#### RICHARD P. HAYES AND BRENDAN S. GILLON

## INTRODUCTION TO DHARMAKĪRTI'S THEORY OF INFERENCE AS PRESENTED IN *PRAMĀŅAVĀRTTIKA SVOPAJÑAVRTTI* 1–10

#### 1. INTRODUCTION

The *Pramāņa-vārttika* (hereafter PV) was the most extensive and ambitious work on epistemology to be written by Dharmakīrti (fl. 7th century C.E.). It is a verse work divided into four chapters, to only one of which did the author write his own commentary (svavrtti) in prose. The subject matter of the Pramāṇa-vārttika-svavrtti (hereafter PVSV) is the process of drawing inferences (anumāna) for one's own benefit (svārtha), that is, for the sake of increasing one's own knowledge. The entire PVSV comprises 340 kārikā verses, excluding the two benedictive verses at the very beginning of the chapter, along with a succinct prose commentary to each. The current work presents a study of Dharmakīrti's commentary on just the first ten of those verses. Since these first ten verses contain so much of the foundation upon which the rest of Dharmakīrti's work is built, we have felt it suitable to present them at this time and then to present studies of further sections of the PVSV in subsequent publications.

Dharmakīrti's style is so terse that it is not always immediately clear what philosophical points he intends to make. Therefore, we have found it necessary to offer a rather extensive commentary of our own. Much, but by no means all, of what is contained in our commentary is based on explanations found in Karnakagomin's commentary on PVSV and Manorathanandin's commentary on PV. Occasional insights into how to construe Dharmakīrti's prose have been provided by the translation of PVSV into Tibetan by an anonymous translator and the translation of PV into Tibetan by Subhutiśrīśānti and Dge ba'i blo gros; such insights from the Tibetan translations as we have found instructive have also been included in our notes.

Since our own interpretation of the issues in the PVSV is outlined in our commentary, we shall confine our comments here to a brief description of how this article is laid out. Our presentation comprises two large divisions; Division A contains our English translation of PVSV, and Division B contains our commentary. To make the correspondence between these two divisions easier, we have further divided each division into sections and provided cross-references from the sections of each division to the corresponding sections of the other division. Each section of Division A contains a reference to the page numbers and the line numbers of the editions of PVSV by Gnoli and Malvania. Thus "(G1.8, M1.7)" indicates that the section in question is a translation of a passage that begins on line eight of page one of Gnoli's edition and line seven of page one of Malvania's edition. The numbering of kārikās follows Gnoli's edition rather than Malvania's. Two other Sanskrit editions that are referred to in Division B are those of Dvārikadāsa Šāstri (indicated by the abbreviation "DS:" followed by a page number) and Rāhula Sāmkrtyāyana (indicated by "S:" followed by a page number). Full bibliographic details of all these editions are provided under the heading Works Cited at the end of this article.

#### A. TRANSLATION OF DHARMAKIRTI'S OWN COMMENTARY ON HIS EXPLANATION OF INFERENCE FOR ONE'S OWN SAKE

#### A.0.1. Om. Homage to the Buddha.<sup>1</sup>

Homage to him who is universally good, whose manifestations are divested of the snares of conceptualizing and are profound and lofty, and whose light spreads in all directions. (See commentary section B.1)

Usually people are addicted to vulgarity and lack the wisdom equal to the task [of understanding learned treatises]; they are not only disinterested in what is said well, but, being afflicted with the filth of envy, are even hostile towards it.

Therefore, although I believe this work to be of no use to others, my heart, its determination increased through repeated study of eloquent works for a long time, has become eager for it. (B.1.1.)

A.0.2.  $^{(G1.8, M1.7)}$  Since the discrimination of the beneficial from the unbeneficial depends upon inference, and because there are misbeliefs regarding it, in order to give a correct account of inference, I have said: (B.1.2.)

A.1. Evidence is a property of the subject of the inference. It is

pervaded by a member thereof. It is of exactly three kinds, because the inseparability [of evidence from what it indicates] is restricted [to just those three kinds of evidence]. [Any property] other than those is spurious evidence. (B.2.)

 $A.1.1.^{(G1.12, M1.10)}$  The subject of the inference is a property-possessor, for there is a synecdochic usage of the [expression for] the whole in the sense of a part. It might be argued that there is no synecdochic usage, since synecdoche would be purposeless. But that is not so. For synecdoche has the purpose of denying [that to be evidence it is sufficient to be some property of just any possessor of the [establishable] property. Since it [sc. the individual subject of inference] is one part of that [subject of a whole comprising the establishable property and the suspected possessor of that property], synecdoche has the purpose of specifying [as a candidate of the evidence] a property of the property-possessor that is suited for synecdochic usage of that [expression for the subject of inference as a whole]. And thus, [by using the expression "subject of inference" synecdochically], we eliminate properties such as visibility [as properties that can serve as evidence for the presence of any further property in the subject of sound]. (B.2.1. and B.2.1.1.)

A.1.2. <sup>(G1.15, M.1.3)</sup> It might be argued that the expression "property" already establishes a property-possessor on which it depends, so the possessor of the establishable property is established implicitly through the term "property-possessor" on the grounds of proximity. But that is not so, because the property-possessor which is an observed precedent is also proximate. From the expression "property-possessor" one assumes [that] the possessor of the establishable property [is intended], because the [property's] presence in the property-possessor that is an observed precedent is established by the [expression of] pervasion of its member. [But] repeating what is already established would be expected to be for the purpose of restriction, as when we express [the evidence's] absence in the absence of the establishable property even though its dissociation from what is of a different class is already established by saying that it is present only in what is of the same class.<sup>2</sup> The expression "subject of inference," moreover, has the

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purpose of eliminating the difficulty in understanding when the object is known implicitly. (B.2.1.2.)

A.1.3.<sup>(G2.7, M1.17)</sup> It might be argued that, given [that the evidence is defined as] being a property of the subject of the inference, that which is expected to be a qualifier of it [sc. the subject] is unique because of non-recurrence elsewhere. But that is not so, because I shall show that the qualification is in the sense of excluding its not belonging [to the subject], as in the expression "Caitra is an archer indeed," rather than in the sense of excluding its belonging to another, as in the expression "Only Arjuna, son of Prthā, is an archer." (B.2.1.3.)

