

**WIENER STUDIEN**  
**ZUR TIBETOLOGIE UND BUDDHISMUSKUNDE**

HERAUSGEGEBEN VON  
ERNST STEINKELLNER

HEFT 58

WIEN 2004

ARBEITSKREIS FÜR TIBETISCHE UND BUDDHISTISCHE STUDIEN  
UNIVERSITÄT WIEN

**THE ROLE OF THE EXAMPLE (*DRṢṬĀNTA*)  
IN CLASSICAL INDIAN LOGIC**

EDITED BY

**SHORYU KATSURA**

AND

**ERNST STEINKELLNER**

WIEN 2004

ARBEITSKREIS FÜR TIBETISCHE UND BUDDHISTISCHE STUDIEN  
UNIVERSITÄT WIEN

## IMPRESSUM

Verleger: Arbeitskreis für Tibetische und Buddhistische Studien  
Universitätscampus AAKH, Spitalgasse 2-4, Hof 2, 1090 Wien

Herausgeber und für den Inhalt verantwortlich:  
Prof. Ernst Steinkellner, Reisnerstraße 6, 1030 Wien

Druck: Ernst Becvar Ges.m.b.H., Lichtgasse 10, 1150 Wien

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# Why Infer and not just Look? Dharmakīrti on the Psychology of Inferential Processes

Birgit Kellner, Vienna

As is well known, Dharmakīrti's *Pramāṇavārttikasvavṛtti* contains an extensive exposition of the theory of "exclusion" (*apoha*) (PVSV 24,16-93,5), whose central tenet is that words and logical marks do not refer to real entities directly, but have the "exclusion of the other" (*anyavyavaccheda*) as their object-content. As the common example goes, the word "cow" does not refer to the real cow, but to the exclusion of all that is not a cow.

In defending this central tenet, Dharmakīrti also makes important remarks about the psychology of inference, which he embeds in a larger discussion of the relationship between sense perception (*pratyakṣa*), deficient mental events such as error (*bhrānti*) and doubt (*saṁśaya*), and ascertainment (*niścaya*). An inquiry into the pertinent sections of PVSV reveals a peculiar connection between the psychological function of inference and the very nature of ascertainment. By contextualising the discoveries of this inquiry with descriptions of inferential processes that can be found in later treatises of the school, it becomes moreover possible to reconstruct a more comprehensive conception of the psychology of inferential processes.

## Perception and conceptualisation in Dharmakīrti's *Pramāṇavārttikasvavṛtti* (PVSV)

For the branch of Buddhist philosophy to which Dharmakīrti belongs, the human mind is nothing but streams, or layers, of mo-

mentary mental events (*citta*) and their associated factors (*caitta*). A momentary mental event arises out of a complex of disparate causes and is in turn, together with other momentary entities, causally responsible for the production of various other mental events.

The forms of mental events relevant in the present context are instances of sensory perception (*indriyapratyakṣa*) and instances of conceptual cognition (*vikalpajñāna*). The passages discussed below are based on the assumption that an instance of sensory perception is directly caused by a non-mental real entity, by a sense faculty, by an immediately preceding mental event, and by a host of additional factors, such as light in the case of visual perception. By contrast, conceptual cognitions have no direct causal link to reality, but depend on recollection (*smṛti*) of past experience. Moreover, while a sensory perception grasps the real entity by which it is caused by showing its image (*pratibhāsa*) or representation, a conceptual cognition operates by identifying and naming. Its content consists in the attribution of a property (*dharma*) to a property-bearer (*dharmin*), as for instance in the conceptual cognition “this is blue” the property of being blue is attributed to the bearer “this”.

While non-conceptual perception is, provided that all of its causes are intact, always veridical owing to its direct link with momentary reality, conceptualisation is inherently erroneous insofar as it mistakes the general features that it abstracts from and superimposes on disparate, momentary reality for reality itself. Still, some conceptual cognitions are correct in the sense that they identify seen reality correctly and serve as a solid basis for successful action, whereas others are false because they misidentify it and lead people astray – identifying mother-of-pearl as mother-of-pearl is in this sense correct, whereas identifying it as silver is false.<sup>1</sup> Finding out

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<sup>1</sup> TILLEMANS 1995: 877f. relates that the dGe lugs pas assume such a “hierarchy of error”, distinguishing between “valid thought, which is only →

how this correctness is exactly to be differentiated from falsehood, and how it is to be known whether an instance of a conceptual cognition is correct or erroneous, is a delicate matter that has generated controversies within the tradition as well as in modern scholarship. In the present context I shall take the liberty to evade this debate and simply posit working definitions for correctness and error that I assume to represent a rough understanding of the views advanced by Dharmakīrti and those of his successors that will be dealt with in this paper: a conceptual cognition is correct if its content is congruent with the nature of the seen real entity that the cognition is about and if it *therefore* enables the cognising person to successfully act upon the entity according to his/her intentions in the situation in question. By contrast, a conceptual cognition is erroneous if its content is incongruent with the seen entity's nature and if it therefore fails to enable the person to act successfully.

A correct conceptual cognition is referred to as “ascertainment/ascertaining cognition” (*niścaya, niścayañāna*), in contrast to which

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erroneous in a very specific way about what appears, and utterly wrong thought, where nothing real appears at all and error occurs on the level of determination”. He further argues that “this idea of a twofold hierarchy of error has only a very strained grounding in Dharmakīrti”. It is true that a clear-cut terminological distinction between the fundamental error of all conceptualisation and the contingent error of some conceptualisation is wanting especially in PVSV, where the expressions *bhrānti* and *samāropa* are used for both notions. Yet, the arguments presented in the passages relevant for the present paper nevertheless evidence that a distinction between these two forms of error was maintained. How, for instance, should the claim “ascertaining cognitions exclude false superimpositions” (cf. below) be understood unless it presupposed a distinction between false superimposition performed by all conceptual cognitions, of which ascertaining cognitions constitute a subclass, and false superimposition performed only by some conceptual cognitions, namely those which are not ascertaining?

a false one is referred to as “false superimposition” (*samāropa*), or “error/erroneous cognition” (*bhrānti*, *bhrāntijñāna*). It deserves to be emphasised at this point that for Dharmakīrti, the category of error (*bhrānti*) in general comprises conceptual as well as sensory error, that is, both the conceptual misidentification of perceived reality and the erroneous perception of something as something else caused by impairment of the sense faculty, such as the visual perception of one moon as two moons on the part of a person suffering from an eye-disorder.<sup>2</sup> Insofar as the following discussion is concerned with conceptual error alone, the expression “error” will be used exclusively in this limited sense.

In the beginning of the *apoha*-section of PVSV, Dharmakīrti propounds as its main thesis that what is understood through words and logical marks are not real entities themselves, but “exclusions” (*vyavaccheda*). This thesis is first defended through arguments pertaining to the nature of, and relationship between, perception and other forms of cognition, as well as language (PVSV 25,26-26,1):

*katham punar etad gamyate: vyavacchedaḥ śabdalingābhyāṃ  
pratipādyate, vidhinā na vasturūpam eveti? pramāṇāntarasya śab-  
dāntarasya ca pravṛtteḥ.*

How is this understood: that an exclusion is made understood by words and logical marks, (and) not, in an affirmative manner

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<sup>2</sup> For sensory error, see PV 3.297ff. and PVin 1.76,29ff. (cf. also HATTORI 1968: 97). Both forms of error are subject to the classical Indic definition of error as the “apprehension of something as that which it is not”, articulated by Dharmakīrti in PVin 2.1c: *atasmimś tadgraho bhrāntir ...* See SCHMITHAUSEN 1965:154 for further references also from other philosophical schools.



(*vidhinā*), the nature of a real entity itself (*vasturūpam eva*)?<sup>3</sup> – [This is understood] on the ground that an additional [instance of a] means of valid cognition and an additional [instance of a] word occurs [with reference to a real entity already grasped by perception, or already grasped by another instance of a *pramāṇa* or a word].<sup>4</sup>

Perception not only grasps real entities directly, but also in their entirety, because real entities are of a uniform and indivisible nature or “own-being” (*svabhāva*), and because the partial perception of something indivisible is impossible.<sup>5</sup> In other words, perception

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<sup>3</sup> Śākyabuddhi construes *vidhinā* with *na vasturūpam eva (pratipādyate)*, whereas Karṇakagomin construes it with *vyavacchedaḥ pratipādyate*. PVT D59b7-60a1 = Q70b4f.: *sgra dañ rtags ni sgra dañ rtags (rtags D : rtags dag Q) ste de dag gis rnam par bcad pa rtogs par byed kyi | rnam par bcad pa la mi ltos pa'i sgrub pas dños po'i rañ gi ño bo kho na rtogs par byed pa ni ma yin no zes bya ba 'di ji ltar šes te | PVSVT 120,28-121,9: sa (sc. vyavacchedaḥ) eva śabdaliṅgābhyāṃ vidhinā vidhirūpeṇa pratipādyate 'dhyavasīyate, na punar vastuno rūpaṃ pāramārthikadharmibhāvalakṣaṇaṃ pratipādyata iti kuto gamyate?*

I have followed Śākyabuddhi, with additional support from PVSV 27,9f. *yadā 'numānam api vastu vidhinā pratyāyayati na vyavacchedakṛt ...*, where an “affirmative” mode of knowing is also connected with knowing a real entity, and not with knowing an exclusion. Karṇakagomin’s interpretation might be related to his position in the debate between *vidhivāda-* and *pratiśedhavāda-*interpretations of the *apoha-*theory that emerged after Dharmakīrti, cf. AKAMATSU 1986.

<sup>4</sup> In my translations, round brackets are used for supplemented expressions of a lesser scale, whereas square brackets indicate supplementations of a larger scale and with a smaller degree of certainty. The distinction therefore shows which supplements depend on the translator’s interpretation to a large extent and might perhaps be controversial.

<sup>5</sup> PV 1.45ab: *ekasyārthasvabhāvasya pratyakṣasya sataḥ svayam*, PVSV 26,4: *eko hy arthātmā | sa pratyakṣaḥ ...*, PVSV 26,14: *... drṣṭasarvatatvasyāpi bhāvasya ...*, PV 1.47ab: *tasmād drṣṭasya bhāvasya drṣṭa evākhilo guṇaḥ*. For the impossibility of partial perception of indivisible →

grasps all there is to be grasped of the real entity by which it was caused. That being the case, nothing remains to be known through further instances of other *pramāṇas* – by which Dharmakīrti specifically means inference –, or for words to make known – all aspects of the entity are already established through perception (*sarvākārasiddhiḥ*, PVSV 26,6). Whatever remains to be established by inference or language cannot belong to the “own-being” of the perceived entity (*atatsvabhāvatvam*, PVSV 26,7), which was after all already grasped by perception. However, it is undeniable that several instances of inference occur with reference to one and the same real entity grasped by perception, and, by extension, that inference is a distinct *pramāṇa* in its own right. According to Dharmakīrti, this is explicable only if the object and mode of apprehension of inference and language differ from that of perception.

But even if this is granted, why should the object of logical marks and words be, of all things, an “exclusion”? Dharmakīrti’s answer: because inference serves to exclude false superimpositions (*samāropavyavaccheda*).<sup>6</sup> Inference excludes a false superimposition by removing it, by – as Karṇakagomin clarifies – preventing that this superimposition, as a momentary event, produces a homologous successor as part of the midstream which constitutes the cognising

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(i.e., partless) entities, cf. PVSV 27,1f.: ... *anaṃśasya caikadeśena darśanāyogāt*.

