為所證，何成能立？故能立中，定除其宗。

Now, Dignāga [asserts that] the reason and the example are means of proof (*sādhana*), and the thesis is what is to be proved (*sādhya*). Both the subject (*svabhāva*, *zì xìng* 自性) and the property (*viśeṣa*, *chā bié* 差別) [, i.e. the qualificand and the qualifier in the thesis-statement,] have already been accepted (*prasiddha*, *jì chéng* 極成) [by both the proponent and the opponent]. They are merely two substrata of the thesis-statement (*pakṣāśraya*, *zōng yī* 宗依), but not [by themselves] the point under disputation. Only when [they are] combined together so as to produce a thesis-statement, the invariable concomitance (*avinābhāva*, *bù xiāng lí xìng* 不相離性) [of the subject with the property as expressed in the whole thesis-statement] then constitutes the point under disputation. So, how can these [two substrata] be the *sādhana*? Therefore, the thesis shall certainly be excluded from the *sādhana*.

Here, the reason-statement together with the example-statement is identified as *sādhana*. This time, the *sādhana* is in contrast with *sādhya*, the thesis-statement, in that the reason and the example are means of proof and the thesis is merely what is to be proved. Although the *sādhana* here is also in contrast with *sādhya*, the *sādhana* and the *sādhya* here are different from the NP and NMu interpretation of them only as the reason-property and the inferable predicate. The *hetu* in Indian logic can mean either the whole reason-statement or only the reason-predicate in that statement. Hence, the exegetical movement from the reason-predicate to the whole reason-statement is not some breaking news *prima facie*. Nevertheless, the implied significance of this movement is very important. It concerns not a mere terminological shift, but a shift of perspective in the basic consideration of the goodness of a good argument. In this new sense, the *sādhana* may be translated as “probative factor.”

In order to harmonize this new interpretation with the NP and NMu passages, where the *sādhana* is clearly said to have more than two statements, say three members,²⁵ the example is carefully counted as two members, i.e. the positive example and the negative example. Then the reason together with these two example-statements is easily to be interpreted as the three members of *sādhana*. Kuiji continues:

²³ Note, Vasubandhu’s concept of *sādhya* is different from that of Dignāga in that only the inferable property but not the whole thesis-statement is said to be what is to be proved. Moreover, Vasubandhu’s concept of *pakṣa* is also slightly different from that of Dignāga in that only the subject is said to be *pakṣa*. Cf. Frauwallner 1957: 33, frg. 1–3: *pakṣo vicāraṇāyām iṣṭo rthaḥ. sādhyaḥ bhidhānam pratijñeti pratijñālakṣaṇam. me daṅ sa bon daṅ mi rtag pa ñid rnam rjes su dpaḥ par bya ba ñid du dper brjod pa’i phyir chos tsam rjes su dpaḥ par bya ba ñid du mñon par ’dod do źes rtogs par bya’o*. “The *pakṣa* is the object one wishes to investigate. The definition of proposition (*pratijñā*) is that the proposition is the expression of what is to be proved (*sādhya*). Examples for the definition of what is to be inferred (*anumeya* = *sādhya*) is said to be fire, seed and non-eternality. Hence, it shall be understood that only the property (*dharma*) is intended [here] as the definition of *anumeya*.” Cf. Frauwallner 1957: 16.

²⁴ Cf. Frauwallner 1957: 16, n. 21.

²⁵ See above cited NP 2, NMu k.1a and NMu 1.1.

YMDS 53; 94a17–21: 問：然依聲明，一言云「婆達喃」，二言云「婆達泥」，多言云「婆達」。今此能立，「婆達」聲說。既並多言，云何但說因、喻二法以為能立？答：陳那釋云：因有三相，一因、二喻，豈非多言？非要三體。由是定說宗是所立。

Question: However, according to the Sanskrit grammar (*śabdavidyā*, *sheng ming* 聲明), a single statement is called *vacanam*, a pair of statements called *vacane*, more than two statements called *vacanāni*. Here, the *sādhana* is said in the form *vacanāni*. Since it is of more than two statements, why do you only assert the reason-statement and the example-statement two as *sādhana*? Reply: Dignāga explains that the reason has three characteristics, i.e. the reason and two examples. Aren't they three statements [in all]? It is not necessitated that there shall be three separate substrata (*san ti* 三體). Hence, the thesis shall be definitely asserted to be merely what is to be proved (*sādhya*).

Furthermore, when commenting on the last sentence in the NP 2.4 passage cited above (唯此三分，說名能立), Kuiji says:

YMDS 304; 113b25–29: 《理門論》云：“又比量中，唯見此理：若所比處，此相審定(遍是宗法性也)；於餘同類，念此定有(同品定有性也)；於彼無處，念此遍無(異品遍無性也)。是故由此生決定解。” (NMu 5.5) 即是此中唯舉三能立。

The NMu says: “**and in an inference, only the following rule is to be observed: when the [inferential] sign (*liṅga*, *xiang* 相 = *hetu* reason) is ascertained on the subject of inference (*anumeya*, *suo bi* 所比), that is, the reason is universally a property of the subject (*pakṣadharmatva*, *bian shi zong fa xing* 遍是宗法性), and in cases other than [the subject], we remember its being [certainly] present in cases similar to that [subject in possessing the inferable property], that is, the reason is certainly present in similar instances (*sapakṣe sattvam*, *tong pin ding you xing* 同品定有性), and its being [universally] absent where that [inferable property] is absent, that is, the reason is universally absent from dissimilar instances (*vipakṣe 'sattvam*, *yi pin bian wu xing* 異品遍無性²⁶), then ascertained knowledge of this [subject] is generated.**”²⁷ This means the same as here [claimed] that only three [members of] a *sādhana* shall be presented.