A.1.4. <sup>(G2.11, M1.20)</sup> [Re: the statement in verse A.1 "Evidence is a property of the subject of the inference. It is pervaded by a member of it."] On the authority of the author's intentions, a member of it means a property of it, not a part of it, because the word "subject (pakṣa)" does not express the whole. (B.2.2)

A.1.5. (G2.12, M2.1) Pervasion is the pervasive property's necessary presence in a certain situation or the pervadable property's presence only in a certain situation. This says that both association and dissociation are made certain individually, each through its own means of acquiring knowledge, as is the property of the subject. (B.2.2.1.)

A.1.6.  $^{(G2.14, M2.3)}$  The three [kinds of] evidence are those that have the characteristic of being an effect, a natural property or non-apprehension. For example, there is fire here, because of smoke. This is a tree, because it is a Shinshapa tree. There is no water-jug on a certain specific site, because there is no apprehension of that which meets the conditions of an apprehension. If there were, it could only be something whose presence was apprehensible; it could not be otherwise. That is why it is described as "that whose presence meets the conditions of an apprehension." (B.2.3.)

 $A.1.7.^{(G2.19, M2.6)}$  Two among those are methods of establishing an actuality, and one is evidence for denying. For when there is a natural connection, one object is not erratic with respect to the other object, and that [natural connection] is because they are of the same nature. It

might be argued that if they are of the same nature, there is no difference between the establishable and the establishing [properties]. But that is not so, because as I shall explain, the distinguishing of properties is a [heuristic] device. Thus [Dignāga] said "This entire distinction between the instrument of inference and what is to be inferred is without exception due to the act of distinguishing property from property-possessor, which is situated in the intellect." Distinguishing them as property and property-possessor is made by an image in the intellect; an object is not also [so made], because differences in the understanding, being self-sufficient, do not depend upon objects. In case of belief in an object owing to a subject matter that is constructed of those [non-objective differences in the understanding], there would only be failure to reach the object. (B.2.5.)

A.1.8.<sup>(G3.3, M2.9)</sup> An effect also has a natural connection, because its natural property arises from that [cause that the effect indicates]. These two cognitions of what is to be inferred [namely, a natural property and a cause], despite not having the their appearance because of not arising in their immediate presence, are nevertheless not erratic with respect to them, because they arise from them. Therefore, like sensation they are a means of acquiring knowledge. For in the case of sensation, too, its being a means of acquiring knowledge consists only in its not being erratic with respect to its object, because that which can come into being in the absence of something is deviant from it. And what, aside from one thing's arising from another thing, is its not being erratic with respect to that other thing? Because things that are by nature independent of one another do not necessarily occur together. (B.2.6.)

A.2. [An effect is evidence for all the natural properties in the cause in virtue of which the effect is inseparable from the cause. A natural property is also evidence for [another] natural property that results from nothing more than the presence [of the evidence].]

A.2.1. (G3.9, M2.15) If an effect is indicative [of something] because it arises from it, then the relation between the indicatable and the

indicative [holds] throughout, since the relation of product and producer [holds] throughout. That is not the case, since what comes into being in the absence of something does not necessarily arise from it. Therefore, an effect is evidence for all the natural properties in the cause in virtue of which the effect is inseparable from the cause, since the condition of being their effect is restricted in virtue of just those properties that do not come into being without those [natural properties in the causel.<sup>3</sup> It might be argued that this entails that the relation of product and producer holds partially. That is not the case, because when the effect's specific property that is produced by those (specific properties of the cause] is grasped, it is accepted [as indicative of them]; and when the [effect's] general properties that are particularized by the specific property that is a sign are grasped they are accepted [as indicative].<sup>4</sup> In case the intention is to express an unparticularized general characteristic [of the effect], that is not admitted [as indicative of the properties of its cause], because it is erratic. (B.3.1.)

A.2.2.<sup>(G4.1, M2.23)</sup> A natural property is also evidence for [another] natural property that results from nothing more than the presence [of the evidence].<sup>5</sup> The word "evidence" is supplied [from the preceding discussion]. For an object has the nature of only what results from nothing more than it, but not of what is dependent upon something further. Because that which was not present in its presence will not necessarily be present at a later time, because causes are erratic concerning their effects. (B.3.2.)

A.3. [Non-activation of the means of acquiring knowledge has the outcome of [one's] not acting towards that which is not present. Some non-activation, provided that it has the characteristics of evidence, has cognition of an absence as its outcome.]

A.3.1.<sup>(G4.5, M3.1)</sup> Non-apprehension is non-activation of the means of acquiring knowledge, having the outcome of [one's] not acting towards that which is not present. It has the outcome of inhibiting cognition of, speech about and action upon a present thing, because those [activities] are preceded by apprehension. The types of evidence for denying the present and affirming the absent have the same nature. For

instance, either presence is just apprehension having the characteristic of the aptitude of an actuality or it is the activation of a cognition depending on that [actuality], because the functions of cognition of, speech about and action upon a present thing arise from it. And nonapprehension is the absence of things that are absent. (B.4.1.)

A.3.2.<sup>(G4.13, M3.6)</sup> Some non-activation, provided that it has the characteristics of evidence, results in cognition of an absence. Non-apprehension is evidence. Its characteristic is a qualifier whose presence meets the conditions of an apprehension. (B.4.2.)

A.3.3.  $^{(G4.15, M3.7)}$  If absence [is established] in this case through the sign of non-apprehension, the absence of apprehension also must be established by a further non-apprehension. Therefore, because of an infinite regress, there could be no awareness. Suppose an absence of apprehension could be established without [further] non-apprehension [serving as a sign]. Then the absence of a presence could also be established in the same way; non-apprehension [as a sign] would be of no use. But suppose the establishment of non-apprehension is by means of the apprehension of something else, so that non-apprehension is established through sensation. Why, then, is the absence not established by the presence of something else in the same way? (B.4.3.)