<sup>6</sup> See PV 1.58ab: ... *bhrāntinivṛttyartha* ...; PVSV 27,13: *samāropavyavacchedaḥ* ... *kriyate*; 27,14f.: *tadartham* (sc. *samāropavyavacchedārtham*) *anyat pravartate*; 26,23f.: ... *tadvyavacchedakāni bhavanti pramāṇāni saphalāni syuḥ* ...; 26,24: ... *teṣāṃ tu vyavacchedaphalānāṃ* ... Most of these passages expressly refer to a *pramāṇa* other than perception (cf. PV 1.45 and 47), but the focus clearly lies in inference/logical marks (cf. PV 1.48). PVSV 61,16–62,15 reiterates analogous claims for verbal expressions (see FRAUWALLNER 1933: 56f.)

person.<sup>7</sup> In other words, inference brings an existing series of error about a certain aspect of reality to a halt, even though this does not per se preclude that the same type of error might occur again at similar occasions in the future.

The most common examples adduced for such superimpositions in PVSV are the false identification of mother-of-pearl as silver (e.g., PVSV 26,15ff.) as well as the case of a mirage, where sun-rays, brought to vibrate by vapour rising up from the heated ground, are mistaken for water when seen from a distance.<sup>8</sup> Moreover, at one place in PVSV, doubt (*saṃśaya*) is indicated side by side with error, as a mental event excluded by inference (PVSV 27,15-22, see further below). Śākyabuddhi and Karṇakagomin emphasise that logical marks also exclude doubt because doubt takes two alterna-

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<sup>7</sup> See PVSVṬ 128,12-15: *yatrāpi samāropaḥ pravṛtto na tatrāpi samāropaniṣedhaḥ śabdaliṅgābhyām pratipādyate sambandhābhāvād. ata evāyam na kriyate, ahetutvāc ca nāśasya. kevalaṃ pūrvakasya samāropasya svarasanirodhāt śabdaliṅgābhyām anityādinīścaye saty anyasya samāropasyānutpāde sati samāropaniṣedhaḥ kṛto bhavati.*

<sup>8</sup> This description of a mirage is borrowed from NBh 112,1: *grīṣme marīcayo bhaumenōṣmaṇā saṃsr̥ṣṭāḥ spandamānā dūrasthasya cakṣuṣā sannikṛṣyante...* KRASSER 1991<sub>2</sub>: 59, n.99 asserts that Dharmakīrti attributes the erroneous character of mirages to deficient sense faculties, but passages in PVSV actually indicate that they were considered as caused by deficiencies in the cognising person's mind. In PVSV 49,19-51,16, the mirage is invoked as an analogy to the fundamental error of all conceptualisation. Since the latter is caused by ignorance (*avidyā*), this implies a mental conditioning also of the former. This is clearly stated in PVV 205,1f., 207,19ff. and 208,1-8. The passage in PPar II 20,10f., which Krasser adduces in favour of his interpretation, might also be interpreted in a different fashion – or perhaps Dharmottara developed his own distinctive theory of the causes for mirages? Cf. also below n. 43 for Śāṅkaranandana's interpretation of *asati bhrāntikāraṇe* in PVSV 32,12.

tives as its object-content, and because one of them is excluded through inference.<sup>9</sup> The function of inference to exclude a certain mental event can therefore be applied to error as well as doubt, the latter being in structural terms derivable from the former.<sup>10</sup> As a shorthand for error and doubt, I shall subsequently use the term “deficient mental event”.

For any given real entity, as many deficient mental events are possible as there are other entities for which it might be mistaken, and there can consequently occur as many logical marks to exclude

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<sup>9</sup> PVṬ D63a4-6 = Q74b1-3: *rjes su dpag par bya ba 'ga' žig la | phyin ci log gi śes pa med du zin kyañ 'on kyañ de la the tshom yod par 'gyur la the tshom yañ gñi ga'i cha la brten pa yin pas | phyogs la der 'khrul pa la reg par 'gyur ro || de'i phyir the tshom bsal ba la yañ rtags kyis (: kyi Q) rnam par gcad (: bcad Q) par bya ba kho na yin no || PVSṬ 126,26-28: yadi nāma kvacid *anubhavayoge sati yadiha niścayas tathā* 'pi tatra saṃśayena bhāvyam. saṃśaya cobhayāṃśāvalambī. sa ca pakṣe tadviparītaṃ saṃsprśaty evātaḥ saṃśayavyudāse 'py anyavyavacchedaḥ kṛto (kṛto conjectured on the basis of PVṬ : kuto PVSṬ) *bhavaty eva liṅgena*. The underlined text (for which the manuscript folio 48b6f. is unfortunately illegible) must be corrupt. On the basis of the parallel in PVṬ, it might be reconstructed as \**yadi nāma kvacid anumānayoge sati yadi na viparyāsas* ... For an argument against the inclusion of doubt in the category of mental events opposed to ascertainment that also takes the relationship between doubt and error as proposed here into account, see NSā 242,19ff.*

<sup>10</sup> However, this structural relationship – doubt contains at least one erroneous alternative – does not necessarily entail that doubt is psychologically caused by error, in that an error-event would serve as a cause for generating a doubt-event under certain circumstances. This conclusion seems to be attributed to Dharmakīrti in the table in KATSURA 1984: 231, where a causal chain error → doubt → ascertainment (through inference/verbal knowledge) is indicated.

these events.<sup>11</sup> By extension, this also supports the status of inference as a distinct *pramāṇa*. The psychological function of inference to exclude error and doubt is consequently tied to its character as apprehending an “exclusion”. However, inference is not the only type of ascertainment to be discussed in its relationship to false superimpositions.

### The two types of ascertainment

The distinction between two types of ascertaining cognitions is based on their causation. Perceptual ascertainment, in secondary literature also termed “perceptual judgment”,<sup>12</sup> follows instantly after and is caused by an instance of sensory perception. By contrast, inferential ascertainment is the establishment of a probandum (*sādhya*) in a logical subject (*pakṣa*) subsequent and due to the ascertainment of a probans (*sādhana*) with which the probandum is inseparably connected, and the recollection of this inseparable connection. In the Hetubindu, Dharmakīrti clarifies that perceptual ascertainment does not occupy the status of a *pramāṇa*

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<sup>11</sup> PVSV 26,22f.: *yāvanto 'sya parabhāvās tāvanta eva yathāsvaṃ nimittabhāviṇaḥ samāropā iti tadvyavacchedakāni bhavanti pramāṇāni saphalāni syuh*. See also the first of two “intermediate verses” (*antaraśloka*) PV 1.52.

<sup>12</sup> See PV 1.60 with PVSV 31,26-32,12, quoted and translated further below. For an outline of Dharmakīrti’s theory of perceptual judgment, see KATSURA 1984: 225f., 1989 and 1993.

Note that in KATSURA 1993: 5 and p.71, a distinction is drawn between “perceptual judgment” and *adhyavasāya* (“determination”): perceptual judgment is described as producing *adhyavasāya*. However, it seems to me that *adhyavasāya* is in the pertinent passages from the Hetubindu more or less synonymous with *niścaya*, “ascertainment”, to the effect that perceptual judgment does not *produce* determination or ascertainment, but in itself *is* an instance of a determinative or ascertaining cognition.

proper, as it does not provide any new information pertaining to the realisation of a human goal on the part of the perceived object (HB 2,18ff.). In a more rudimentary form, this argument is already advanced in *Pramānaviniścaya* 3 (prose on k.48, D207a4-b6 = Q304b7-305b1), in connection with refuting an independent *pramāṇa* for cognising absences. The problematic status of perceptual ascertainment as a *pramāṇa* may be responsible for the lack, at least in Dharmakīrti's works, of a specific Sanskrit term for it. In PVSV, it is only indirectly referred to as that form of ascertainment which is not inferential, which arises instantly after perception, and which is characterised by its opposition to false superimpositions.<sup>13</sup>

Since perceptual ascertainment arises immediately after perception, it cannot, like inference, exclude a deficient mental event by removing it. But this, one might argue, entails that it does not grasp an “exclusion” and thus undermines Dharmakīrti's general claim that all instances of conceptualisation are characterised by having exclusions as their objects. Dharmakīrti clarifies this issue by specifying that perceptual ascertainment is nevertheless opposed to deficient mental events by preventing their arising in the first place.<sup>14</sup>

Because the function of *pramāṇas* to exclude deficient mental states is adduced as one reason for the claim that they take an “ex-

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<sup>13</sup> PVSV 28,8: *yad rūpādidarśanānantaram aliṅgaṃ niścayajñānaṃ bhavati ...* In PVSV 31,12f., perceptual ascertainment is referred to simply as “the other” (*anyat*), meaning the other type of ascertainment as opposed to inference.

<sup>14</sup> See PV 1.50-51 with PVSV 28,8-22. Cf. KATSURA 1993: 70: “Perceptual judgment ... will lead us to a successful action by preventing erroneous superimpositions from occurring.” KATSURA 1984: 227: “... In fact, inference is meant to dispel misjudgement and suspicion just as perceptual judgment is meant to prevent them.” By “suspicion”, Katsura here most probably refers to doubt (*saṃśaya*).

clusion” as their object-content, it can be expected that they always function in this manner. In other words, inference will be held to remove error or doubt not only in some particular cases, but universally and intrinsically. From this it further follows that inference is necessarily preceded by doubt or error pertaining to the presence of the probandum in the logical subject. This is confirmed in the following passage which articulates Dharmakīrti’s views on the psychology of inference in a most explicit fashion (PVSV 27,15-22):<sup>15</sup>

*nānu nāvaśyaṃ viparyāsapūrvaka evāpratītanīścayo bhavati, yathā 'kasmād dhūmād agnīpratīpattīḥ. na hi tatrānāgnisamāropaḥ sambhāvyyate. tan na sarvatra vyavacchedaḥ kriyate. uktam atra: dharmīpratīpattāv abhedāt sarvapratīpattīḥ. bhede vā 'sambaddhasya tatrāpratīpattir iti. tasmāt tatrāpi taddarśinas tatsvabhāvānīścayaḥ. kutaḥ? viparyāsāt. sa ca taṃ pradeśaṃ tadvivik-tena rūpeṇa nīścinvann agnisattābhāvanāvimuktayā buddhyā katham aviparyasto nāma? tadākārasamāropasamśayarahitaś ca tatpratīpattau na liṅgam anusaret. na ca tasyānvayavyatirekayor ādriyeta.*

[Objection:] An ascertaining (cognition) of something not (yet) cognised (i.e., inferential ascertainment) is not necessarily preceded by a misconception (*viparyāsa*), as for instance in (case of) the spontaneous cognition of fire from smoke. For in that (case), no false superimposition of non-fire is assumed [by the inferring person]. Therefore, an exclusion (of a false superimposition) is not carried out in every case (of an inference).

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<sup>15</sup> Other – and quite different – translations of this passage are given in MOOKERJEE/NAGASAKI 1964: 104f. and ZWILLING 1976: 94f. A summary is presented in FRAUWALLNER 1932: 252f.

[Answer:] Regarding this (point), it was stated [before]:<sup>16</sup> when a property-bearer is cognised (by perception), all (its properties) are cognised if (they are) non-different (from the bearer). Or, if (a property is) different (from the bearer), no cognition occurs, with respect to this (bearer), concerning (a property which is then) not connected (with the bearer). Therefore, in that case (of a seemingly spontaneous inference from smoke to fire), too, an essential property (i.e., possession of fire) of this (place) is not ascertained on the part of one who sees this (place). (But) why? – Because of a misconception. Now, how (could) someone who ascertains this place as devoid of this (fire), by means of a cognition that is bereft of the presumption that fire exists,<sup>17</sup> not be taken (to hold) a misconception? For someone who is without false superimposition and without doubt about a certain aspect (of a perceived object) will not pursue a logical mark in order to understand this (aspect); nor will he attend to the positive and negative concomitance of this (logical mark). ...