Here, the three members of *sādhana* are further identified with the three characteristics of a correct reason (*trairūpya*), the alleged basic rule of argument in Buddhist logic. The presupposition behind is that the reason-statement and especially the positive and negative example-statements are nothing but the expression of the three characteristics in the sense that these three statements are true if and only if the three characteristics are satisfied.

The interpretation of *sādhana* of this kind, though without being supported in NP and NMu, can indeed find its textual evidence in PS, Dignāga's last magnum opus. Recent studies by Tom J. F. Tillemans have already showed that although in NMu, Dignāga did consider the thesis-statement to be a member of *sādhana*, “in PS Dignāga did not consider the thesis-statement as being a *sādhana*, but nevertheless he most likely allowed its presence in a *parārthānumāna*.”²⁸ As pointed out by him, one passage from PS fits quite well with the intention of this kind, i.e. excluding the thesis-statement from *sādhana* while just letting it be in the arrangement of an argument:

²⁶ NP 2.2: *hetus trirūpah / kiṃ punas trairūpyam / pakṣadharmatvam sapakṣe sattvam vipakṣe cāsattvam iti* // 因有三相。何等為三？謂遍是宗法性，同品定有性，異品遍無性。For translation and discussion, see Tachikawa 1971: 121; Katsura 1985: 161–162.

²⁷ Cf. Tucci 1930: 44; Katsura [4]: 74. The adverb “certainly” (*ding* 定) and “universally” (*bian* 遍) qualifying “being present” (*astitva*, *you* 有) and “being absent” (*nāstitva*, *wu* 無) respectively are probably added in the Chinese translation. Cf. the parallel passage in PSV IV (K 150b5–7): *rjes su dpag pa la yan tshul 'di yin par mthon ste / gal te rtags 'di rjes su dpag par bya ba la nes par bzui na / gzan du de dan rigs mthun pa la yod pa 'ñid dan / med pa la med pa 'ñid dran par byed pa de'i phyir 'di'i nes pa bskyed par yin no* // (Kitagawa 1965: 521,8–13)

²⁸ Tillemans 1999: 71.

PSV ad PS III k.1cd: *tatrānumeyanirdeśo hetvarthaviṣayo mataḥ* // (k.1cd) *yan lag rnams la rjes su dpag par bya ba bstan pa gañ yin pa de ni kho bo cag gi sgrub byed ñid du bstan pa ni ma yin te de ñid las the tsom skye ba'i phyir ro* // 'on te gtan tshigs kyi yul gyi don yin pa'i phyir de ni de ma sgrub par byed do (de ma sgrub par byed do: des bsgrub par bya'o V) // (K 124b6–7, Kitagawa 1965: 471,5–8)

In this regard, the presentation of what is to be inferred (*anumeya*) is held to concern the goal of the reason. (k.1cd) Among the members, the presentation of what is to be inferred is not presented by us to be *sādhana*, because from it, doubt will arise. However, because it concerns the goal of the reason, it [, i.e. the thesis,] is to be established by that [, i.e. the reason].²⁹

Besides the exclusion of the thesis-statement from *sādhana*, the equivalence of the *sādhana* with the expression of three characteristics can also be found in PS:

PSV ad PS III k.1: *trirūpaliṅgākhyānaṃ parārthānumānaṃ*.³⁰

The communication of a triply characterized sign (*liṅga*) is inference for others (*parārthānumāna*).

The idea of assigning the reason together with the positive and negative examples to express the three characteristics can be found in NMu as well as in PS:

NMu 5.6: 若爾喻言應非異分，顯因義故。事雖實爾，然此因言唯為顯了是宗法性，非為顯了同品、異品有性、無性，故須別說同、異喻言。

[Objection:] If so, then the example-statement must not be a separate member [from that of the reason], because it is [designed] to express the implication of the reason. [Reply:] Although the fact is actually so, yet the statement of the reason is only meant to express [the reason's] being a property of the subject, but not to express [the reason's] being present in similar instances and being absent from dissimilar instances. Therefore, it is necessary to express the positive and negative examples separately [from the reason-statement].³¹

PSV ad PS IV k.7: 'on te de lta na dpe'i tshig kyañ tha dad par mi 'gyur te gtan tshigs kyi don bstan pa'i phyir ro // ... gtan tshigs ni mtshan ñid gsum pa can yin la / bsgrub bya'i chos ñid ni gtan tshigs kyi tshig gis bstan pa yin no // de las gtan tshigs lhag ma bstan par bya ba'i don du dpe brjod pa ni don dan bcas pa yin no // (K 151a2–4, Kitagawa 1965: 522,7–523,2)

[Objection:] However, if so, even the example-statement will not be separated [from the reason], because it is [designed] to express the implication of the reason. [Reply:] ... Since the reason possesses three characteristics, [only the reason's] being a property of the subject (*sādhya* = *pakṣa*) is expressed by the statement of the reason. In order to express the remaining [characteristics of the] reason other than that [i.e. the first characteristic], it is meaningful to express the example.