A.3.4.<sup>(G4.20, M3.11)</sup> But when only this sort of non-apprehension is the absence of things that are not present, then one who is not aware of cognition of, speech about and action upon an absent thing because his cognition is confused, even though the subject matter is well established, is introduced to the linguistic convention by being shown the subject matter [through a statement] such as "This is a cow since it has the nature of being a collection of dewlap and so forth." And the objection concerning the observed precedent not being established is also countered in the same manner, because it is observed that one is not aware of cognitions even when one is aware of their subject matter. (B.4.3.2.)

 $A.3.5.^{(G5.2, M3.15)}$  Thus both these [types of] non-apprehension are the

same in that they both have as their outcome the inhibition of action on what is present through the absence of evidence for [that which is present] itself and through the presence of evidence for opposition to it. Because in the one case there is uncertainty while in the other case there is opposition. The first of them is said to be a means of acquiring knowledge, because it helps exclude action on what is present. But it does not help such things as the observation of dissociation, because there is uncertainty [with respect to that]. But the second is a means of acquiring knowledge here, because its outcome is certainty. (B.4.4.)

And owing to difference in method,

A.4. non-apprehension, which has absence as its object, is of four types: (1) establishment of an incompatible property, (2) establishment of the effect of an incompatible property, (3) disestablishment of the cause, and (4) disestablishment of the natural properties of that which is observable by nature. (B.4.5.)

A.4.1.<sup>(G5.9, M3.21)</sup> Every denial results from non-apprehension. For instance, two types of denial may be made: by affirming something or by denying something. When there is an affirmation, one may affirm either what is incompatible or what is not incompatible. When there is the affirmation of what is not incompatible [with a given property], then there is no denial [of the property], because there is no incompatibility in occurring together. Even [when there is affirmation] of what is incompatible, there is no awareness of incompatibility without non-apprehension. For instance, knowledge of incompatibility arises from the absence of one thing coming into being, the causes of which are not yet exhausted, when another thing is present. And that [knowledge] results from non-apprehension.

*A.4.2.* <sup>(G5.14, M3.25)</sup> Alternatively, incompatibility consists in being characterized by the preclusion of [two properties] being apprehended with each other, as in the case of being permanent and being impermanent. Regarding that [incompatibility] too, it is said to consist in the non-apprehension of one thing through the apprehension of another. Because otherwise there is no establishing the absence of something

unless apprehension of it has been excluded. Non-apprehension is well established in the case where the absence of one thing is established through the exclusion of another, since exclusion is the nature of nonapprehension.

A.4.3.<sup>(G5.18, M3.27)</sup> For that exclusion of the other object, too, [the evidence could be one of three things:] (1) [the exclusion] of the [other's] effect, (2) the exclusion of its cause, (3) the exclusion of what is neither its effect nor its cause. Among those [alternatives], since that which is neither a cause nor the effect [of a thing] has no connection [with the thing], how could it be [established] that the one must not be present when the other is absent? And even when there is no apprehension of an effect, since causes do not necessarily occur with their effects, how [could] the absence of that [cause be established]? Therefore it is only the non-apprehension of a cause that makes an absence known.

*A.4.4.* (G5.22, M3.30) But the non-apprehension of a natural property is absence in itself. In that case, only the cognition [of an absence] is established. Also when one states with reference to this [non-apprehension of a natural property] the absence of a pervadable property on the basis of the non-apprehension of a pervasive property, then the absence [of the pervadable property is] also [established].

A.4.5. (G5.25, M4.1) This non-apprehension which has denial as its subject matter is of four types on account of its different methods. [One can have non-apprehension]

(1) by establishing what is incompatible; for example, because there is fire here, there is no feeling of cold. It should be understood that this statement includes the establishment of what is incompatible with a pervasive property; for example, because there is fire here, there is no feeling of hoarfrost;

(2) by establishing an effect of what is incompatible; for example, because of smoke here, there is no feeling of cold;

(3) by disestablishing a cause; for example, because of lack of fire here, there is no smoke;

(4) by disestablishing a natural property; for example, because there

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is no apprehension, there is no smoke here. This includes the disestablishment of the natural property of a pervasive property; for example, because there is no tree here, there is no Shinshapa tree.

A.4.6.  $^{(G6.7, M4.6)}$  In every case when there is this non-apprehension that establishes an absence, the establishment and the disestablishment should be understood to be only of [the absence] of those things that are by nature observable and of what is incompatible with what is observable. Because there is no establishing the absence or incompatibility of anything else [than what is observable].

A.4.7.<sup>(G6.9, M4.8)</sup> If one establishes an absence even by apprehending an effect of what is incompatible, then why does one not establish [an absence] by apprehending the cause of that [which is incompatible]?

A5. The apprehension of the causal conditions of what is incompatible with that [property which is to be disestablished] is erratic when used when there is no incompatibility between the causal conditions [of the property to be disestablished and the property that is incompatible with it].

A.5.1.<sup>(G6.13, M4.11)</sup> For example, [a bad inference based on this kind of erratic sign is]: because there is firewood here, there is no feeling of cold. But when the causal conditions are incompatible, then [apprehension of one set of causal conditions] is indicative [of the absence of the other]; for example, because this person has the specific property of having a fire nearby, he does not have specific properties such as goose flesh and so on. It should be understood that this statement includes knowledge of the absence of an effect that is incompatible with a thing, even [when such knowledge is] derived from the effect of that thing; for example, because of smoke, this site does not have a man who is endowed with such specific properties as goose flesh and so on. And this establishment of what is incompatible with a thing was shown just above by the disestablishment of the cause. So, this non-apprehension is of eight types, according to the different methods.

A.5.2.  $^{(G6.18, M4.16)}$  In that context, concerning the aforementioned apprehension of an effect of what is incompatible,

A.6. even in the case of [apprehension of] the effect of an incompatible, it is advisable to take into consideration its location and time. Otherwise it may be erratic, as ashes are in the establishment of the non-cold.

 $A.6.1.^{(G6.22, M4.19)}$  How, then, is the arising of an effect that is inferred through the complete cause included within the three kinds of evidence?

A.7. The arising of an effect which is inferred through the complete cause is called a natural property, because it has no dependence upon any further object.