Because it is observed that persons spontaneously realise fire from smoke, an opponent argues, not all instances of inference are preceded by false superimpositions, i.e., “misconceptions” (*viparyāsa*). Such spontaneous inferences, which apparently function like

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<sup>16</sup> This is most probably a reference to PVSV 26,5f., summarised above on p. 6. The part between *uktam atra* and *iti* might also be a quotation from another text (by Dharmakīrti or someone else?), but no source could be identified.

<sup>17</sup> Since the main focus of the rhetorical question is on *niścinvat* – “how (could) someone who ascertains ... not be taken (to hold) a misconception?” –, the nominal phrase *agnisattābhāvanāvimuktayā buddhyā* is best taken as a specification of this ascertaining cognition in that it further emphasises its being devoid of the presumption, i.e., the positive conviction, that fire exists. Based on this interpretation, *agnisattābhāvanāvimuktayā buddhyā* refers to the same state of affairs as *tatsvabhāvāniścayaḥ* from above: a cognition which does not ascertain the presence of fire.



mental reflexes, are also discussed in later Nyāya sources. Discussions of the relationship between *anumāna* and error/doubt before Dharmakīrti could not be located,<sup>18</sup> and it appears that Dharmakīrti can indeed be credited with introducing a peculiar conception in this regard.

Moreover, certain Nyāya texts after Dharmakīrti suggest that the reaction to Dharmakīrti's psychological views was not uniform. According to Jayanta Bhaṭṭa, inference generally applies to doubtful objects; error is not discussed in this connection. Even though inference is observed to occur with regard to objects for which no

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<sup>18</sup> Prior to Dharmakīrti, error/doubt seem to have been discussed in relation to processes of examination, reflection and judgment predominantly in the context of defining "ascertainment" (*nirṇaya*) in NSū 1.1.41: *vimṛśya pakṣapratipakṣābhyām arthāvadhāraṇam nirṇayaḥ*. While ascertainment may also arise from perception alone (NBh 38,14: *bhavati khalv indriyārthasannikarṣād utpannapratyakṣe 'rthāvadhāraṇam nirṇaya itī*), reasoning (*nyāya*) in general is elsewhere said to apply neither to something uncognised – that is, something unperceived? –, nor to something already ascertained, but to something doubtful (NBh 3,3f.: *tatra nānupalabdhe na nirṇite 'rthe nyāyaḥ pravartate, kiṃ tarhi saṁśayite 'rthe*, where the Jaisalmer ms. reads *saṁśayite pravartate* for *saṁśayite 'rthe*).

Moreover, older lists of ten members of proof contain, in addition to the five known as the *pañcāvāyavāḥ* in the Nyāya school, "doubt" (*saṁśaya*), "desire to know" (*jijñāsā*), "attainment of what is possible" (*śakyapṛāptī*), "purpose" (*prayojana*) and "removal of doubt" (*saṁśayavyudāsa*), see NBh 30,8f., where a ten-membered list is said to have been propounded by *aneke naiyāyikāḥ*.

Lastly, in PDhS 37,10 (text according to NENNINGER 1992), those who are in doubt, error or without an opinion (*saṁśayitaviparyastāvvyutpannānām*) are mentioned as hearers of an inference for others. This is the closest connection between deficient mental events and inference – as opposed to proof or ascertainment in general – in pre-Dharmakīrtian literature that could be identified so far.

doubt exists, like in the case of the unsought realisation of fire through the unexpected perception of smoke rising from the ridge of a mountain, those trained in reasoning (*nyāyavidāḥ*) assume that inference necessarily has a doubtful object from an objective viewpoint (*vastuyogyatāvaśena*).<sup>19</sup> In other words, even when subjectively no doubt is experienced during the inferential process, the object still remains doubtful objectively. Bhāsarvajña, on the other hand, expressly argues against Dharmakīrti's position after quoting PVSV 27,18-28,1, with minor variations, in NSā 249,21-242,2. In fact, his argumentation reads like a more explicit statement of the objection presented in PVSV itself: the undeniable fact that people occasionally see smoke and instantly realise the presence of fire, without experiencing error or doubt beforehand, shows that inference is not always preceded by such events, and it is not admissible to assume their existence without the inferring person being conscious of them. The occasional experience of spontaneous inferences which are, according to Bhāsarvajña, prompted by a high degree of habituation (*abhyāsātīśaya*),<sup>20</sup> is therefore raised against the universal presupposition of error/doubt on the part of inference.

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<sup>19</sup> NM<sub>1</sub> 595,2-5 = NM<sub>2</sub> 149,20-24: *anumānaṃ ca sandigdhe viśaye pravartata iti prāyeṇa tadvyavahāraḥ. yady api kvacid asandigdhe 'pi viśaye dṛṣṭaṃ pravartamānaṃ anumānaṃ analānarthitāyām (anarthitāyām NM<sub>2</sub> : arthitāyām NM<sub>1</sub>) atarkitopanataparvatanitambanirgatadhūmadarśanena kṛśānukalpanam (°kalpanam NM<sub>2</sub> : °kalpam NM<sub>1</sub>) iva, tathā 'pi vastuyogyatāvaśena sandigdhaviśayam evānumānaṃ icchanti nyāyavidāḥ.*

<sup>20</sup> See NSā 242,7-9: *na hi viparyayaḥ saṃśayo vā 'pratīyamāno 'py astīti vaktuṃ śakyate. na ca tadapratītau kvacid dhūmadarśanānantaram evāgnyanumānaṃ bhavan na dṛśyate. ... NSā 242,17f.: abhyāsātīśayād anicchato 'py anumānapravṛtter na samāropābhāve 'numānapravṛtīḥ.* For a discussion of the conceptual properties of *abhyāsa* in the context of recollection, see PREISENDANZ 1994<sub>2</sub>: 304f., n.84.

Later Navya-Naiyāyikas follow this line of reasoning and further illustrate such inferences with the instantaneous realisation of the presence of a cloud upon hearing thunder.<sup>21</sup>

In refuting the objection, Dharmakīrti first reiterates the theoretical conundrum, stated before in PVSV 26,5f., which arises from the assumption that inference grasps real entities immediately and in their entirety, just like perception: in that case, all properties that a property-bearer possesses would have to be known already when it is perceived, so that no occasion would be left for the application of instances of other *pramāṇas*; by extension, inference would lose its status as a distinct *pramāṇa*. With respect to those properties that the property-bearer does not possess, a directly apprehending inference could not operate anyway, as these are not connected with the bearer in the first place. The – here only implicit – conclusion is that the mode of apprehension as well as the object of inference must be differentiated from that of perception. It is to this implicit conclusion that the description of the inferential situation which now follows is causally connected with *tasmāt*.

For understanding the description, it is worth bearing in mind that for Dharmakīrti all conceptualisation involves an intention on the part of the cognising person: provided a person intends to ascertain an aspect of reality, this aspect is posited as the property in an ascertaining cognition, and the undifferentiated remainder of the real entity is posited as its bearer.<sup>22</sup> If a person intends to ascertain the difference of a seen white cow from horses, the ascertaining cogni-

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<sup>21</sup> In Navya-Nyāya treatises, the issue is discussed under the heading of *pakṣatā*; see the summaries in BHATTACHARYA 1974 and MOHANTY 1992: 102. The two main criteria applied in the investigation of *pakṣatā* are (a) presence/absence of doubt (*saṃśaya*) and (b) presence/absence of desire to establish (*siṣādhayiṣā*).

<sup>22</sup> See PVSV 44,6-10, STEINKELLNER 1971: 200.

tion will be one that attributes the property “non-horse” to the seen white cow. Differences of the cow from sets of objects other than horses – such as its difference from spotted cows – are set aside in this particular ascertaining cognition, but may become attributed in others if the cognising person so intends.<sup>23</sup>

Accordingly, the situation invoked by the opponent is to be described as one where a person who perceives the fire-possessing place (*taddarśinah*),<sup>24</sup> and who intends to ascertain fire, does not

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<sup>23</sup> Cf. also PVSV 33,9-11: *yadā 'yaṃ pratipattā tadanyavyavaccheda-bhāvānapekṣaḥ piṇḍaviśeṣe 'śvavyavacchedamātram jijñāsate tathābhū-tajñāpanārtham tathākṛtasanketena śabdena prabodhyata anaśvatvam asyāstīti*. The wish on the part of a listener in a communicative situation to understand – i.e., ascertain – the difference of a cow from horses that is addressed here corresponds to a wish to ascertain a particular property on the part of the inferring person in the case of a private inference.

<sup>24</sup> As an aside, it deserves to be noted that this passage rests on the assumption that the inferring person perceives a place which possesses both smoke and fire. This is brought out clearly in HBṬ 20,19ff. on HB 2,13f. where Dharmakīrti claims that in smoke-fire-inferences, smoke is ascertained in the place through perception (i.e., through perceptual ascertainment).

Arcaṭa presents an objection to this statement which questions that the place can be properly assumed as *sādhyadharmin* (HBṬ 20,19ff.), attributed to Uddyotakara in HBṬĀ 265,10: the place connected with fire is not perceived by the inferring person, whereas the region in the sky which is perceived only possesses smoke, but not fire. Hence – it is implied –, the place cannot be the *sādhyadharmin* qualified by both *sādhyā-* and *sāadhanadharma*. Arcaṭa counters the argument mainly by pointing out that the oneness of the place as *dharmin* is assumed according to worldly judgment. The criticism as such goes back to Uddyotakara's discussion of Dignāga's *anumeya*-definition as *dharmaviśiṣṭo dharmī* in NV 46,23-47,6. See also similar criticism of this definition in ŚV 316,7-11, where it is also pointed out that if the fire-possessing parts of the moun-  
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ascertain that the place is fire-possessing (*tatsvabhāvāniścayaḥ*), that is, determines the seen place as being without fire (*tadvivikṭena rūpeṇa niścinvat*). The interesting move in this argumentation lies in the shift from the proposition “N.N., who intends to ascertain fire, does not ascertain that the place is fire-possessing” to “N.N., who intends to ascertain fire, ascertains that the place is not fire-possessing”. In other words, a person with an intention towards ascertainment of F ascertains non-F if he/she does not ascertain F.<sup>25</sup> It is this shift which renders the ascription of error to the cognising person inevitable: someone who ascertains that a place which in fact possesses fire is without fire can only be assumed to be in error, even though, one feels tempted to add, the person does not experience an erroneous cognition because the inferential process appears to occur spontaneously.

Lastly, Dharmakīrti adds that people who are without doubt and error pertaining to an aspect of reality will not perform an inference in order to ascertain it. This suggests that there is an alternative, simpler method available. Because of the arguments presented above, this cannot be an ascertainment *in* perception, because perception does not ascertain individual aspects of entities due to its holistic character. Rather, this is ascertainment immediately after perception – perceptual ascertainment. If someone who is without doubt/error regarding the property F ascertains it immediately after perceiving a real entity which is an F, and, moreover, if someone

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tain were indeed perceived, their fire-possession would already be known through perception (and inference would be unnecessary).

<sup>25</sup> Note that this shift becomes plausible only if an intention on the part of the cognising person is assumed, for otherwise, the non-ascertainment of F could simply be due to a lack of interest. If I see a fiery place and have absolutely no interest in fire because I am looking for a swimming-pool, I would find it rather odd if someone were to accuse me of the erroneous assumption that fire is absent there.

who entertains doubt/error about F requires inference to remove it, perceptual and inferential ascertainment end up sharing a specific relationship to each other with regard to actual situations: in any given situation where a real entity is perceived, inferential ascertainment becomes necessary when perceptual ascertainment is impossible and a deficient mental state arises instead immediately after the perception.