Thus, combining this idea with the PS claim that *sādhana* is nothing but the expression of the triple characterization of a correct reason, it is not difficult to get the conclusion that only the reason and example, not the thesis, are *sādhana*. To preserve the nature of *sādhana* as being three-membered, it is also not difficult to count the example as two members. The separation of positive and negative examples naturally results from the idea that the second and third characteristics of a correct reason are to be expressed by them respectively. At the same time, the statement of thesis is always preserved in an argument, though no longer recognized as a member of *sādhana*. This is also

²⁹ Tillemans 1999: 71, translation slightly modified.

³⁰ Kitagawa 1965: 126, n.154. The *parārthānumāna* as a verbalized piece of inference corresponds to the *sādhana* in the terminology of NP and NMu.

³¹ Cf. Tucci 1930: 45–46; Katsura [4]: 76–77.

Dignāga's attitude as mentioned above.³²

Therefore, the Chinese conception of *sādhana* as being the reason together with two examples or being exactly the triple characterization of a correct reason can be regarded as a natural movement from Dignāga's late thought, and to some extent reflects the views in the Indian tradition following Dignāga when Xuanzang was taught there. This also provides us with an opportunity to take attention to the possibility that: Although the Chinese tradition is alleged to have only NP and NMu as its root texts, the ideas presented in the commentarial literature on these two short treatises might not be limited to the scope of Dignāga's early thoughts. On certain occasions and to certain extent, the ideas even probably pertains to his last views as well as to the tradition after him where the evolutionary contributions from Dharmakīrti (c. 600–660 CE) might be unrecognized yet. However, the clues for representing the hereto unknown historical relation of this kind might always be obscure, since no special reference to the subtle differences between Dignāga's early and late stages could be found in the Chinese tradition. In this regard, recent studies on Dharmakīrti and his successors as well as on Dignāga himself will be surely proved to be relevant to an improvement in our understanding of Chinese Hetuvidyā.³³

4. The “completeness” of an argument and identifying the probative factors

As brought into light in Tillemans' 1991 article, the point at stake is not a terminological one, but “about how logic works”³⁴ in Buddhist logic. Its theoretical implication can be clarified if we look the matter from a different angle, and take into account a new development, resulting from the new definition of *sādhana*, in reinterpreting the fallacy called “incompleteness”³⁵ (*nyūnatā*, *que jian*

³² Cf. n. 28.

³³ Unlike Dharmakīrti (Tillemans 1999: 72–73), the thesis-statement is constantly retained in the Chinese literature. There is no thought that the thesis-statement can be known by “implication” (*artha*, *yi* 義) or by “presumption” (*arthāpatti*, *yi zhun* 義准). Nevertheless, like the tradition following Dharmakīrti, the Chinese tradition also pays a lot effort and takes a roundabout hermeneutic strategy so as to explain away the word *pakṣa* constantly leading the definition of *sādhana* in NP and NMu (cf. n. 25). The gist of such a kind of strategy is to say that this word is so placed as to indicate exactly the aim or the object of *sādhana*. For details, see YMDS (54–56; 94a21–b13) *ad* NP 1; YMDS (86–94; 96c11–97b7) *ad* NP 2; For Wengui 文軌 (early 7th century)'s similar discussion, see ZYS (1,4b–5b) *ad* NP 2 and ZYS (2,2a–3a) *ad* NP 2.4; For Kuiji's ambiguous comment on NMu k.13cd = PS IV. k.6cd, see YMDS (305; 113c6–10) *ad* NP 2.4. Shentai 神泰 (early 7th century), the author of the only extant commentary on NMu, says nothing on relevant passages in NMu. On one hand, he makes reference to his commentary on NP, which however has lost, and on the other hand, he misleadingly ascribes this new interpretation even to Vasubandhu, see YZMS (1,3b) *ad* NMu 1.1. Nevertheless, he has said something on *nyūnatā* (incompleteness), see below, n. 36. Furthermore, the author of the NP, Śāṅkarasvāmin, who was said to be a disciple of Dignāga, did know PS. There are certain elements in NP which can be found only in PS, e.g. NP 3.1(9): *eṣāṃ vacanāni dharmasvarūpanirākaraṇamukhena* 如是多言，是遣諸法自相門故 ≈ PSV *ad* PS III k.2 (K 125a5–6): *ḍi yan chos kyī rañ gi ño bo dañ 'gal bas sel ba'i sgo tsam žig bstan pa yin la* / (Kitagawa 1965: 472,14–15). Moreover, the theory of four contradictory reasons (*viruddha*, NP 3.2.3) can only be traced to the PSV *ad* PS III k.26–27 (K 133b1–134a8), cf. Kitagawa 1965: 205–217. In this respect, the relation between the writing of popular manuals on logic and the logical investigation in its proper sense is an interesting topic. The strength of innovation might sometimes be diluted with the traditional viewpoint more or less in these popular manuals composed immediately or even several centuries after the emergence of that new idea, just as the *Hetutattvopadeśa* of Jitāri is a careless juxtaposition of NP and Dharmakīrti's *Nyāyabindu*.

³⁴ Tillemans 1999: 81.