A.7.1.<sup>(G6.26, M4.22)</sup> That [arising of an effect] also does not depend on anything further than what is nearby in such manner [as a collection of causes], so a natural property of what is present is dependent upon nothing more than that [collection of causes]. For in that case it is only the possibility of the effect's arising from the complete cause that is inferred, because there is an inference of the aptitude of the collected [causes] to produce an effect. And the aptitude is dependent on nothing more than the totality [of causes], so it is only a virtual natural property that is inferred. (B.5.)

 $A.7.2.^{(G7.1, M4.25)}$  But why is it that the effect itself is not inferred from the totality of causes?

A.8. There is ambiguity in [inferring] an effect that is dependent upon the fruition of the potentials that are outcomes of the totality [of causes], because an impediment is possible.

A.8.1.<sup>(G7.5, M4.28)</sup> For it is not the case that causal elements produce their effect just because they are complete, since the arising of an effect depends upon the fruition of the potentials that arise from the totality [of causes]. And because of the possibility of an impediment in the meantime, there is no inference of an effect. But the inference of a [causal] aptitude is not ruled out, because it depends upon no other elements. The totality of causes has the capacity to produce the effect through the successive fruition of potentials, <sup>(M5)</sup> because no other

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causal factor is necessary in the fruition of the potentials. Since the arising of the potentiality is caused by no more than the antecedent conditions of the same class, the aptitude is said not to be dependent on anything fruther. (B.5.)

A.8.2.<sup>(G7.12, M5.3)</sup> How, then, can there be knowledge of one thing, such as a visible property, through another thing, such as taste, that is neither cause nor effect? Also that

A.9. knowledge through taste of the visible properties and so forth that are dependent upon the same totality [of causes] [comes about] by means of inferring a property of the cause, like [the inference through] smoke of the changing state of the kindling. (B.6.)

 $A.9.1.^{(G7.16, M5.6)}$  In that case, it is the cause that is inferred as being so [connected with the appearance of the visible property.] For what produces taste is the cause of taste, which is a causal factor coefficient with the material cause of the visible property whose potential is activated. It is like the production of smoke by fire, which is a causal factor coefficient with the material cause of a specific changing state of kindling.

A.10. [Without the activation of the potentials there is no taste. That same thing [sc. the activation of the potentials] is the cause of the other [properties that accompany taste]. Therefore, there is knowledge of things prior to it and contemporary with it, this knowledge being produced by a sign which is an effect.]

A.10.1.<sup>(G7.18, M5.8)</sup> For instance, *the cause of the other thing*, [that is,] the cause of the activation of the material causes of the visible property, *is just that without which there is no taste, namely, the activation of the potentiality*, [that is,] the propensity of its cause to produce an effect. Also that activation of the material cause of a visible property. Therefore, taste, which enables the inference of just the sort of cause from which it has arisen, enables the inference of a visible

property. So in that case too *there is knowledge of what is prior and of what is of the same time.* There is no knowledge of what is future, because that is erratic. *Therefore*, this [knowledge] is *produced by the sign which is an effect.* Therefore, there is no other indicative evidence, because [a sign] whose natural property is not connected is not necessarily inseparable [from that which it putatively signifies]. This explains the inference of rain from the commotion of ants and the agitation of fish. In that case too, the cause of the rain is the cause of the disturbance of the ants, namely, a fruition of elements.

## B. COMMENTS BY HAYES AND GILLON ON DHARMAKIRTI'S COMMENTARY ON HIS EXPLANATION OF INFERENCE FOR ONE'S OWN SAKE

#### B.1. The Dedication (A.0.1.)

Dharmakīrti's PVSV opens with a dedication verse that reads:

vidhūta-kalpanā-jāla-gambhīra-udāra-mūrtaye namah samanta-bhadrāya samanta-spharaņa-tvise.

As Manorathanandin (DS:1) and Karnakagomin (S:2) both explain, the element "vidhūta-kalpanā-jāla" is a bahuvrihi compound modifying "mūrti," and "gambhīra" and "udāra" are two separate elements also modifying "murti." Thus we have three elements modifying "murti," which is glossed as "kāya"; each of the three elements is said to specify one feature of one of the three bodies (kaya) of the Buddha in accordance with late Mahāyāna religious theory. "Vidhūta-kalpanājala" means divested of the snare of the conceptualizing that consists in making a distinction between oneself as the knowing subject in experience and external objects as the subject matter known in experience. The fact of being free of the snares of such dualistic conceptualizing, says Karnakagomin (S:2), brings to mind the property of being without origination, which characterizes the intrinsic body (svābhāvikakāya) of the Buddha. The profound manifestation, he says, refers to the body of thorough enjoyment (sāmbhogika-kāya) that is appreciated by the disciples (śrāvaka) and the solitary Buddhas (pratyekabuddha) as well as by bodhisattvas, while the lofty manifestation refers to the transformational body (nairmāņika-kāya) that includes all experiences and all that is beneficial to sentient beings. Moreover, says Karņakagomin, the expression "samantabhadra" is not to be understood as the proper name of the bodhisattva in this context, but rather as an epithet of the Buddha himself. For a more detailed account of the various religious doctrines alluded to in this opening salutation, see Mookerjee and Nagasaki (1964: 3-4).

#### **B.1.1.** Statement of Intended Audience

It is traditional for the author of an academic treatise to begin with a discussion of the subject matter of the work and the audience for whom the work is intended. Dharmakīrti's statement of his intended audience is set forth in this sardonic verse:

prāyah prākrtasaktir apratibalaprajāo janah kevalam nānarthy eva subhāsitaih parigato vidvesty apīrsyāmalaih. tenāyam na paropakāra iti nas cintāpi cetas ciram sūktābhyāsavivardhitavyasanam ity atrānubaddhasprham.

Usually people are addicted to vulgarity and lack the wisdom equal to the task [of understanding learned treatises]; they are not only disinterested in what is said well, but, being afflicted with the filth of envy, are even hostile towards it.

Therefore, although I believe this work to be of no use to others, my heart, its determination increased through repeated study of eloquent works for a long time, has become eager for it.