Naturally, this situation-specific relationship holds good only for such inferences which are occasioned by the perception of a real entity about which knowledge is to be gained. By extension, it also concerns only such deficient mental states which are “about” real entities, which have a real substrate,<sup>26</sup> such as the misidentification of real and perceived mother-of-pearl as silver, or the misidentification of a fire-possessing place as being a place without fire. By contrast, deficient mental states or inferences about construed property-bearers – here one might think of the Sāṅkhya’s primordial matter (*prakṛti*) – are exempt from it, simply because nothing is perceived in the inference situation. Such inferences still remove a deficient mental state, because all inferences remove deficient mental states, but they do not remove one which pertains to a real entity perceived in the situation where the inference takes place.

Moreover, this account connects perceptual ascertainment with deficient mental events through their respective causes: if it is possible that immediately after an instance of perception, there arises either perceptual ascertainment or a deficient mental event, at least some of the causes for perceptual ascertainment must be such that their absence is responsible for the production of error or doubt. In order to clarify what type of factors precisely cause those deficient mental events that are to be removed through inference, it is there-

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<sup>26</sup> For the distinction between error with substrate and error without substrate in classical Indic theories of error, see SCHMITHAUSEN 1965: 149.

fore necessary to examine further the causation of perceptual ascertainment, even if this in textual terms unfortunately turns out to be more difficult than might be expected.

### The causation of perceptual ascertainment and of deficient mental events

The verse PV 1.60, together with the prose PVSV 31,26-32,12, is the sole passage in PVSV which lists factors responsible for the emergence of perceptual ascertainment. Unfortunately, it does not directly address the question which of these factors are responsible for the arising of an ascertaining cognition rather than an erroneous or doubtful one because its main explanatory interest lies elsewhere. Arriving at a plausible hypothesis about these causes is nevertheless possible, but requires some extrapolation.

The central part of the passage is PVSV 32,5-12:

*anubhavo hi yathāvikalpābhyāsaṃ niścayapratyayān janayati, yathā rūpadarśanāviśeṣe 'pi kuṇapakāminībhakṣyavikalpāḥ. tatra buddhipāṭavaṃ tadvāsanābhyāsaḥ prakaraṇam ityādayo 'nubhāvād bhedanīścayotpattisahakāriṇaḥ. teṣāṃ eva ca pratyāsattitāratamyādibhedāt paurvāparyam, yathā janakatvādhyāpakatvāviśeṣe 'pi pītarāṃ āyāntam dṛṣṭvā pītā me āgacchati nopādhyāya iti. so 'pi bhavan niścayo 'sati bhrāntikāraṇe bhavat. |*

[1] (Perceptual) experience produces ascertaining cognitions (*niścayapratyaya*) in accordance with (a person's) habituation to a [correct] conceptual cognition [with a certain content] (*yathāvikalpābhyāsaṃ*), as for instance when (an ascetic, a lecher and a dog respectively) conceive of (a woman's corpse) as a corpse, as desirable or as something to eat, even though the perception of (its) appearance does not differ (for these three beings). In this case, acuity of (conceptual) cognition (*buddhipāṭava*), a (state of) habituation to the imprint of this (conceptual cognition) (*tadvāsanābhyāsa*), situation-context and the like cooperate [with perception] in the production, out of (an instance of perceptual) experience, of a cognition that ascertains a distinctive (property) (*bheda*). The precedence (of ascertainment) (*paurvāparya*), moreover, is due to the

difference in degree, etc. of proximity (*pratyāsatti*) of precisely these (cooperating causes), as for instance when (a person), having seen (his) father approach, (determines) “my father is coming”, (and) not “my teacher (is coming)”, even though (the approaching person) is likewise father and teacher.

[2] Moreover, this ascertainment (that follows immediately after a perception) arises – (if it) arises (indeed) (*bhavan*) (?)<sup>27</sup> – when a cause for error is absent.<sup>28</sup>

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<sup>27</sup> The function of the present participle *bhavan*, attributed to *niścayaḥ*, is not entirely clear.

Such uses of *bhavan*, in combination with an indicative main verb, but also with one in optative mood or future tense, are not uncommon in *śāstric* language, cf., e.g., TSP 475,16f.: *yathā pratyakṣeṇa gṛhīte śabdādau dharmīṇi kṛtakatvādinā ’nityatvaniścayo bhavan pramāṇam bhavati, tathā samāropavyavacchedaviṣayo niścayo bhaviṣyati*. TSP 225,13f.: *tathā hi – padārthasyopalambho bhavan sākāreṇaiva vijñānena bhaved anākāreṇa vā*. TSP 614,22f.: *na cātra vyatiriktasya samvedane kaścit pratibandho ’sti. tathā hi pratibandho bhavan bhavet tādātmyam tadutpattir vā*. It seems that in these instances, as well as in others, *bhavat*, when attributed to an entity, indicates that its occurrence is not necessary, or that the acceptance of the corresponding concept is not self-evident, but depends on further conditions: a *pratibandha*, for instance, if it exists – that is, if it obtains for the case under discussion, but precisely this cannot be taken for granted and remains to be examined –, will consist either in *tādātmya* or in *tadutpatti*.

In the present case, this tentative assumption yields the following interpretation: if an ascertaining cognition arises indeed – but its arising is not always the case, because it only arises when the *niścayapratyayas* are instantiated –, it does so only with respect to those aspects of reality which are not subject to fundamental error (cf. further below for the meaning of *bhrāntikāraṇa*).

<sup>28</sup> For other translations of this passage, see ZWILLING 1976: 107, and KYŪMA 2002: 187f. For a summary, see FRAUWALLNER 1932: 257.



Paragraph [1] first states that an instance of perception, here referred to as *anubhava*, produces ascertaining cognitions in accordance with *vikalpābhyāsa*, that is, in accordance with the habituation of the cognising person to a conceptual cognition, resulting from its repeated experience or deliberate training in the past. We can surmise that this conceptual cognition is specified by having a particular content, for naturally, the repeated experience/training of conceptualising lemons will hardly habituate me to the conceptualisation of airplanes. Moreover, since such habituation is supposed to be responsible for the production of ascertainment, the conceptual cognitions experienced in the past must have been correct, for Dharmakīrti will hardly have believed that repeatedly mistaking mother-of-pearl for silver will result in the correct determination of mother-of-pearl as mother-of-pearl on the next occasion.

The author next adduces the rather graphic example of an ascetic, a dog and a lecher, who, when they see a woman's corpse, ascertain it respectively as a corpse, as something to eat, and as desirable, in reliance on the cooperating causes *buddhipāṭava*, *tadvāsanābhyāsa*, *prakaraṇa*, and the like (*ityādayaḥ*). These factors therefore – at least primarily – explain why, out of several equally possible interpretations of seen reality, one arises for a certain person or being rather than another. Moreover, within a smaller range of possible interpretations of perceived reality available to one and the same cognising person, such as “being a father” or “being a teacher”, the degree, etc. (*-ādi*) of “proximity” (*pratyāsatti*) of these cooperating causes decides on which one dominates and therefore actually arises.<sup>29</sup> What is meant by “proximity”, and what is indicated by

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<sup>29</sup> Or: the degree, etc. of proximity decide on which one arises first, in an actual situation where several ascertainments arise in succession? I do not consider this as the most plausible interpretation, but in view of the un-  
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-ādi after *tāratamya* in the compound, remains obscure, also from the commentaries, but this semantic uncertainty can be left aside for the time being, since the main burden for the explanation undoubtedly lies on the “cooperating causes” themselves.

But what is actually the issue at hand? The passage is introduced with the question why, if a real entity which is different from everything else is perceived, it is not ascertained precisely in this fashion, that is, as different from everything else and therefore in its own, unique own-being with all its aspects.<sup>30</sup> Dharmakīrti’s answer: because the causes which cooperate with the perception in bringing about an ascertainment are incomplete (*sahakāriṅkaḥ*, PVSV 31,27f.). Judging from the example of the woman’s corpse, the author primarily aims to explain the partial nature of ascertainment through factors which render different forms of ascertainment relevant to different cognising persons. All these possible forms are correct, in that the dead woman can indeed be correctly identified in these various ways. It may be mentioned in passing that Dharmakīrti’s list, insofar as it focuses on factors which render a particular interpretation relevant in a particular situation, coincides with two lists given by Bhartṛhari, where factors such as “situation-context” (*prakaraṇa*), “sentential connection” (*vākya*) or “spatial and temporal context” (*deśakāla*) are enumerated as responsible for deciding which of several possible meanings a word/utterance actually has on specific occasions.<sup>31</sup>

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certainties surrounding *pratyāsatti* and -ādi in the compound, it cannot be entirely ruled out.

<sup>30</sup> PVSV 31,26-28: *kiṃ punaḥ kāraṇaṃ sarvato bhinne vasturūpe ’nubhavotpattāv api tathaiva na smārto niścayo bhavati?*

<sup>31</sup> VP 2.314-315: *vākyaṅkaḥ prakaraṇād arthād aucityād deśakālataḥ | śabdārthāḥ pravibhajante na rūpād eva kevalāt | saṃsargo viprayogaś ca sāhacaryaṃ virodhitā | arthaḥ prakaraṇaṃ liṅgaṃ śabdasyānyasya san-*  
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*nidhiḥ || sāmāthyam aucitī deśaḥ kālo vyaktiḥ svarādyah | śabdārthas-  
yānavacchede viśeṣasmṛtihatavaḥ ||* “From sentential connection, situa-  
tion-context, meaning (of co-occurring words, i.e., textual context), prop-  
riety/suitability, spatial and temporal context, the meaning of words is  
differentiated, not merely from their form. Accompaniment by an entity  
that would serve to distinguish and absence of an entity that would serve  
to distinguish, mention of an entity that regularly accompanies, opposi-  
tion, meaning (of co-occurring words), situation-context, indication  
available in a related sentence, presence of a specifying word, probability,  
propriety/suitability, place, time, gender, (and) accent, etc. are causes for  
remembering the specific (meaning) when the meaning of a word is not  
delimited.” This paraphrasing translation closely follows the summary of  
the verse in AKLUJKAR 1990: 147; for other, slightly varying translations,  
cf. IYER 1977 and RAGHAVAN PILLAI 1971.

Already in BIARDEAU 1964: 418, it has been noted that VP 2.314 is mod-  
elled after Bṛhaddevatā 2.318: *arthāt prakaraṇāl līṅgād aucityād deśa-  
kālataḥ | mantreṣv arthavivekaḥ syād itareṣv iti ca sthitiḥ ||* “From the  
meaning [of other words or sentences?], from situation-context, gen-  
der/indication, appropriateness, from (considerations of) place and time,  
there will result the determination of meaning for *mantras*; such is the  
settled rule for other (genres of speech/writing), too.” (Cf. also MAC-  
DONNELL 1904.)

The partial overlap of items in both lists in VP, as well as the close re-  
semblance of VP 2.314 to the verse from the Bṛhaddevatā, suggest that  
Bhartṛhari for some reason juxtaposed lists from different sources, modi-  
fying that from the Bṛhaddevatā or taking it over from another source  
where it had already been changed. That these are actually two lists is  
also confirmed by VPT 127,13f. on VP 2.314: *anye 'pi tanniścayāya pra-  
kārā 'nusandhātavyaḥ. ślokavaśāc codāharaṇamātram eva darśitam iti  
mantavyam.* (Cf. also VPVṛ 273,8f., which, however, contains lacunae.)  
Note that VP 2.315-316 seem to have missed from the text used by  
Biardeau, which is probably why this issue has not been pursued any  
further by her. For Kāṇḍa 2, this was the edition Benares 1887, Benares  
Sanskrit Series vols. 19 (?) and 24. That k.316 is missing from the  
Benares edition is also noted in RAGHAVAN PILLAI 1971: 108, n.263. A

However, in Dharmakīrti's case, the incompleteness of the factors listed, which have previously been termed "causal factors for ascertainment" (*niścayapratyaya*),<sup>32</sup> was in a different passage also said to be responsible for error.<sup>33</sup> While the present passage is on the surface mainly concerned with epistemic relevance, at least some of the factors that it mentions must therefore also have been considered responsible for epistemic correctness – their absence does not result in the emergence of a different, equally relevant ascertainment, but rather results in the emergence of error instead of ascertainment. That the list itself is not complete – after all, it ends in *-ādayaḥ* – need not disturb us, for given that this is the only place where Dharmakīrti lists the *niścayapratyayas*, we can surely

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detailed examination of the genesis of these lists has, to my knowledge, not yet been undertaken.