³⁵ For this development, see Tillemans 1999: 75.

guo xing 缺減過性) in an argument. As the NMu 1.1 passage shows, in NMu, Dignāga defined *sādhana* to be a three-membered argument, comprised of the thesis, the reason and the example. The lack of any member of them was called “incompleteness.”³⁶ However, in PS Dignāga says:

PSV *ad* PS III k.1ab: *’dir yañ tshul gañ yañ ruñ ba cig ma smras na yañ ma tshañ ba brjod par ’gyur ro*
// (V 40b2, Kitagawa 1965: 470,7–8)

Here [in saying that the communication of a triply characterized reason is inference for others], it shall be also called incomplete when any one of the three characteristics is unstated.³⁷

What is altered here is not only the fallacy called “incompleteness” as handed down from the early phase of Indian logic, but also the conception of what kind of factor contributes to the “completeness” of an argument and in the absence of such factors an argument has to be counted as “incomplete” or unsound. We are now inclined to call them the “probative factors.” Indeed, a plenty of elements can be regarded as being capable of contributing to the “completeness” of an argument. At first, there should be certain linguistic expression with certain ideas the proponent would like to communicate with the opponent. This expression should be capable of explicating these ideas in accordance with certain semantic conventions. Even the intelligence of the opponent who should be intelligent enough to pick out the meaning as same as the proponent intends through his speech, as well as a just circumstance where arguments from each side can be evaluated only according to principles for thinking rationally, should also be presupposed as the necessary prerequisites for an argument to be practically possible. Therefore, by “probative factors,” we do not mean all the necessary conditions for an argument to be “complete,” which are nearly infinite, but only the factors which were actually selected by certain theoreticians in the history as the focus on which their theorization of argument concentrated. So, the “probative factor” is just a meta-logical concept, not a logical one in usual sense. This is a concept only used to represent or recapture the main concern of a logician in his theory of argument. In fact, we are bound to select only a limited number of elements for reflecting on the soundness of a sound argument in a theoretical manner and

³⁶ Cf. Tillemans 1999: 85, n. 14. When commenting on this passage, Shentai (YZMS 1,4a–b) gives three different explanations of “incompleteness,” among which the first two correspond to that of Vasubandhu and that of scholars after Vasubandhu but before Dignāga, and the last one to that of Dignāga and his followers. However, he mentions the authors of the first two explanations both ambiguously by “certain master,” cf. Tucci 1930: 6, n. 5. The definition of “incompleteness” in NP is basically the same with that in NMu, see NP 6: *sāghanadoṣo nyūnatvam / pakṣadoṣaḥ pratyakṣādiviruddhatvam / hetuḍoṣo ’siddhānaikāntikaviruddhatvam / drṣṭāntadoṣaḥ sādhanadharmādyasiddhatvam / tasyodbhāvanam prāśnikapratyāyanam dūṣanam // 謂初能立缺減過性、立宗過性、不成因性、不定因性、相違因性及喻過性、顯示此言、開曉問者、故名能破。 For translation, see Tachikawa 1971: 129. NPVP (124,8–12) *ad* NPT (54,12–13) on this passage: ***sāghanadoṣo nyūnatvam sāmānyeneti / nyūnatvam pakṣādyavayavānām yathoktalakṣaṇarahitvam pramāṇabādhitvam iti yāvat / ayam arthaḥ — sādhanavākyaḥ ’vayavāpekṣayā nyūnatāyā atirikatāyās ca sabhāsadaḥ purato ’bhidhānam yat tat sāmānyena dūṣanam / viśeṣatas tu pakṣadoṣodbhāvanam asiddhaviruddhānaikāntikadoṣodbhāvanam drṣṭāntadoṣodbhāvanam vā dūṣanam iti / “The fault of the *sādhana* in general (*sāmānyena*) is incompleteness.* That is to say, incompleteness is the fact that the members including the thesis and others lack [one or more of] the above mentioned definitions, or is contradictory with [other] means of valid cognition (*pramāṇa*). This means: refutation is any words in general [said] before a witness (*sabhāsada*) when there is incompleteness or redundancy (*atirikatā*) in regard to any member in the expression of a *sādhana*; in particular (*viśeṣatas*), however, refutation is either to point out the fault of thesis, or to point out the fault of unaccepted, contradictory or inconclusive [reason], or to point out the fault of example.”***

³⁷ Tillemans 1999: 85, n. 15, translation slightly modified.

this does not prevent us from recognizing the fact that there must be other elements remaining untheorized in our present framework or even yet unobserved.

The mere illustration of probative factors contributes to a theory of argument just as little as a good intuition of what a sound argument may look like, let alone its being a theory of logic. The key feature of a theory is that the probative factors as identified in it is at the same time considered as the criteria for discriminating in a general way a sound argument from an unsound one. Therefore, a theory of argument could possibly step on different approaches in identifying different kinds of probative factor and result in different systems of criteria for sound argument. In short, different identifications of probative factors betray different conceptions of argument, and lead to different theories of argument, or even different theories of logic.

Now, let us return to the historical account as given in the Chinese literature in line with PS's new interpretation of "incompleteness."

YMDS 57; 94b17–21: 世親菩薩，缺減過性，宗、因、喻中，闕一有三，闕二有三，闕三有一。世親已後，皆除第七。以宗、因、喻三為能立，總闕便非。既本無體，何成能立？有何所闕而得似名？[According to] the Bodhisattva Vasubandhu, [there are seven cases of] incompleteness (*nyūnatā*). [Of them,] three are the lack of [only] one [statement] among the thesis, the reason and the example, three are the lack of two [statements among them], and one is the lack of all the three [statements]. [Scholars] after Vasubandhu all exclude the seventh case. Since the thesis, the reason and the example, as three [members], form a *sādhana*, it is not possible for all of them to be lacking [and there is still an argument]. Since then, there would be no substratum (*wu ti* 無體) at all, what could be an argument (*sādhana*) and what [kind of argument] could be called false on account of its being incomplete?