According to Stcherbatsky (1932: 35–36), Buddhist tradition holds that the verse was added by Dharmakīrti after his own work was received with hostility by critics. One of the several interpretations of the verse reported by Karnakagomin (S: 4), however, has this verse pertaining to Dignāga's *Pramānasamuccaya*, one of that great teacher's several feats of eloquence that was beyond the grasp of those people so addicted to such vulgar pursuits as political science (nītiśāstra) that they could not avail themselves of truly learned treatises. On this

interpretation, Dharmakirti is compassionately writing his Pramānavārttika as an exposition that can provide some trifling aid (alpopakāritva) in explaining Dignāga's theories, and it is out of repeated study of Dignaga's eloquent works that Dharmakirti's heart has grown eager for the task at hand. Manorathanandin (DS: 3) also identifies this verse as an homage to Dignaga on whose work Dharmakīrti's is a commentary. Neither Karnakagomin nor Manorathanandin mentions the story of Dharmakīrti's adding this verse in reply to critics of his own work, nor does either of them relate any of the other stories found in Tibetan sources concerning Dharmakīrti's legendary arrogance and contempt of small-minded critics who tried to humiliate him and disparage his work. For a number of entertaining but probably inauthentic stories about Dharmakirti, see Chattopadhyaya (1980: 224-248). Many of the stories there appear to be designed to give validity to the later Tibetan tantric tradition by depicting the celebrated Indian master Dharmakīrti as an ancestor in the lineages of key Tibetan teachers.

#### B.1.2. Statement of Purpose (A.0.2.)

As for the purpose of writing his work, Dharmakīrti says simply that discrimination of what is beneficial from what is unbeneficial (arthaanarthavivecana) depends upon inference, and there are many misconceptions about inference that need to be dispelled, hence the need to write a treatise on the topic. This concern with distinguishing the beneficial from the unbeneficial is, incidentally, part of Dharmakīrti's Buddhist agenda and hence part of the reason why his treatise should not be regarded as a purely secular work motivated by simple curiosity on the nature of logic and inference. In case the Buddhist agenda is not readily apparent, consider for example one of the most frequently cited summaries of Buddhist practice, verse 183 of the Dhammapada, which reads:

## sabbapāpassa akaraņam kusalassa upasampadā sacittapariyodapanam etam buddhāna sāsanam

Not doing any wrongful deeds, undertaking what is wholesome, purifying one's thought. This is the discipline of them who are awakened.

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Wrongful deeds (pāpa) are usually understood as those that are unbeneficial (ahita, anartha) to oneself and to others. What is wholesome or skilful (kuśala) is that which is beneficial (hita, artha) to oneself and others. Wisdom, which is the goal of all Buddhist practice, consists in discriminating those actions of the body, speech and thought that are good for oneself and others from those actions that are bad for oneself and others. But such discrimination is a matter of judgement that necessarily goes beyond any knowledge that can be acquired through sensation (pratyaksa) alone. Sensation is limited to the immediate objects of experience in the present moment and is, according to Dignaga's famous definition, free of the impingements of any mental acts that consists in associating the object of immediate experience with any remembered experiences, with any names, with any categories or with any concepts. (See Hattori 1968: 25.) Since it is impossible to know through immediate experience alone whether any given item of experience, such as the experience of a flash of anger, will have beneficial or harmful consequences in the yet to be experienced future, one must rely upon knowledge of the general effects of anger as learned through one's own previous experiences. One must, therefore, correctly identify one's present experience by associating it with a suitable past experience. This identification is called "kalpanā," the absence of which is an identifying characteristic of sensation, but which is always present as a feature of inference (anumāna). Given that the heart of Buddhist discipline is discerning the good from the bad and that this can only be done through judgement and inference, understanding inference correctly is for Dharmakīrti tantamount to understanding Buddhism properly and pursuing wisdom correctly.

#### B.2. Definition of Evidence (A.1.)

The first statement in the opening verse of PV presents a definition of what it is to be a property that establishes the conclusion of an inference. The definition, which is attributed to Dignāga, is that an item of evidence is a property of the subject (pakṣa-dharma) that is pervaded (vyāpta) by the establishable property (sādhya-dharma). In his opening sentence of the PVSV, Dharmakīrti defines the subject of inference (pakṣa) simply as a property-possessor (dharmin). As will become more clear further along in the text, a pakṣa can more accurately be described as a suspected but unconfirmed, or not yet established (asiddha), possessor of a given property. The property whose presence in the subject of inference has to be established is called the sādhya-dharma. That establishment (siddhi) is provided through the observation of an establishing property (sādhaka-dharma) that is known through observation (darsana) of its occurrence in other objects to be present only in objects that bear the property requiring establishment. An establishing property is also called evidence (hetu) or a sign (linga). A property H can be used as evidence or a sign for a second property S only if it is pervaded (vy $\bar{a}$ pta) by the second property. A property H is said to be pervaded by a property S only in case every attested (prasiddha) bearer of H is also an attested bearer of S. Thus pervasion (vyāpti) is a relation between a property serving as evidence for a further property and that further property itself whose presence in a given subject requires establishment through inference. This pervasion relation holds when the set of possessors of the sign is a subset of the set of bearers of the property that is to be established through the sign. Any property the set of whose possessors is not a subset of the set of possessors of the property requiring establishment is not really evidence, although it may have the appearance of evidence (hetvabhasa). Any property not belonging to the subject of inference, or not pervaded by the property requiring establishment, is only spurious evidence.

# B.2.1. Evidence as a Property of the Subject of the Inference (A.1.1.-A.1.3.): General Remarks

(a) In the opening passage of the PVSV, Dharmakīrti defends Dignāga's definition of evidence against a challenge by Īśvarasena, a commentator on Dignāga's work who preceded Dharmakīrti but whose works have not survived. In particular, Īśvarasena challenged the felicity of Dignāga's expression "subject-property (pakṣa-dharmaḥ)" and suggested that it be replaced by the expression "property-possessorproperty (dharmi-dharma)". In the following paragraphs we offer an overview of Dharmakīrti's terse and occasionally difficult discussion of this rather subtle point. After presenting this overview we shall offer comments on specific points in Dharmakīrti's presentation. (b) To begin with, let us see in schematic form how an unabridged inference would be stated. It should be borne in mind that the issue here is not how to state an argument properly, but rather how to reason without error. It is, nevertheless, useful to see how a properly reasoned inference might be formally stated.