For a general assessment of VP 2.314-316, cf. AKLUJKAR 1990: 558, n.13: "There is some overlap in the list [i.e., in VP 2.314-316 as a whole, B.K.] that follows by the very nature of the matter involved and because the list evolved through the efforts of generations of thinkers. For the latter reason, there is also an element of variation in the understanding or definition of terms involved. For example, *prakaraṇa* and *sāmarthya* obviously had wider meanings in addition to their specific meanings determined on the basis of other factors included in the list(s)."

<sup>32</sup> I here assume, on the basis of Karṇakagomin's commentary, that the factors listed in PVSV 32,5-12 and referred to as *bhedaniścayotpattisāhakāriṇaḥ* are the same ones previously referred to as *niścayapratyaya*.

<sup>33</sup> See PVSV 26,19f.: ... *niścayapratyayaivaikalyāt tv aniścinvan tatsāmānyam paśyāmīti manyate*. The incompleteness of the causal factors for ascertainment results in a non-ascertainment, i.e., in the mistaken belief that one sees a form common to silver and mother-of-pearl, when in fact only mother-of-pearl is perceived.

expect the key factor responsible for epistemic correctness to be expressly mentioned in it.<sup>34</sup>

The factor “situation-context” (*prakaraṇa*) can be ruled out as a factor whose absence leads to error. First of all, it seems that a “situation-context” in general is not something that can be “absent” or “incomplete”, but only something that can be different under different circumstances. Secondly, while a given situation-context such as a medical conversation may well explain why someone ascertains a fruit as medicine, and not as tasty, it hardly explains why someone ascertains it as medicine instead of mistaking it for a pot.<sup>35</sup>

As candidates for conditions for epistemic correctness, we are thus left with the three expressions *vikalpābhyāsa*, which occurs in the sentence that precedes the actual list, *buddhipāṭava*, and *tadvāsanābhyāsa*, both of which occur in the list itself. In later texts of the

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<sup>34</sup> As additional factors covered by *-ādayaḥ*, Śākyabuddhi and Karṇakagomin list *arthitva*, *sāmarthyā*, and the like (!). Cf. PVT D70b7-71a1 = Q83a8 = PVSVT 142,16f.: *ādīśabdād arthitvasāmarthyādiparigrahaḥ*. The former could mean either “interest [of the cognising person in the aspect that comes to be ascertained]” or “usefulness [of the seen object, in that fashion in which it is ascertained, for the cognising person]”, and the latter might mean “propriety” or “suitability”. However, the actual semantics of these notions remain so far unknown and do not become any clearer from similar lists given by Kamalaśīla or Arcaṭa, cf. TSP 244,17, 478,13ff., 707,19f., HBT 22,11, 26,21f.

<sup>35</sup> A medical conversation, as situation-context for ascertaining a particular fruit as medicine, is given as an example for *prakaraṇa* by Śākyabuddhi and Śāṅkaranandana: PVT D70a6f. = Q83a6f.: *dper na sman pa la sogs pa'i gtam gyi skabs su bab pa na | de mthoñ ba las skyes bu chos du ma yod du zin kyañ sman pa la sogs pa ñid du ñes pa lta bu'o || PVT(Ś) D191a3f. = Q221b5f.: sman pa'i skabs su gnas par 'gyur ba'i skyes bu la sman par ñes pa yin no ||*

tradition, *abhyāsa* is in at least two different contexts assigned the function of keeping away error. First, in the discussion about intrinsic or extrinsic validity (*prāmānya*) of cognitions that is led in various post-Dharmakīrtian treatises, a “habituated perception” (*abhyāsavat pratyakṣam*) is said to be intrinsically valid because causes for error are removed from the mind stream of the cogniser.<sup>36</sup> Second, in a context that is closer to the one in PVSV, Jñānaśrīmitra in his *Anupalabdhirahasya* repeatedly states that habituated persons, or persons whose perceptions are acute, do not perform inferences for cognising certain aspects of reality, but instead determine them through perceptual ascertainment.<sup>37</sup> Because repeated experience or training can be assumed to produce a state where one’s perceptions are acute, acuity can be considered a result of a process of habituation. The mention of either “acuity” or “habituation” by Jñānaśrīmitra can therefore be considered simply a matter of different emphasis.<sup>38</sup> However, while these later materials confirm that acuity and habituation are the key factors responsible for the correctness of perceptual ascertainment, they depart from the passage in PVSV

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<sup>36</sup> See STEINKELLNER 1992: 259, and, among others, TSP 938,19-23, PVinṬ(a) 13,5-14,6.

<sup>37</sup> See AR 186,16-23 where, in connection with the quotation of PV 3.107cd *vyavasyantīkṣaṇād eva sarvākārān mahādhiyah*, someone whose mind is sharp (*paṭudhi*) is said to ascertain the absence of a real entity solely on the basis of perception, whereas someone whose mind is not sharp (*apaṭu*) requires inference. Cf. in particular AR 186,22: *pratyakṣā-pāṭava eva hy anumānam prārthyate*, “... for it is only when perception is not sharp that inference is striven for”. In AR 185,10, 185,27, 186,11, 189,22, 189,27, a state of habituation (*abhyāsadaśā*) or a specific habituation (*abhyāsaviśeṣa*) is invoked as the decisive factor.

<sup>38</sup> On *abhyāsa*, see also the useful general observations in KYŪMA 2002, where the term is translated as “repetition” (Japanese *hanpuku*).

in one important respect, at least if Śākyabuddhi's interpretation of it is adopted.

Both Śākyabuddhi and Kaṛṇakagomin liken *buddhipāṭava* to a yogi's perceptual acuity which ensures direct perceptual awareness of such fundamental aspects of reality as momentariness (*kṣaṇikatva*).<sup>39</sup> In other words, *buddhipāṭava* as mentioned in the list is *like* a yogi's perceptual acuity, which implies that the two are not fully identical. This seems reasonable, because meditative concentration on such aspects of reality as momentariness or selflessness results in a yogi's direct perceptual awareness of these aspects, whereas the *niścayapratyayas* are considered responsible for the production of a relevant and correct conceptual cognition immediately after an instance of sensory perception. This functional difference also extends to *tadvāsanābhyāsa* when understood as "habitation to the imprints of this (*buddhi*)".

But if *buddhipāṭava* is only *like* yogic perceptual acuity, how is it to be understood in its function to ensure the correctness of perceptual ascertainment on the part of ordinary persons? Not surprisingly, Śākyabuddhi interprets *tadvāsanābhyāsa* as habituation to imprints of ascertaining cognitions, which implies that *buddhi* was understood as equivalent to *vikalpa* in *vikalpābhyāsa*. This turns *tadvāsanābhyāsa*, "habitation to imprints of this (ascertaining cognition)" into an explication, or specification, of *vikalpābhyāsa*, "habitation to a conceptual cognition". Indeed, Śākyabuddhi indicates a conceptual connection between these two items to the effect that the initial mention of *vikalpābhyāsa* as an ex-

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<sup>39</sup> PVSVT 142,15f.: *buddheḥ pāṭavaṃ tīkṣṇatā. yathā yogināṃ buddhipāṭavād darśanamātreṇa kṣaṇikatvādiniścayaḥ* = PVT D70b4f. = Q83a4f. Other translations of *buddhipāṭava* in the present context are "Frische des Geistes" (FRAUWALLNER 1932: 257) and "[the degree of] sagacity" (ZWILLING 1976: 107).

planatory factor had “to be completed” (*bskañ bar bya ba*, \**pūrya?*) by the subsequent indication of *tadvāsanābhyāsa*.<sup>40</sup> It is possible that the additional information conveyed by *buddhipāṭava* and *tadvāsanābhyāsa* is precisely that the conceptual cognition to which the person must be habituated is ascertaining, if we assume that only ascertaining cognitions can be “acute” (*paṭu*) and that the notion of an “acuteness of error” is self-contradictory for Dharmakīrti and his commentators.

Secondly, the “completion” of *vikalpābhyāsa* by *tadvāsanābhyāsa* may also have had a further dimension, even though this is by no means certain. From a theoretical viewpoint, a mere habituation to concepts, which are after all viewed as context-insensitive labels abstracted from disparate and momentary reality, would hardly be able to ensure the arising of ascertainment immediately after per-

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<sup>40</sup> PVṬ D70b5f. = Q83a5f.: *de'i bag chags goms pa ni (tadvāsanābhyāsaḥ) nes pa'i śes pa de'i bag chags de goms śiñ rgyun chags su 'jug pa ste, dper na skyes bu 'ga' žig la yon tan du ma yod du (ma yod du om. Q) zin kyañ ji ltar goms pa bžin du yon tan nes pa la (la om. Q) lta bu'o || 'dis ni nram par rtog pa la ji ltar goms pa bžin (yathāvikalpābhyāsaṃ) žes bśad pa gañ yin pa de kho na'i gtan tshigs bskañ bar bya ba'i phyir yañ bzlas pa yin no ||* The syntax of the final sentence is not entirely clear; I tentatively translate as follows: “with this [immediately preceding explanation of *tadvāsanābhyāsaḥ*], the reason/cause (*gtan tshigs*, \**hetu*) (indicated) in the solitary/in this very explanation (given with) *yathāvikalpābhyāsaṃ* is also (*yañ?*) discussed (*bzlas pa*, \**jalpita?*), because (this reason/cause) is to be completed (*bskañ bar bya ba*, \**pūrya?*).” In other words, the mention of *yathāvikalpābhyāsaṃ* alone as a reason/cause asks for “completion”, i.e., additional explanation or specification, and this completion is provided with *tadvāsanābhyāsa* when interpreted as a habituation to the imprints of an ascertaining cognition.

Even if this last sentence were to be read differently, the preceding interpretation of *tadvāsanābhyāsa* clearly evidences an attempt to interpret it as an equivalent to or specification of *vikalpābhyāsa*.



ception *in similar contexts* in the future. What is required is not only knowledge of situation-independent semantics, but rather knowledge, by experience, of the use of concepts *in* specific situations. It is not certain whether Buddhist epistemologists in general reflected upon this pragmatic aspect of habituation, or whether it was at all relevant as background for Śākyabuddhi's interpretation of the relationship between *vikalpābhyāsa* and *tadvāsanābhyāsa*. But it is at least possible that the occurrence of *vikalpa* in *vikalpābhyāsa* is significant in this respect, namely if *vikalpa* is interpreted as a mental event with conceptual content, referred to under the aspect of its occurrence in a certain situation, and not merely as a type of cognition. The term *vikalpābhyāsa* would then refer to a habituation to a content-specific conceptual cognition as it occurs in a specific situational context, and the "imprint" (*vāsanā*) of this *vikalpa* is not a mere concept such as "corpse" or "desirable", but an impression left behind by the correct application of this concept in a certain situation. In other words, the imprint can be expected to, as it were, store and preserve situation-specific information and not merely information about the general semantics of concepts. As the texts are transmitted, it is not possible to determine whether such considerations informed either Dharmakīrti's conception of the *niścayapratyayas* or Śākyabuddhi's interpretation of PVSV 32,5-12, but it may be useful to bear these considerations in mind when examining further and related occurrences of *abhyāsa*.