Here, the probative factors are identified by logicians before Dignāga with the linguistic expression comprised of the thesis, the reason and the example. When one of these factors is lacking, the whole argument has the fault of incompleteness. A point yet unclarified here is that the linguistic expression itself could contribute to the "completeness" or soundness of an argument in two ways. On one hand, the linguistic expression could be probative in representing certain form of valid reasoning. On the other hand, it could be probative in that the reason-statement together with the example-statement in it is or is accepted to be true. As we know today, an argument could be regarded as sound if and only if all its premises are true and the whole form is valid. Therefore, if the identification of probative factors with the linguistic expression itself does not merely represent a good intuition of what a sound argument looks like, it could possibly provide the Buddhist logicians with two different options in theorizing the "completeness" of an argument.

We name the first option the "formulistic approach" in that the logical form itself is identified as the probative factor, forms the focus of theorization, and becomes the criterion for discriminating sound argument from unsound ones. For the second option, that is, to identify the truth of premises or of the reason-statement with the example-statement as the probative factor, to theorize this point and to let the truth of both statements be the criteria for discriminating sound argument from unsound ones, we give the name "epistemic approach" or "dialectic approach" according to which sort of interpretation of "truth" is chosen. If we interpret a true statement as being a piece of ascertained knowledge (*niścayaprasiddha*), we have the "epistemic approach." If interpreting a statement's being true as merely being accepted to be true, i.e. being equally accepted by both sides in debate (*abhyupagamaprasiddha*, *gong xu ji cheng* 共許極成), we have the "dialectic approach." Our text continues:

YMDS 57–58; 94b21–26: 陳那菩薩，因一喻二，說有六過，則因三相六過是也。闕一有三，闕二有三，無闕三者。大師至彼六十年前，施無厭寺有一論師，名為賢愛，精確慈悲，特以貫世，因明一論，時無敵者，亦除第七。自餘諸師，不肯除之。因一喻二，即因三相。

[According to] the Bodhisattva Dignāga, six cases of the fault [of incompleteness] are said concerning the reason, the first, with the examples, the last two (*yin yi yu er* 因一喻二³⁸). They are the six faults concerning the three characteristics of a correct reason. [Of them,] three are the lack of [only] one [characteristic], three are the lack of two [characteristics], and there is no case where all the three [characteristics] are lacking. Sixty years before Xuanzang's arrival at the Nālandā Temple, there was a learned master (*sāstrin*, *lun shi* 論師) Bhadraruci (*xian ai* 賢愛), who was famous throughout the world for his acute thinking and compassionate heart. No one could compare with him in the science of Hetuvidyā. He also excluded this seventh case. The other masters, however, were not willing to exclude it. The reason, the first, with the examples, the last two, is exactly the three characteristics of a correct reason.³⁹

The Buddhist logicians following Dignāga have identified the factors contributing to the “completeness” of an argument directly with the three characteristics of a correct reason (*trairūpya*), the alleged basic rule of argument in Buddhist logic. As a detailed account of the *trairūpya* formulae according to the Chinese tradition is not in place here, we can make no decision between the “epistemic approach” and the “dialectic approach” as which one is actually stepped on by logicians following Dignāga. However, the evidence from our text does suffice to support the view that at least the “formulistic approach” is not the one stepped on. For this aim, we just need to point out that the “incomplete” or unsound arguments which are to be ruled out by the three characteristics are of the same logical form with that of the above sample (1), which is typically a sound argument in Buddhist logic of whatever kind. Indeed, it is not difficult for us to abstract the following form from that good sample:

Thesis: $p \rightarrow S$

³⁸ Cf. RINM 30c29–31a2: 且「能立」者，即有二義：一一因二喻，二因一喻二。一因二喻，約因三相也；因一喻二，約因二喻也。“Here, the *sādhana* has two meanings: (1) one reason with two examples (*yi yin er yu* 一因二喻); and (2) the reason, the first, with the examples, the last two (*yin yi yu er* 因一喻二). The ‘one reason with two examples’ concerns to the three characteristics of a correct reason. The ‘reason, the first, with the examples, the last two’ concerns to the reason together with two examples.” Gomyō 護命 (750–834 CE)’s division between 一因二喻 and 因一喻二 is quite obscure. However, I have kept the room for such a subtle division in translating these two expressions differently, though Kuiji in this passage equated the three characteristics with 因一喻二 but not 一因二喻.

³⁹ In fact, Kuiji is also unwilling to exclude the seventh possibility. Just a few lines after this passage, he says: 又雖有言，三相並闕。如聲論師，對佛法者，立「聲為常，德所依故，猶如擇滅。諸非常者，皆非德依，如四大種」。此「德依」因，雖有所說，三相並闕，何得非似？由此第七亦缺減過。(YMDS 58–59; 94b28–c3) “Again, there is also the case where the statement is complete but all the three characteristics are lacking. For example, an upholder of the eternity of sound (*śābdika*, *sheng lun shi* 聲論師), against a Buddhist, claims that ‘sound is eternal, because of being a substratum of qualities (*guṇāśraya*, *de suo yi* 德所依, cf. NP 3.2.1(4)), like cession through analytical meditation (*pratisamkhyānirodha*, *ze mie* 擇滅). Whatever is non-eternal is not a substratum of qualities, like four great elements (*caturmahābhūta*, *si da zhong* 四大種).’ Although there is an argument from the reason ‘being a substratum of qualities,’ it lacks all the three characteristics. How can it not be false? Hence, the seventh case should also be counted as incompleteness.” That is to say, at least there can be some linguistic expressions where all the three characteristics are lacking, though the expressions of this kind have no probative force at all. Huizhao 慧沼 (650–714 CE) gives a much clearer example for the seventh possibility: 如立「聲常，眼所見故」，虛空為同，盆等為異，三相俱闕。(YMDS 753; 141c21–22) “For example, ‘sound is eternal, because of being visible.’ [Here,] ether is similar instance. A dish, etc. are dissimilar instances. [The argument] lacks all the three characteristics.”