Sp	Conclusion
Нр	Minor Premiss
$\forall x(Hx \rightarrow Sx)$	Association (anvaya)
Hs & Ss	Precedent of similarity (sādharmya-
	drstānta)
$\forall x(-Sx \rightarrow -Hx)$	Dissociation (vyatireka)
-Hv & -Sv	Precedent of dissimilarity (vaidharmya-
	dṛṣṭānta)

In this formula "H" denotes the establishing property (hetu); "S" the property requiring establishment (sādhyadharma); "p" the subject of inference (pakṣa), that is, the property-possessor about which the inference is being made, "s" the precedent of similarity (sādharmya-dṛṣṭānta), which is a property-possessor distinct from p which has both the property denoted by "H" and the property denoted by "S"; and "v" the precedent of dissimilarity (vaidharmya-dṛṣṭānta), which is a property-possessor which possesses neither property.

(c) As shall be shown further on, it is clearly recognized by Dharmakīrti that the precedents of similarity and dissimilarity are irrelevant to the validity of an inference and that the relations of association and dissociation are logically equivalent. Thus, the part of the inference schema determining logical validity is this:

$\forall x(Hx \rightarrow Sx)$	Major premiss, which may also be stated
	$\forall x(-Sx \rightarrow -Hx)$
Hp	Minor premiss
Sp	Conclusion

(d) The major premiss expresses the fact that the establishable property (sādhya-dharma) pervades the establishing property (sādhana-

dharma or hetu). The minor premiss expresses the fact that the particular property-possessor (dharmin) about which an inference is being made has the establishing property. The conclusion expresses the fact that the property-possessor about which the same inference is being made has the establishable property. The identity of the propertypossessor mentioned in the minor premiss with the property-possessor mentioned in the conclusion is essential; otherwise, the inference would not be valid. In other words, without this identity, it would be possible for the premisses to be true, yet the conclusion false. In our formulation of the inferential schema, this identity is guaranteed by the fact that a letter used in a schema must denote the same thing on each of its uses. To achieve the same effect this convention has for our inferential schema, Dignaga chose to use the term "subject (paksa)" in compound with the term "property (dharma)" in his definition, since the term "subject" uniquely denotes that about which an inference is made.

(e) It is this problem of ensuring the identity of the terms in the premisses and the conclusion that is the core of the controversy between Īśvarasena and Dharmakīrti. The discussion does not concern the linguistic formulation of an inference. Rather, it concerns the factual situation that validates an inference. In particular, an inference is valid just in case it expresses the situation in which the establishing property both (1) belongs to the property-possessor with respect to which an inference is to be made (pakṣa-dharma), and (2) is pervaded by another property, which is attributed to the very same property-possessor in the conclusion (sādhya-dharma-vyāpta). Notice that the first of these two conditions is what makes the minor premiss true and the second is what makes the major premiss true. The controversy between Īśvarasena and Dharmakīrti is whether or not the expression "subject property (pakṣa-dharma)," which had been used by Dignāga, expresses the first condition.

(f) To understand why Dignāga's wording may not have the desired results, it is necessary to understand some of the subtleties in the usage of Sanskrit logical terms. (See Staal, 1973, for further details.) The term "subject", it is agreed, literally designates the state of affairs

corresponding to what is expressed by the conclusion of the inference. Such a state of affairs comprises a substratum, or property-possessor (dharmin), and a superstratum, or property (dharma). The state of affairs may be considered a whole or collection (samudāya) whose components (avayava) are its property (dharma) and its propertypossessor (dharmin). Thus, the term "subject", which literally denotes a state of affairs Sp may, through synecdoche, refer to the propertypossessor p, belonging to the state of affairs that the term literally denotes.

(g) A problem arises from this synecdochic usage of the term "subject." The property belonging to Sp (the subject in the sense of the entire state of affairs expressed by the conclusion of an inference) is the establishable property S rather than the establishing property H. We should expect, therefore, that the compound "subject-property" would literally denote the establishable property rather than the establishing property. There are, however, two ways out of this problem. One could replace the term "subject" with a term which *literally* denotes the property-possessor about which the inference is being made. Or one could countenance the *figurative* sense of the term "subject" as a result of which it does denote the property-possessor about which the inference is being made.

(*h*) Perhaps on the principle that, all other things being equal, it is better to use an expression whose literal sense gives the proper denotation than to use an expression that must be used figuratively to yield the intended meaning, Iśvarasena took exception to Dignāga's original formulation of the definition of establishing property (hetu) and suggested an emendation. What he suggested was that "subject property (pakṣa-dharma)" be replaced by "property-possessor property (dharmi-dharma)". Dharmakīrti's response to this suggested emendation is that it too is infelicitous. The problem as Dharmakīrti sees it is that the expression "property. And though the property-possessor, it is not the only entity which is a property-possessor. Therefore, when the establishing property is defined as "a property-

possessor property," there is nothing in the expression to ensure that the property-possessor referred to is in fact the unique one about which an inference is being made. The definition thereby permits the unacceptable consequence that the property-possessor in the condition that makes the minor premiss true is distinct from the propertypossessor in the condition that makes the conclusion true. Under this interpretation of the definition, the following line of reasoning would be sound: "Everything that is visible is impermanent; this pot is visible; therefore, sound is impermanent." It is indeed true that visibility is pervaded by impermanence and that a pot is visible (in some specified circumstances). But it is clearly unacceptable to draw from those two facts the conclusion that sound is impermanent. (See B.2.1.1. below.) So while the expression "subject-property property" may have the wrong literal denotation, the emendation proposed by Īśvarasena has a literal denotation that is too broad.

(*i*) In light of the inadequacy of both Dignāga's and Īśvarasena's definitions, one might wonder whether or not there is any consideration that would favor one expression over the other. Dharmakīrti supposes that someone might appeal to the following consideration: whereas the literal denotation of the expression "property-possessor property" is too broad, the context of its use is sufficiently clear to narrow the literal denotation to the unique thing that is the property-possessor about which an inference is being made. This narrowing is inescapable, it might be thought, for any reasonable person who adheres to three fairly evident principles of interpretation. They are: (1) do not accept any interpretation that renders any part of the expression being interpreted manifestly redundant; and (3) use context to resolve any ambiguities.