In the context of explaining the relevance/correctness of perceptual ascertainment, Śākyabuddhi's interpretation of a habituation to conceptual imprints and an acuity of conceptual cognitions seems better suited than the accounts of perceptual acuity and, by exten-

sion, a habituation to perceptions that were mentioned above,<sup>41</sup> simply because perceptual imprints alone are inadequate for ensuring the production of perceptual ascertainment in the future – after all, repeatedly seeing a woman’s corpse will hardly make me ascertain it as a corpse, and not as something else, when I perceive it next time; surely, what is called for is a habituation to conceptualisation, to ascertainment.<sup>42</sup> For this reason, I have decided to follow Śākyabuddhi in the interpretation of PVSV 32,5-12, even though it may turn out that this view proved to be controversial or problematic in the tradition itself – after all, there may have been a reason why precisely this passage from his commentary was not taken over by Kaṛṇakagomin who otherwise closely follows his predecessor.

In spite of the apparent concern of PVSV 32,5-12 with epistemic relevance and not with epistemic correctness, we can thus extrapolate that the crucial presupposition for perceptual ascertainment as opposed to error consists in a mental state where, as a result of repeated experience or training of certain correct conceptual cognitions in the past, an instance of perception instantly triggers an association with a correct and relevant feature that can be attributed to the perceived entity. For the sake of terminological convenience, this particular state of mind will from now on be referred to as a *state of habituation*, whereas its absence will be referred to as *lack of habituation*, or *insufficient habituation*. If the view that this is a

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<sup>41</sup> An interesting critique of *abhyāsa* which focuses precisely on this question can be found in PKM 33,17f.: *atha ko 'yam abhyāso nāma, bhūyodarśanam bahuśo vikalpotpattir vā?*

<sup>42</sup> The description of *abhyāsa* in KATSURA 1984: 225 as “repeated experience of a given object” may therefore be misleading because the repetition implied in *vikalpābhyāsa* applies to a content-specific conceptual cognition, and not to a direct perceptual experience of an object.

habituation to conceptual cognitions should turn out as problematic, the fact still remains that some form of habituation serves as the key factor responsible for the correctness of perceptual ascertainment, and that insufficient habituation is the key factor responsible for the production of error or doubt.

Lastly, in paragraph [2] of PVSV 32,5-12, it is added that ascertainment arises instantly after perception only if “a cause/causes for error” (*bhrāntikāraṇa*) is/are absent. Śākyabuddhi and Kaṇakagomin interpret this as a reference to a scope-restriction of perceptual ascertainment: perceptual ascertainment arises when the causal factors for ascertainment are present, but solely with regard to those aspects of reality for which ordinary beings are properly predisposed.<sup>43</sup> For ordinary persons whose cognitive faculties are not as highly developed as those of yogis or Buddhas can in principle

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<sup>43</sup> In other words, *asati bhrāntikāraṇe* is held to answer the following objection: “Even though they are habituated to a conceptual cognition of momentariness and selflessness, which is a contributing cause [for perceptual ascertainment], those who do not see the truth (*tattvādarśin*) do not ascertain momentariness, etc. on account of perception [alone].” PVT D71a4f.-Q83b5f. = PVSVT 142,25f.: *nanu saty api kṣaṇikatvanairātmya-vikalpābhyāse sahakāriṇi (sahakāriṇi ms 54a1-2 : sahakāriṇi PVSVT) tattvādarśinām na pratyakṣāt kṣaṇikatvādinīścayo bhavātīy ata āha ...*

By contrast, Śāṅkaranandana interprets *asati bhrāntikāraṇe* to exclude cases such as a mirage, i.e., to refute the following objection: “[Objection:] Even if [all] cooperating causes exist, [it may be the case that] there is no ascertainment of a distinctive quality, as for instance in cases like a mirage (*\*marīcikā*).” PVT(Ś) D191b4f. = Q222a6f.: *gal te lhan cig byed pa rnam yod kyañ khyad par ñes pa yod pa ma yin te | dper na smig rgyu dag la bžin no* / Since it is not certain whether Śāṅkaranandana proposed his own distinctive theory of errors of the type of mirages (in this context, cf. also a possibly related passage in Dharmottara’s PPar II referred to above in n.8), or whether the text is corrupt, it is not possible to tell exactly what sort of *bhrāntikāraṇa* the author aims at.

not ascertain fundamental aspects of reality such as momentariness (*kṣaṇikatva*) or selflessness (*nairātmya*) immediately after a perception.<sup>44</sup> Being afflicted with ignorance (*avidyā*), they will inevitably identify real entities as permanent or endowed with a self after perceiving them. The resultant error may be temporarily removed through a subsequent inference, like, for instance, the inference from existence to momentariness (*sattvānumāna*), but it will occur again the next time a real entity is perceived and the intention to determine its momentariness exists.

### Two descriptions of inferential processes according to post-Dharmakīrtian treatises

The peculiar relationship between perceptual and inferential ascertainment within a certain domain of aspects of seen reality, namely those which are not subject to the power of ignorance, is also assumed as part of one particular description of inferential processes. This is the description given by Dharmottara of the *śiṃśapā*-inference, one of the most common illustrations of inferences based on a reason of essential property (*svabhāvahetu*).<sup>45</sup> Dharmottara's is the

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<sup>44</sup> See PVSV 21,6-9: *tāṃ punar asya kṣaṇasthitidharmatām svabhāvaṃ svahetur eva tathotpatteḥ paśyann api mandabuddhiḥ sattopalambhena sarvadā tathābhāvaśaṅkāvipralabdho na vyavasyati sadṛśāparotpattivi-pralabdho vā.* / See also PV 3.106cd-107, where it is emphasised that beings with sublime cognitions – i.e., yogis or Buddhas – determine all aspects of reality solely by perception: ... *moho viniścetur apātavāt ... / ta-syaiva* (sc. *moha*, k.106d) *vinivṛtyartham anumānopavarnanam / vyavasyantikṣaṇād eva sarvākārān mahādhiyaḥ.*

<sup>45</sup> The main passage used for the following description is NBT 106,11-107,2: *yatra pracuraśiṃśape deśe 'viditaśiṃśapāvyavahāro jaḍo yadā kenacid uccāṃ śiṃśapām upadārśyocyate 'yaṃ vṛkṣa iti tadā 'sau jāḍyāṃś śiṃśapāyā uccatvam api vṛkṣavyavahārasya nimittam avasyati tadā yām evānuccāṃ paśyati śiṃśapām tām evāvṛkṣam avasyati. sa mūḍhaḥ* →

most explicit and articulate description located so far, but passages in the works of other Buddhist epistemologists contain descriptions with the same main structural features, sometimes applying to *svabhāvahetu*-, sometimes to *anupalabdhihetu*-inferences.

The inference “this is a tree, because it is a *śiṃśapā*” is understood to establish that a seen *śiṃśapā* can be referred to with the expression “tree” due to its possession of branches and other distinguishing characteristics of trees. The inferential process is described in reliance on two temporally distinct situations. In the first situation, a dull (*jaḍa*) person who is faced with a place full of *śiṃśapā*-trees is shown a tall *śiṃśapā* and told that it is a tree. When faced with a small *śiṃśapā* in the second, later situation, the same person fails to call it a tree and is thus perhaps rightly termed a “dimwit” (*mūḍha*).<sup>46</sup> This failure to ascertain a *śiṃśapā* as a tree, which is said to amount to a false superimposition of “non-tree” on the tree, is rooted in an incorrect understanding of the “cause” (*nimitta*), that is, of the cause for the correct application of the designation “tree”. The understanding is incorrect in the specific sense that the cause is

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*śiṃśapātvamātranimitte vṛkṣavyavahāre pravartyate. noccatvādi nimit-  
tāntaram iha vṛkṣavyavahārasya, api tu śiṃśapātvamātram nimittam  
śiṃśapāgataśākhādimattvaṃ nimittam ity arthaḥ* (translated in STEIN-  
KELLNER 1991: 321, n.58) See also PVSVT 33,17-21: *yadā 'yaṃ mūḍha-  
matih śābaleye pravartitagovyavahāro bāhuleye śābaleyarūpaśūnyatvād  
govyavahāraṃ na pravartayati sa nimittapradarśanena govyavahāre  
pravartyate. sāsnaḍisamudāyanimittako hi govyavahāro na śābaleyarū-  
panimittikaḥ. bāhuleye 'pi tannimittam astīti katham asau na pravartyate.*  
Analogous descriptions with slightly varying examples are given in  
PVinṬ 2 D202a5-b2 = Q240a3-b1 and PVinṬ 1 D26a1-b5 = Q29a5-30a4.

<sup>46</sup> STEINKELLNER 1967: 184, n.97 describes such a “dimwit” as “clumsy” (“schwerfällig”) in cognition and action, whereas cognisers who are *amūḍha* are people with “normal reactions” (“... der ... normal reagiert ...”). See also TORELLA 1994: 140, n.12, where the dimwit features as a “a torpid intellect”, as opposed to a “normal person”.

assumed to be overly narrow: the dimwit considers tallness as a part of the cause of the designation “tree”, whereas the correct cause is nothing but the possession of branches and certain other features that distinguish trees from other plants or objects. This erroneous assumption of an overly narrow cause is attributed to forgetfulness,<sup>47</sup> since the dimwit had not only correctly determined the *śimśapā* as a tree in the first situation, but had also properly understood possession of branches, etc. as the correct cause, as the proper logical reason that is inseparably connected with the property of being a tree.

The actual inference takes place in the second, later situation, assisted by instruction on the part of another person in the form of an utterance like “you have used this expression before because of this cause”,<sup>48</sup> serving to remind the dimwit of his own previous correct

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<sup>47</sup> See DhP 107,23f.: ... *paścāj jāḍyavaśāt tanmātram nimittam vismṛt-ya* ..., PVinṬ 1 D24b2f. = Q27b1: *tha sñad du žugs pa las blun pas physis brjed* (: *brjod* D) *pa*, also D24b4 = Q27b3.

<sup>48</sup> For such “instructions” (in the case of inferences based on a *svabhāvā-nupalabdhi*-reason, where the non-perception of a perceptible is considered the cause of the designation “absent”), see PVinṬ 1 D23a5f. = Q25b6f.: *yul dañ rgyu ’dis tha sñad ’di la khyod kyis sñon žugs pa yin no žes rgyu dañ bcas pa’i yul bstan pas pha rol po rmoñs pa la rgyu mtshan dañ bcas pa’i med pa’i tha sñad dran par byed do* || PVV 507,14-16: *pūrvam api tvayā dṛśyādarśanamātrako ’sadyavahāraḥ pravartitaḥ. tatsadbhāvād ihāpi pravartayeti paraḥ pratipādyate*. Corresponding “instructions” for *svabhāvahetu*-based inferences are given in PVinṬ 3 D86a4 = Q102a4f., D86b3-5 = Q102b4-7, as well as PVinṬ 2 D198a7-b2 = Q235a3-5.