Reason:	$p \rightarrow H$
Positive example:	$H \rightarrow S$
Negative example:	$\neg S \rightarrow \neg H$ ⁴⁰

If we, further, regard the negative example as merely the contraposition of its positive counterpart, we could just skip it. Then, the whole process of reasoning can be considered as beginning from the positive example-statement and ending with the thesis-statement. If the formulization were correct, the form would be obviously valid.

When commenting on the NP passage on refutation (*dūṣaṇa*, NP 6⁴¹), Huizhao⁴² has provided each one of these seven possibilities with an example.⁴³ Here, we just concern the first three where only one characteristic is lacking respectively:

YMDS 752; 141c12–16: 闕一有三者：如數論師，對聲論立：「聲是無常，眼所見故」，聲無常宗，瓶、盆等為同品，虛空等為異品，此但闕初而有後二；聲論對薩婆多立：「聲為常宗，所聞性故」，虛空為共同品，瓶、盆等為異品，闕第二相；「所量性」因，闕第三相。

The three [kinds of incomplete argument where only] one [characteristic] is lacking [respectively] are for example: (1) When a Sāṃkhya, against a Śābdika, claims that “sound is non-eternal, because of being visible (*cākṣuṣatva*, *yan suo jian* 眼所見).” The thesis (*pakṣa*) that sound is non-eternal has a pot and a dish, etc. as similar instances (*sapakṣa*, *tong pin* 同品), and has ether, etc. as dissimilar instances (*vipakṣa*, *yi pin* 異品). The [argument] lacks only the first [characteristic] but has the last two [characteristics]. (2) When a Śābdika, against a Sarvāstivādin (*sa po duo* 薩婆多), claims that “sound is eternal, the thesis, because of being audible (*śrāvaṇatva*, *suo wen xing* 所聞性).” [Here,] ether is the similar instance equally accepted [by both sides] (*gong tong pin* 共同品). A pot and a dish, etc. are dissimilar instances. [The argument] lacks [only] the second characteristic. (3) The reason “being cognizable (*prameyatva*, *suo liang xing* 所量性)” [for the thesis “sound is eternal”] lacks [only] the third characteristic.

To write all the three arguments in “syllogistic” manner, skipping the negative example and all the individual cases cited, calling the “positive example” just as “example” for convenience and transforming the reason into subject-predicate statement for clarity, we have the following three samples:

	Sample (2)	Sample (3)	Sample (4)
Thesis:	Sound is non-eternal,	Sound is eternal,	Sound is eternal,
Reason:	for sound is visible.	for sound is audible.	for sound is cognizable.
Example:	Whatever visible is non-eternal	Whatever audible is eternal	Whatever cognizable is eternal

It is not a surprise to find out that all the unsound arguments illustrated here and the above sample (1) of sound argument share the same logical form as described above. The difference lies only in the fact that:

⁴⁰ $p = pakṣa$ the subject, “sound”; $S = sādhyadharmā$ the inferable property, “being non-eternal”; $H = hetu$ the reason-property, “being produced.” Note, the formalization here is just a provisional one. Since the individual case quoted in each example is considered as being irrelevant for our project now. Moreover, there must be certain implicit elements which should not be ignored but now are ignored. Nevertheless, the formulization of this kind does suffice our aim now.

⁴¹ See n. 36.

⁴² The YMDS from the commentary on NP 3.3.1(1) to the end is actually written by Huizhao after the death of his teacher Kuiji, see Zheng 2010: 605.

⁴³ See YMDS 752–753; 141c11–22.

In sample (2), the reason-statement that “sound is visible” is not true, in that sound is clearly not visible. Here, the implication $p \rightarrow H$ is false. In this case, only the first characteristic “*pakṣadharmatvam*,” i.e. the reason’s being (universally) a property of the subject (*bian shi zong fa xing* 遍是宗法性), does not obtain or is not satisfied.⁴⁴

In sample (3), the example-statement that “whatever is audible is eternal” is not true. It cannot be instantiated in existent individuals apart from the subject “sound,” since only sound is audible. Here, the positive example should be interpreted as a statement with existential import, like $(x) ((x \neq p \ \& \ Hx) \rightarrow Sx) \ \& \ (\exists x) (x \neq p \ \& \ (Hx \ \& \ Sx))$.⁴⁵ The whole conjunction is false just because the last conjunct is false. In this case, only the second characteristic “*sapakṣe sattvam*,” i.e. the reason’s being (certainly) present in similar instances (*tong pin ding you xing* 同品定有性) is not satisfied, since no similar instance or nothing eternal apart from sound itself has the reason-property “being audible.”⁴⁶

In sample (4), the example-statement that “whatever cognizable is eternal” is also not true. There certainly are non-eternal things which are not only cognizable but also different from sound, say a pot. Here, the first conjunct in the above conjunction is false. Hence, the whole conjunction is false. In this case, only the third characteristic “*vipakṣe ’sattvam*,” i.e. the reason’s being (universally) absent from dissimilar instances (*yi pin bian wu xing* 異品遍無性), is not satisfied, since the dissimilar instances, things not “being eternal” apart from sound itself, also have the reason-property “being cognizable,” like a pot.⁴⁷

In all the three cases, a valid form of reasoning has no function for discriminating sound argument from unsound ones. They are just considered as unsound on account of the lacking of this or that characteristic. The “probative factors” in this theory are not the logical form, but the three characteristics, just as the three characteristics are proclaimed by logicians following Dignāga as *sādhana*, means of proof. Therefore, in identifying the three characteristics as the probative factor, the “formulistic approach” is not the approach actually stepped on by Buddhist logicians.