(*j*) Applying these principles to the case in question, one might reason as follows. To begin with, it is well known that a property requires a property-possessor. Therefore, it would apparently be redundant to state what is already well known. So when the expression "property-possessor (dharmin)" is used in connection with the word "property (dharma)," it must have some special sense if it is not to be

redundant. The special sense is to be supplied from the context. Karnakagomin recapitulates Iśvarasena's line of reasoning (A.1.2.) concerning the nature of this context that removes ambiguity. Hayes and Gillon have been unable to come to an agreement on how to interpret Karnakagomin's explanation, so the interpretation of each is set out in Section B.2.1.2. below.

(k) Hayes and Gillon agree that Dharmakīrti's final move in the dispute with Īśvarasena is to consider another objection to Dignāga's expression "subject property (pakṣa-dharma)", namely, that it might be interpreted to mean that the property in question belongs only to the subject. This interpretation would certainly render the definition invalid. For if an establishing property belonged only to the subject, then it could not belong to the observed precedent (dṛṣṭānta). That being the case, there would be nothing to make known the pervasion needed to infer the conclusion, since the observed precedent must be distinct from the subject. Dharmakīrti retorts that it is neither required nor correct to interpret the definition to mean that the phrase "subject property" means being a property of only the subject. (See Section B.2.1.3. below.)

(*l*) Given this overview of the issues dealt with in sections A.1.1.-A.1.3. of the PVSV, let us now offer more particular comments on each of these paragraphs.

B.2.1.1. Notes on A.1.1.

(a) The reference to synecdochic usage (upacāra), which lies at the heart of the dispute between Dharmakīrti and Īśvarasena, does not appear in the Tibetan translations, but much is made of it in the commentaries of Karnakagomin and Manorathanandin. The latter (DS: 256) explains that the word "pakṣa", which means that which is to be inferred (anumeya), refers to the complex state of affairs that consists of the collection (samudāya) of two component items, namely, the (1) possessor of the property, and (2) the property borne by that possessor. But while the principal subject of an inference is the relation between a given property and an individual that is shown by reasoning to be a possessor of that property, one may also regard just

one of the relata in this relation as the subject of inference. In this case one can use the term "subject of inference (paksa)."

(b) In his Hetu-cakra-nirnaya, Dignāga established many of the conventions that were used by Indian Buddhist logicians for several centuries. In this very compact work, which is just one page long in Tibetan translation, Dignaga examined nine cases in which a property belonging to the subject sound (sabda) might be put forth as evidence for a second property's occurring in sound. In each of the nine cases, Dignaga judged whether the property advanced as evidence was proper evidence on merely spurious evidence. In setting forth this analysis, Dignāga established the convention followed by Indian logicians that, unless the subject matter of an inference under examination is explicitly stated to be otherwise, it is assumed to be sound in general or speech in particular. Thus at the end of A.1.1., for example, Dharmakīrti could write very briefly "tathā ca cāksusatvâdi-parihārah (And so there is an elimination of visibility and so forth)," and his readers would know that the property of visibility, which of course does not belong to sounds, is a stock example of a property that cannot be used as evidence for any property's occurrence in sound. In order to be used as evidence for any establishable property in a given subject of inference, the evidence must itself be a property of that subject. This fact of being a property of the subject is called "paksadharmatā."

(c) The issue here is why one should specify that the evidence must be a property of the subject (pakṣa-dharma) rather than saying that the evidence must be a property of the possessor of the establishable property ([sādhya]-dharmi-dharma). If we were to say the latter, then the property of visibility would qualify as evidence for the property of transitoriness in sound, because visibility does belong to at least some possessors of the property of transitoriness. A pot, for example, is a possessor of transitoriness, and visibility is a property of pots. So, if in order to be evidence for transitoriness in sound it were sufficient simply to be a property of something that is a possessor of transitoriness, visibility would serve as evidence despite its not being a property of sound. But this is obviously unacceptable, since it would

allow a large number of instances of spurious evidence to conform to the definition of proper evidence. In order to tighten up this statement of the first condition that a property must meet in order to serve as evidence, a way must be found to make sure that what is said is that the evidence must be a property of the same possessor of the establishable property as is stated in the conclusion of the inference. If the conclusion is that sound is a possessor of transitoriness, the evidence for that conclusion must be some property that belongs to sound. A way to achieve this requirement is to make use of synecdoche, whereby a term for the whole subject matter (namely, whether sound has transitoriness as a property) of the inference is used for an item that forms one part of the subject matter (sound alone). Whether there might be other, presumably better, ways to make it clear that proper evidence must be a property that belongs to the putative possessor of the establishable property is the principal issue that comes up for discussion in A.1.1.

## B.2.1.2. Notes on A.1.2.

(a) It has been noted in sections B.2.1. and B.2.1.1. that issue was made in A.1.1. over the most efficient way to state the definition of proper evidence. Dharmakīrti followed Dignāga in stating that "evidence is a property of the subject of the inference". According to Karnakagomin (S: 12), Dignāga's commentator Īśvarasena had argued that the above definition should be amended to read "evidence is a property of the property-possessor (dharmi-dharma)". It was reportedly Isvarasena's contention that his definition was an improvement over the definition in which the term "subject of inference (paksa)" is used synecdochically, because synecdochic usage entails the awkwardness of ambiguity arising from a term having a narrower and a wider application. Dharmakīrti (A.1.1.) protested against Īsvarasena's contention by showing that the term "property-possessor (dharmin)" is also ambiguous, since it can be applied equally to all bearers of the establishable property and not only to the one that is the subject of the inference. Now in section A.1.2. Dharmakīrti anticipates and answers further arguments that Isvarasena might make in favour of his own attempt at an improved definition. He says:

It might be argued that, given that even the expression "property" establishes a property-possessor on which it depends, implicitly through the term "property-possessor" there is establishment owing to proximity of the possessor of the establishable property.

Karnakagomin (S: 12) expands this summary of Isvarasena's argument, but Hayes and Gillon have not been able to arrive at an agreement on how to interpret Karnakagomin's explanation, so the interpretation of each is given in the following paragraphs.