In some of these passages, the expression “object” (*viṣaya*) is used side by side with or instead of “cause” (*nimitta*), based on a conceptualisation of the relationship between probans and probandum as one between object and object-bearer (*viṣayin*) as evidenced in PVSV 5,1: ... *viṣayapratipattāv apy apratipannaviṣayinām darśanāt*, cf. also PVin 1 34,5-14. →

ascertainment of both probans and probandum. Enabled to recall the inseparable connection, the dimwit then performs the inference “this is a tree, because it is a *śiṃśapā*.” Durvekamiśra adds that people of even dimmer wit, who have not even ascertained the inseparable connection at a previous point in time, cannot carry out such inferences and need to be taught about the inseparable connection first.<sup>49</sup> By contrast, people who are not dimwits with respect to the said property ascertain it solely on the basis of perception, that is, through perceptual ascertainment.<sup>50</sup>

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Dharmottara notes that Dharmakīrti’s uses of *viṣaya* and *nimitta* always imply each other, see PVinṬ 1 D23a5 = Q25b5f.: *de bzin du gzan dag tu yañ yul gyi* (: *gyis* Q) *sgras rgyu ’phen* (: *phel* Q) *la rgyu’i sgras kyañ yul ’phen pa yin te | thams cad du slob dpon gyi tha sñad ni ’di lta bu yin no* //

<sup>49</sup> DhP 107,20: *ādita eva tena śākhādimattvamātram nimittam na grhītam* (statement of opponent which is endorsed), and DhP 107,22-25: *yaḥ prathamam tāvat śiṃśapāgatam śākhādimattvamātram eva nimittam avasāya vṛkṣavyavahāram pravartayat paścāj jāḍyavaśāt tanmātram nimittam vismrtyānyad eva vṛkṣavyavahārakāle uccatvam api nimittam āśid iti vyāmuhya tadoccatvam api vṛkṣavyavahāranimittam avakalpayatīti*. Insofar as the instruction on the part of a second person is accorded the function of reminding the dimwit of the previously ascertained inseparable relation in the relevant passages from PVinṬ (see the previous note for references), the assumption that such inferences can only be undertaken by dimwits who have in fact ascertained the relation before can also be attributed to Dharmottara.

<sup>50</sup> See PVinṬ 1 D26b1-5 = Q29b7-30a4: *... rmoñs pa ma yin pa ni mñon sum ñid las so* // *... rgyu mtshan ñes pa gañ yin pa de ni mñon sum kho nas ’gyur ro* // PVinṬ 2 D202b2-4 = Q240b1-3: *’di lta bu la sogs pa mñon sum sñon du ’gro ba’i tha sñad ni thams cad du rjes su dpag pa kho nas rtogs par byed pa ma yin gyi | ’on kyañ gañ gi tshe rgyu mtshan la rmoñs pa de’i tshe rjes dpag pas rtogs par byed do* // *rgyu mtshan la* (: *las* Q) *<ma> rmoñs na ni mñon sum ñid las don rtogs par ’gyur ro* // Note that, for Dharmottara, such perceptual ascertainment applies to af-  
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It is not difficult to see how this description accords with the above extrapolations from PVSV: a real entity is perceived, and a property S that the perceiving person intends to ascertain is not ascertained immediately after perception. The person's forgetfulness, adduced in Dharmottara's description as the cause for this failure, can be interpreted as a result of insufficient habituation, which we have identified as the key cause for deficient mental events. It is this failure to ascertain S, tantamount to the erroneous assumption that the object is non-S, which necessitates ascertainment of S through inference. The deficient event which necessitates the inference is caused solely by the mental predisposition of the cognising person. If this predisposition changes through subsequent habituation, the person will in the future ascertain *śiṃśapās* as trees immediately after perceiving them – experience and training remove the necessity of reasoning.

There is, however, a significant type of description of inferential processes in which no such relationship between perceptual and inferential ascertainment is involved, and most probably for good reasons. This description is useful because it permits us to reconstruct limitations to the scope of perceptual ascertainment. In explaining one by one the various sub-types of non-perception (*anupalabdhi*), which vary in complexity depending on the degree of knowledge about the conceptual relationships causality (*kāryakāraṇabhāva*), pervasion (*vyāpti*) and incompatibility (*virodha*) re-

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firmative ascertainment, and to negative ascertainment only when the negated entity is an instance of a cognition or mental image. Negative ascertainment with an external object such as a pot is categorically exempt from this rule and can only be established through inference. No other Buddhist epistemologist is known to draw such a distinction, and Jñānaśrīmitra expressly opposes it. See KELLNER 1997a for a (preliminary) treatment of this controversy.



quired for their application,<sup>51</sup> Dharmottara repeatedly adduces a principle that is to decide which type of reason is to be applied in a particular situation: if, due to certain features of the situation, it cannot be guaranteed that an object would be necessarily perceived if it existed,<sup>52</sup> then knowledge about conceptual relationships pertaining to this object must be introduced as the situation demands. More complex reasons which involve a higher degree of knowledge are to be applied in situations whose features render the application of simpler reasons impossible.

These features, as they are described in Dharmottara's works, comprise a host of factors: (a) excessive spatial distance, either because the object is too far away to be seen distinctly, or because it can only be perceived through a type of perception (e.g. tactile perception) that cannot operate from a certain distance, or because of both these reasons (five out of the ten complex types of non-cognition enumerated in NB according to PVinṬ, four according to NBT); (b) a part of the property-bearer in regard to which the object to be negated is not visible to the cognising subject (two types); (c) a combination of both these factors (one type); dim light (d) (one

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<sup>51</sup> See KELLNER 1997b: 497, n.8 and 501, n.22, for the various classifications of *anupalabdhi*-types in Indic and Tibetan Buddhist texts.

<sup>52</sup> This hypothetical conditional constitutes an "assumption of necessary perceivedness" (*drśyatvasambhavanā*, *drśyatvasamāropa*) and is central to the notion of situational perceptibility that restricts the logical reason of non-cognition, see KELLNER 1997c and 1999. Statements that emphasise the role of this conditional in the application of *anupalabdhi*-types are stereotypically repeated in NBT on each of NB 2.32-41 (with the exception of NB 2.36), e. g. NBT 126,3f.: *kāryānupalabdhiś ca yatra kāraṇam adrśyaṃ tatra prayujyate. drśye tu kāraṇe drśyānupalabdhir eva gamikā*. See KELLNER 1999: n.30 for a list of corresponding passages in PVinṬ 2, and, further, PVT D17a3ff. = Q20b7ff, PVSVT 39,13ff., TBh 64,6-8, TSop 289,25-27, and PVA k.584cd with PVA 639,5f.

type according to NBT). In detail: (a) comprises *svabhāvaviruddhopalabdhi*, *kāryaviruddhopalabdhi*, *vyāpakaviruddhopalabdhi*, *kāraṇānupalabdhi* as explained in PVinṬ, *kāraṇaviruddhopalabdhi*, (b) comprises *kāryānupalabdhi* and *viruddhakāryopalabdhi*, (c) is given with the *kāraṇaviruddhakāryopalabdhi*, and (d) with the *kāraṇānupalabdhi* as explained in NBT. The description of the *vyāpakānupalabdhi*-example deserves special mention: There are two mountain tops next to each other, one so densely forested that it is not possible to discern individual tree species such as *śiṃśapās*, the other with a *stūpa* but without any trees. It is not possible to directly ascertain the absence of a *śiṃśapā* on the treeless mountain top, for it cannot be guaranteed that a *śiṃśapā* would necessarily be seen if it existed. Dharmottara does not clearly state why this is the case, but merely claims that being a tree is perceptible (in the situation in question), whereas being a *śiṃśapā* is not. But even if the analysis is not clear, the following train of thought seems to be a fair reconstruction of the argument: The information in the situation renders it questionable whether a *śiṃśapā* would be clearly seen or identified, and permits an unequivocal visual perception and ascertainment only of a tree. It is the discernable absence of a tree on the mountain top with the *stūpa* which then allows one to indirectly infer the absence of *śiṃśapās*.<sup>53</sup> Or, consider for instance the description of a *kāraṇānupalabdhi*-inference: a person sees some sort of vapour rising up from a lake in the near darkness of a winter dawn. He intends to ascertain that smoke is absent, but distance and dim light make it possible that, even if smoke existed, it might not be seen, that is, it might not be

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<sup>53</sup> Cf. PVSṬ 39,13-17, and also, though not as detailed, PVṬ D17a3f. = Q20b7-21a1. The *viruddhavyāptopalabdhi* occupies an exceptional status, inasmuch as it represents a hypothetical inference (*prasaṅga*) and is perhaps for this reason the only type without an explanation of this type.

seen as smoke. Hence doubt persists as to what the seen substance actually is. He then looks at the dark lake and determines that fire is absent there – fire, whose bright colour would be necessarily seen if it existed. Recalling that smoke is an effect of fire, he reasons from the absence of fire as a cause to the absence of smoke as an effect and thus establishes the non-instantiation of smoke.<sup>54</sup>

In all cases there is either directly mentioned or at least implied a deficient mental event prior to the inference, namely that of doubt. This deficient event is, however, here mainly caused by unfavourable environmental circumstances, such as excessive distance, dim light, an object being partly hidden behind another, and so forth. It is because of such unfavourable circumstances that the perception in question does not trigger a mental association of the correct and appropriate imprints that may be present in the cogniser's mind stream. No indication is made that the acquisition of habituation would enable the person to ascertain the property in question immediately after perception. This suggests that perceptual ascertainment was considered impossible not only in cases where the cognising person lacks habituation, but also in cases where the perceptual image is, owing to unfavourable conditions in the environment, not clear or complete enough to trigger an association with

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<sup>54</sup> This is the description of the *kāraṇānupalabdhi*-situation according to NBṬ 136,2-7: *niṣkampāyatasalilapūrite hrade hemantocitavāspa<s>yodgame virale sandhyātamasi sati sann api tatra dhūmo na dṛśyata iti kāraṇānupalabdhyaṁ pratiśedhyate. vahnis tu yadi tasyāmbhasa upari plavamāno bhavet prajvalito rūpaviśeṣād evopalabdho bhavet. ajvalitas tu indhanamadhyaniviṣṭo bhavet. tatrāpi dahanādhikaraṇam indhanam pratyakṣam iti svarūpeṇa ādhārarūpeṇa vā dṛśya eva vahnir iti tatrāsya prayoga iti.* See also PVinṬ 2 D210b1f. = Q251a4f. (where the relevant external parameter is said to be spatial distance, not dim light), PVT D17b4f. = Q21b1f., and PVSVT 40,11-15.

the properly habituated imprints, where it is in some sense below the required threshold for awakening the proper *vāsanās*.

That such a type of limitation to the powers of habituation was indeed taken into account is further confirmed by a passage in Dharmottara's PVinṬ, where it is stated that habituation removes suspicion of error only when a perception does not occur under the influence of sleep, when its object is in spatial proximity, and when the conditions for manifestation are not unfavourable (*gsal byed mi mthun pa ma yin pas*, PVinṬ(a) 13,3f., *anāśaṅkyavyaṅjaka* DhP 19,9). This account deserves special notice in that environmental conditions such as spatial distance are here not connected with the occurrence of perception, but with the emergence of conceptualising cognitions subsequent to a perception. Thus, within the range of objects that I can see and that are therefore close enough to produce a perception, it is possible that the perceptual image of a vapour-like substance is because of too great a distance, or too little light, so unclear that it does not trigger an association with the imprint of smoke that I am actually interested in, and that I could ascertain immediately after seeing smoke if there was more light, or if I moved a little closer.

The reconstruction of these limitations is tentative to the degree that it relies on descriptions of inferential processes from later literature which are not contained in Dharmakīrti's works. However, at least at the present stage, these descriptions are not known to contain features which are connected specifically with views that developed only after Dharmakīrti, that conflict with tenets attested in his own writings, or that exhibit an entirely different philosophical perspective which might invest individual claims and views expressed by Dharmakīrti with a new function. These descriptions present more detail, but they do not, it seems, introduce new theoretical notions that would render their use in interpreting Dharmakīrti problematic.