Moreover, each case above where one characteristic is lacking or is not satisfied can be reduced to the circumstance where one premise in the argument, either the reason-statement or the

⁴⁴ Cf. NP 3.2.1(1): *śabdānityatve sādhye cākṣuṣatvād ity ubhayāsiddhaḥ* // 如成立聲為無常等，若言是眼所見性故，兩俱不成。“When one is to prove that sound is non-eternal, [the reason] ‘because of being visible’ is unaccepted by both (*ubhayāsiddha*).” Cf. Tachikawa 1971: 123.

⁴⁵ Oetke 1994: 24, ES_{+eva}4.

⁴⁶ Cf. NP 3.2.2(2): *asādhāraṇaḥ śrāvaṇatvān nitya iti / tad dhi nityānityapakṣābhyāṃ vyāvṛttatvān nityānityavinirmuktasya cānyasyāsambhavāt samśayahetuḥ / kimbhūtasyaśya śrāvaṇatvam iti* // 言不共者，如說聲常，所聞性故，常、無常品皆離此因，常、無常外餘非有故是猶豫因，此所聞性其猶何等？“An uncommon (*asādhāraṇa*) [reason] is: ‘[Sound is] eternal, because of being audible.’ For, since this [reason] is [certainly] excluded from both the eternal and non-eternal kinds (*pakṣa, pin* 品) [apart from the subject ‘sound’], and since anything else which is different from eternal and non-eternal is impossible, this [reason] is a cause for doubt. [The question remains:] ‘What kind of [thing] has audibility?’” For translation and discussion, see Tachikawa 1971: 124; Oetke 1994: 33–35.

⁴⁷ Cf. NP 3.2.2(1): *sādhāraṇaḥ śabdaḥ prameyatvān nitya iti / tad dhi nityānityapakṣayoḥ sādāraṇatvād anaikāntikam / kiṃ ghaṭavat prameyatvād anityaḥ śabda āhosvid ākāśavat prameyatvān nitya iti* // 共者，如言聲常，所量性故，常、無常品皆共此因，是故不定。為如瓶等，所量性故，聲是無常；為如空等，所量性故，聲是其常？“A common (*sādhāraṇa*) [reason] is: ‘Sound is eternal, because of being cognizable.’ For, since this [reason] is common to both the eternal and non-eternal kinds [apart from the subject ‘sound’], it is inconclusive (*anaikāntika*). [The question remains:] ‘Is sound non-eternal because of being cognizable, like a pot, or eternal because of being cognizable, like ether?’” Cf. Tachikawa 1971: 124.

example-statement, is not true. In this sense, the three characteristics concern nothing formal. They are only the definition of the truth of the reason-statement with the example-statement, the definition of the truth of premises in an argument in the sense that all the premises are true if and only if all the three characteristics are satisfied. Therefore, in identifying the three characteristics as probative factor, the implied intention is that the essential factors or criteria for discriminating a sound argument from unsound one should be the truth of premises. The theory of *trairūpya* is only a theorization of this implied intention. It is only in this sense that the reason with the positive and negative examples is also proclaimed to be the “probative factors,” the *sādhana*. Whether the emphasis is put on the three characteristics or on the reason and example is only a matter about on which level, the meta-language level or the object-language level, this implied intention is to be presented.

Therefore, it might be improper to say that since at least the reason and the example are retained as *sādhana* in this new interpretation following PS, there is certainly a form of argument coming to the core in the Buddhist theorization of argument, and the “formulistic approach” is not totally refused by them. As a matter of fact, what is actually at stake in this new interpretation is not the form but the truth of these two members. As we have said above, on one hand, a good intuition of what a sound argument looks like does not mean by itself a theory of argument, let alone its being a “formulistic” theory. The Buddhist form of three-membered argument is just a representation of this good intuition. Further, there is only one form which is actually elaborated in the Buddhist theory of three-membered argument.⁴⁸ It means nothing but a linguistic standard for all the arguments to follow. At any rate, the formal logic does not come about when there is only one form, in comparison neither with many other invalid forms, nor with other equally valid ones. On the other hand, to step on an approach other than the “formulistic” one and to take some factors other than the logical form itself as theoretically the most significant does not necessarily imply a refusal of the other equally necessary factors, esp. the logical form, as being irrelevant to the “completeness” of an argument. To step on which approach means just where the theorization takes place and that the other possible candidates for “probative factor” in the present framework lie right at the edge of their horizon, not out of it.⁴⁹

Thus, to interpret the Buddhist three-membered argument merely on its face value as some

⁴⁸ The clue for this fact lies partly in the constant practice of transforming a negative statement into its affirmative counterpart, cf. NP 2.3: *vaidharmyeṇāpi / ... tadyathā / yan nityaṃ tad akṛtakaṃ dr̥ṣṭam yathākāśam iti / nityaśabdenātrānityatvasyābhāva ucyate / akṛtakaśabdenāpi kṛtakaṃ dr̥ṣṭam yathā bhāvābhāvo 'bhāva iti //* 異法者，…，謂若是常，見非所作，如虛空等。此中常言表非無常，非所作言表無所作，如有非有說名非有。“[The example] by dissimilarity [i.e. the negative example] is ... for instance, ‘whatever is eternal is observed to be non-produced, like ether.’ Here, the negation (*abhāva*) of being non-eternal is said by the word ‘eternal,’ and the negation of being produced is said by the word ‘non-produced,’ like non-being (*abhāva*) is the negation (*abhāva*) of being (*bhāva*).” Cf. Tachikawa 1971: 121.

⁴⁹ Indeed, there are other minor fallacies beyond the scope of *trairūpya*, cf. NP 3.3.1(5): *viparītānvayo yathā / yat kṛtakaṃ tad anityaṃ dr̥ṣṭam iti vaktavye yad anityaṃ tat kṛtakaṃ dr̥ṣṭam iti bravīti //* 倒合者，謂應說言，諸所作者，皆是無常，而倒說言，諸無常者，皆是所作。“[An example where] the positive concomitance is reversed is that: One states ‘whatever is non-eternal is observed to be produced’, when he should say ‘whatever is produced is observed to be non-eternal’”; NP 3.3.2(5): *viparītavyatireko yathā / yad anityaṃ tan mūrtaṃ dr̥ṣṭam iti vaktavye yan mūrtaṃ tad anityaṃ dr̥ṣṭam iti bravīti //* 倒離者，謂如說言 諸質礙者，皆是無常 “[An example where] the negative concomitance is reversed is that: one states ‘whatever is corporeal (*mūrta*, *zhi ai* 質礙) is observed to be non-eternal,’ when he should say ‘whatever is non-eternal is observed to be corporeal.’” Cf. Tachikawa 1971: 127, 128.

Indian equivalence to the Aristotelian syllogism might well be an over-interpretation.⁵⁰ For such an interpretation, the thesis or conclusion has to be taken into account so that a form representing the complete process of reasoning can be available for further considerations concerning its being valid or not. However, this is obviously not the intention of logicians following Dignāga, in that the thesis is explicitly excluded by them from “probative factors” and from their fundamental considerations concerning an argument’s being tenable or not.

5. Conclusion

In the development from Vasubandhu to Dignāga and his Indian and Chinese followers, and in the new interpretation of *sādhana* as the triple characterization of a correct reason (*trairūpya*) instead of the linguistic expression of a three-membered argument, what comes to the fore is a gradually clearer conception of what is essentially decisive for an argument to be a good or sound argument. In identifying the decisive factor with the *trairūpya* or the truth of premises, Dignāga and his followers lead the Buddhist theory of argument to an approach sharply different from that of the formal logic of their European colleagues.

A crucial problem undecided, however, is whether the “epistemic approach” or the “dialectic approach” is to be stepped on in further development. As we have said, we leave the answer open at the present stage. I believe that a solution will come about with a detailed discussion of the *trairūpya* in Chinese Hetuvidyā.⁵¹

Bibliography and abbreviations

Primary sources

NMu	<i>Nyāyamukha</i> (Dignāga): see Katsura [1]–[7].
NP	<i>Nyāyapraveśa</i> (Śaṅkarasvāmin): see Tachikawa 1971: 140–144; Chinese translation, T32, no. 1630.
NPT	<i>Nyāyapraveśakaṭīkā</i> (Haribhadra): <i>Nyāyapraveśakaśāstra of baudh ācārya Diṅnāga. With the commentary of ācārya Haribhadrasūri and with the subcommentary of Pārśvadevagaṇi</i> , ed. Muni Jambuvijaya, Delhi: Motilal Banarsidass, 2009, 13–55.
NPVP	<i>Nyāyapraveśakavṛttipañjikā</i> (Pārśvadeva): see op. cit., 56–126.
PS(V)	<i>Pramāṇasamuccaya(vṛtti)</i> (Dignāga): Tibetan translation, see Kitagawa 1965.
RINM	<i>Daijō hossō kenjin shō</i> 大乘法相研神章. Chapter 10 <i>Ryakken Inmyō</i>

⁵⁰ This is exactly the conclusion of Tillemans’ 1991 article (Tillemans 1999: 78–81), where he clearly shows that the thesis or conclusion constitutes “an integral part of the syllogism” but not of the Buddhist *sādhana*, and this fact foreshadows the “fundamental incommensurability” between syllogism and *sādhana*. To certain extent, my treatment of the concept of *sādhana* in Chinese literature could be regarded as presenting the matter “from a slightly different angle.”

⁵¹ I have made some preliminary attempts in this direction, esp. on the concept of *sapakṣa* and *vipakṣa* in Chinese Buddhist logic, and on a logical reading of the second characteristic under the Chinese interpretation, see Tang 2015. For the most extensive and profound analysis of the “epistemic operator” in Indian logic and of the *trairūpya*, see Oetke 1994.

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- YMDS *Yin ming da shu* 因明大疏 (Kuiji 窺基): see Zheng 2010; also T44, no. 1840.
- YZMS *Yin ming zheng li men lun shu ji* 因明正理門論述記 (Shentai 神泰): Woodprint edition. Nanjing: Zhina neixue yuan 支那內學院, 1923.
- ZYS *Yin ming ru zheng li lun shu* 因明入正理論疏 (Wengui 文軌), abbreviated as *Zhuang yan shu* 莊嚴疏: Woodprint edition. Nanjing: Zhina neixue yuan 支那內學院, 1934.

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