## Conclusions

In the *apoha*-section of the *Pramāṇavārttikasvavṛtti*, Dharmakīrti not only develops his distinctive theory of conceptualisation and language, but also advances a psychological theory of inference: as one type of ascertaining cognition, inference serves to exclude, that is, remove, error and doubt. It is – amongst other things – for this reason that it has an “exclusion” (*vyavaccheda*) as its object. The other main form of ascertainment that is dealt with in PVSV, ascertainment which follows immediately after perception, serves to keep error and doubt away and for this reason also has an “exclusion” as its object. In both cases, the opposition between ascertainment and deficient mental states is used as argumentative support for claims about the nature of ascertainment itself: it is because of the function of ascertainment to remove or prevent error and doubt that it does not grasp real entities in the same direct fashion as non-conceptual perception, but rather grasps “exclusions”. This connection between the character of ascertainment and its psychological function is worth noting because it invests the psychological function of inference with a theoretical significance that one would not readily expect it to have, and that at least some philosophers from other schools were not prepared to endorse. Bhāsarvajña, for instance, rejects the universal presupposition of deficient mental events on the part of inference by pointing to inferential processes which apparently happen spontaneously, as, in a manner of speaking, mental reflexes. Dharmakīrti’s insistence that even in such cases a deficient mental event exists points to a divergence of opinions about what precisely is required to subsume a certain cognitive process under the heading of *anumāna*. It remains to be seen whether these divergences and the different psychological analyses involved in them were further addressed, or developed, in a later period.

Furthermore, with respect to a certain situation where a real entity is perceived, there exists according to our reconstruction of Dharmakīrti's position a specific relationship between perceptual and inferential ascertainment: provided that the cognising person intends to ascertain a certain aspect of the perceived entity, this aspect is either ascertained immediately after perception, or a deficient mental event – error or doubt – with respect to it arises instead. The former occurs provided that (a) the perception takes place in a favourable environment, meaning, e.g., that the spatial distance between the cogniser and the seen object is not too great, and provided that (b) the cogniser is habituated to the ascertainment in question because of repeated experience of it, in significantly similar situations, in the past. It is only if both conditions are fulfilled that perceptual ascertainment arises; if either of them is not fulfilled, a deficient mental event arises instead. This perhaps curious view, namely that when seeing an object I can only determine it correctly or be in error/doubt about it, is rendered somewhat more plausible by the added assumption that this process takes place in a situation where the cogniser's mind is, through a certain intention or wish, focused on ascertaining a particular aspect of seen reality. Perception is thus assumed to take place in a context – a situational context which comprises both a certain mental focus of the cognising person and certain environmental features of the situation itself, such as the spatial distance between cogniser and object, or lighting conditions.

Deficient mental events which arise after sensory perception can subsequently be removed through inference, provided, of course, that the cognising person is capable of properly identifying correct evidence for arriving at the desired item of knowledge, and of remembering the inseparable connection required to obtain between evidence and probandum. Such is, in short, the conception of the relationship between sense perception, perceptual and inferential ascertainment, and error or doubt as reconstructed on the basis of

Dharmakīrti's *Pramāṇavārttikasvavṛtti* and two different descriptions of inferential processes provided in later texts of the Buddhist epistemological tradition.

## Abbreviations and Bibliography

English titles of Japanese publications which are my own making are marked with an asterisk.

BKGA	Beiträge zur Kultur- und Geistesgeschichte Asiens
VKSKS(O)	Veröffentlichungen der Kommission für Sprachen und Kulturen Süd(- und Ost)asiens

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AR	<i>Anupalabdhirahasya</i> (Jñānaśrīmitra): Anantalal Thakur (ed.), <i>Jñānaśrīmitranibandhāvaliḥ</i> . (Tibetan Sanskrit Works Series 5) Patna <sup>2</sup> 1987, 183-190.
TSP	<i>Tattvasaṅgrahapañjikā</i> (Kamalaśīla): Dvarikadas Shastri (ed.), <i>Tattvasaṅgraha of Ācārya Shāntarakṣita with the Commentary 'Pañjikā' of Shri Kamalshīla</i> . 2 vols. (Bauddha Bharati Series 1, 2) Varanasi 1968, reprint 1981, 1982.
TBh	Tarkabhāṣā (Mokṣākaragupta): H.R. Rangaswami Iyengar (ed.), <i>Tarkabhāṣā and Vādasthāna of Mokṣākaragupta and Jitāripāda with a Foreword by Māmahopādhyāya Vidhuśekhara Bhattāchārya</i> . Mysore <sup>2</sup> 1952.
TSop	<i>Tarkasopāna</i> (Vidyākaraśānti): Giuseppe Tucci, <i>Mi-</i>

- nor Buddhist Texts*, part I. Roma 1956, 275-310.
- DhP Dharmottarapradīpa (Durvekamiśra): Dalsukhbai Malvania (ed.), Paṇḍita Durveka Miśra's Dharmottarapradīpa. [Being a sub-commentary on Dharmottara's Nyāyabinduṭīkā, a commentary on Dharmakīrti's Nyāyabindu]. Patna <sup>2</sup>1971.
- NBṬ *Nyāyabinduṭīkā* (Dharmottara): See DhP.
- NBh *Nyāyabhāṣya* (Pakṣilasvāmin): Anantalal Thakur (ed.), *Gautamīyanyāyadarśana with Bhāṣya of Vātsyāyana*. (Nyāyacaturgranthikā 1) New Delhi 1997.
- NM<sub>1</sub> Nyāyamañjarī of Jayantabhaṭṭa with Ṭippaṇī – Nyāyasaurabha by the Editor. Ed. K. S. Varadacharya. Vol. 2, Mysore 1983.
- NM<sub>2</sub> *The Nyāyamañjarī of Jayanta Bhaṭṭa, edited with notes, etc.*, by Pandit Śrī Sūrya Nārāyana Śukla. (Kashi Sanskrit Series 106) Benares 1936. [Both volumes are printed as two parts in one book; page-numbers refer to the second part.]
- NV *Nyāyavārttika* (Uddyotakara): Anantalal Thakur (ed.), *Nyāyabhāṣyavārttika of Bhāradvāja Uddyotakara*. (Nyāyacaturgranthikā 2) New Delhi 1997.
- NSā Nyāyasāra (Bhāsarvajña): Swāmī Yogīndrānanda (ed.), Śrīmad-ācārya-Bhāsarvajña-praṇītasya Nyāyasārasya svopajñaṃ vyākhyānaṃ Nyāyabhūṣaṇam. Vārānasī 1968.
- NSū *Nyāyasūtra*: See NBh.
- PKM Prameyakalamārtanda by Śrī Prabhācandra, a commentary on Śrī Manika Nandis Parīkṣā Mukhasūtra. Ed. Mahendra Kumar Shastri. Bombay <sup>2</sup>1941.
- PPar II *Laghuprāmānyaparīkṣā* (Dharmottara): See KRASSER 1991<sub>1</sub>.



- PV 1 *Pramāṇavārttika* (Dharmakīrti), chapter on *svārthānumāna*: See PVSV.
- PV 3 *Pramāṇavārttika* (Dharmakīrti), chapter on *pratyakṣa*: Hiromasa Tosaki, *Bukkyō-ninshikiron no kenkyū* [\*Studies in Buddhist Epistemology]. Volume I, Tōkyō 1979.
- PVA *Pramāṇavārttikālaṅkāra* (Prajñākaragupta): Rāhula Saṅkṛtyāyana (ed.), *Pramāṇavārtikabhāṣyam* or *Vārttikālaṅkāraḥ* of Prajñākaragupta. (Being a commentary on Dharmakīrti's *Pramāṇavārtikam*). Patna 1953.
- PVin 1 *Pramāṇaviniścaya* (Dharmakīrti), chapter 1: Tilmann Vetter (ed.), *Dharmakīrti's Pramāṇaviniścayaḥ. I. Kapitel: Pratyakṣam*. (VKSOSO 3) Wien 1966.
- PVin 2 *Pramāṇaviniścaya* (Dharmakīrti), chapter 2: Ernst Steinkellner (ed.), *Dharmakīrti's Pramāṇaviniścayaḥ. Zweites Kapitel: Svārthānumānam. Teil I: Tibetischer Text und Sanskrittexte*. (VKSOS 12) Wien 1973. [References are made to the pagination with an asterisk.]
- PVin 3 *Pramāṇaviniścaya* (Dharmakīrti), chapter 3: Tshad ma rnam par ṅes pa, Derge (D) 4211, Ce 152b1-230a7; Peking (Q) 5710, Ce 285a7-329b1.
- PVinṬ 1, 2, 3 *Pramāṇaviniścayaṭīkā* (Dharmottara): *Tshad ma rnam par ṅes pa'i 'grel bśad*. Peking (Q) 5752 Dze 1-196a7 (chapter 1), Dze 196a8-347a8 (chapter 2), We 1-209b5 (chapter 3); Derge (D) 4229 (chapters 1 and 2), Dze 1-289a7; Derge 4227 (chapter 3), Tshe 1-178a3.
- PVinṬ(a) *Pramāṇaviniścayaṭīkā* (Dharmottara) Q 7b6-13a7: Ernst Steinkellner, Helmut Krasser (eds.), *Dharmottaras Exkurs zur Definition gültiger Erkenntnis im Pramāṇaviniścaya*, Tibetischer Text, Sanskritmaterialien und Übersetzung. (Materialien zur Definition gültiger

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- PVṬ(Ś) *Pramāṇavārttikaṭikā* (Śāṅkaranandana): *Tshad ma rnam 'grel gyi 'grel bśad*. Derge (D) 4223 Pe 1-293a7, Peking (Q) 5221 Pe 1-338a8.
- PVV *Pramāṇavārttikavṛtti* (Manorathanandin): Rāhula Sāṅkrtyāyana (ed.), *Dharmakīrti's Pramāṇavārttika with a commentary by Manorathanandin*. Patna 1938-1940.
- PVSV *Pramāṇavārttikasvavṛtti* (Dharmakīrti): Raniero Gnoli (ed.), *The Pramāṇavārttikam of Dharmakīrti, the first chapter with the auto-commentary. Text and Critical Notes*. Roma 1960. [Verse 1 in Gnoli's edition corresponds to verse 3 in our numbering.]
- PVSVṬ *Pramāṇavārttikasvavṛttiṭikā* (Kaṛṇakagomin): Rāhula Sāṅkrtyāyana (ed.), *Ācārya-Dharmakīrteḥ Pramāṇavārttikam (svārthānumānaparicchedaḥ) svopajñavṛtṭiyā Kaṛṇakagomi-viracitayā taṭṭikayā ca sahitam*. Allahabad 1943. [Reprint: Kyoto 1982].  
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- VP 2 *Vākyapadīya* (Bhartṛhari): K.A. Subramania Iyer (ed.), *Vākyapadīya of Bhartṛhari containing the Ṭikā of Puṅyarāja and the Ancient Vṛtti*. Kāṇḍa II. With a Foreword by Ashok Aklujkar. Delhi 1983.
- VṬ *Vākyapadīyaṭikā* (Puṅyarāja): See VP 2.
- VPVṬ *Vākyapadīyavṛtti*: See VP 2.

- ŚVṬ *Ślokavārttikavyākhyā* (Umbeka): S.K. Ramanatha Sastri (ed.), *Ślokavārttikavyākhyā Tātparyaṭikā of Uṃveka Bhaṭṭa*. Revised by Dr. K. Kunjunni Raja and R. Thangasvamy. Madras 1971 [1<sup>st</sup> edition 1940].
- HB *Hetubindu* (Dharmakīrti): Ernst Steinkellner (ed.), *Dharmakīrti's Hetubinduḥ. Teil I, Tibetischer Text und rekonstruierter Sanskrit-Text*. (VKS KS 4) Wien 1967. [References are made to the pagination with an asterisk.]
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- HBṬĀ *Hetubinduṭikālokā* (Durvekamiśra): See HBṬ.

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