(b) According to Hayes the explanation is as follows. In the definition we read that evidence is a property that is pervaded by another property. Now just saying that evidence is a property is sufficient to imply that there is a possessor of the property, because a property necessarily has a possessor upon which it depends for support. Therefore it would ordinarily go without saying that evidence, being a property, is a property of something. When, however, an author goes to the effort of stating explicitly something that would ordinarily go without saying, it must be assumed that he is making the effort towards the purpose of expressing something that would otherwise not be expressed. Therefore, when the definition reads "evidence is a property of the property-possessor," it must be assumed that adding the word "property-possessor (dharmin)" states something beyond the obvious. It must, in other words, be that the seemingly redundant words are being used to refer implicitly (sāmārthyāt) to something further. This further something is proximity (pratyāsatti), the fact of being right at hand. When a person is in a situation in which there is a need to use evidence in order to infer that a given property is borne by a given individual, what is it that is right at hand? It is, says Isvarasena, the individual itself that prompted the need to draw an inference: it is the subject of the inference. Therefore, when the revised definition of Isvarasena says "evidence is a property of the property-possessor," the word "property-possessor" can be understood to refer unambiguously to the individual that is the subject of the inference. Dharmakīrti replies to Īśvarasena's line of reasoning by saying:

But that is not so, because the property-possessor which is an observed precedent is

also proximate. From the expression "property-possessor" one assumes [that] the possessor of the establishable property [is intended], because the [property's] presence in the property-possessor that is an observed precedent is established by the [expression of] pervasion of its member.

According to Hayes's reading of Karnakagomin, this means that it is not the case that the individual that is the subject of the inference is the only property-possessor that is right at hand and at the forefront of one's mind when one is drawing an inference. Karnakagomin (S: 13) explains that sometimes in practice when one is making an inference, the first observation that one makes is of the evidence's association with the property whose occurrence in the subject of the inference requires establishment. In such cases one first observes the evidence and the establishable property together in some individual other than the subject of the inference; this other individual is called the observed precedent (drstanta). Now given that, depending upon the circumstances in which one is actually using the piece of evidence to draw an inference, either the subject of the inference or the observed precedent may be proximate and so at the forefront of one's mind, it cannot be assumed that this proximity is an attribute of only the subject of the inference. Therefore, in the definition that says "evidence is a property of the property-bearer," there is not sufficient reason to assume that the word "property-possessor" implicitly calls to mind only the individual that is the subject of the inference.

(c) According to Gillon, on the other hand, the word "proximity (pratyāsatti)" refers not to the context of actually drawing an inference but rather to that of making a statement about the inference that one has drawn. His reconstruction of Īśvarasena's line of reasoning is as follows. The definition is intended to define an establishing property; and an establishing property is relevant in the context of making an inference. In this context, the conclusion is stated first. A conclusion ascribes a property to a property-possessor. Since this is the only property-possessor in the context, one must reason that the expression "property-possessor (dharmin)" refers to this property-possessor, which is the one about which the inference is being made. Dharmakīrti, according to Gillon's reading, then points out that there is a flaw

in Isvarasena's reasoning. Though it is true that inferences may begin with a statement of the conclusion, it need not be so. Inferences may also begin with a statement of the pervasion. As can be seen from the inferential schema given above (B.2.1.), the major premiss, when it expresses positive concomitance, is accompanied by the statement of an observed precedent, which must be a property-possessor distinct from the one about which the inference is being made. In such a context, the compound "property-possessor" used in the definition would be connected with this corroborating positive example, which is the wrong property-possessor. Such an interpretation renders the definition invalid. Dharmakirti admits that such a flaw in reasoning about the interpretation of the compound "property-possessor" can be overcome by bearing in mind the remainder of the definition. The other phrase of the definition, "[the evidence] is pervaded by a member thereof", pertains to pervasion. And observed precedents are relevant only to pervasion. Reference to an observed precedent, and thereby to pervasion, in the part of the definition under consideration would be redundant. There is another flaw in the reasoning, however, which Dharmakīrti maintains cannot be overcome. It was contended above that when the expression "property-possessor (dharmin)" is used in connection with the word "property (dharma)," it must have some special sense if it is not to be redundant. From this consideration it was concluded that the special sense is to be supplied from the context. But this does not follow, since the redundancy can be eliminated by a special sense, but not one supplied from context. Rather, Dharmakirti points out, a redundant expression can be used to indicate a restriction of what is being talked about to just the cases explicitly mentioned. He cites a statement of Dignāga's as an example. (See section B.2.1.2. above and the paragraph immediately below for further details.) The upshot is that, even with the application of standard principles of interpretation, the denotation of the term "property-possessor (dharmin)" in the compound "property-possessor property (dharmi-dharma)" cannot be sufficiently narrowed so that it uniquely denotes the property-possessor about which an inference is being made. In addition, Dharmakirti maintains that the interpretational demands placed on the definition's interpreter are too great -

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greater, presumably, than the demands of his availing himself of the figurative sense of "subject", instead of its literal sense.

(d) Whether the issue of "proximity" as that which removes ambiguity is understood according to Hayes's interpretation of Karnakagomin or according to Gillon's, Dharmakīrti's next move is to say

repeating what is already established would be expected to be for the purpose of restriction, as when we express [the evidence's] absence in the absence of the establishable property even though its dissociation from what is of a different class is already established by saying that it is present only in what is of the same class.

Dharmakīrti's prose is so terse that once again we must resort to Karnakagomin's explanation of the passage. As we saw in B.2.1.1., Isvarasena argued that a definition reading "evidence is a property of the property-possessor" would turn the reader's mind to the propertypossessor that is most clearly associated in one's mind with the property being used as evidence in an inference; that propertypossessor would be the subject of the inference. But Dharmakirti replied that equally closely associated to the evidence is the observed precedent in which the evidence is observed to be present in the same individual as the property whose presence in the subject requires establishment. Therefore the appeal to "proximity" as a feature of only the subject of the inference failed. In the passage in A.1.2. that begins "From the expression 'property-possessor' one assumes the possessor of the establishable property," İsvarasena tries another tack. According to Karnakagomin (S: 13), the argument is as follows. Suppose that it is not owing to proximity that the mind is directed by the phrase "property-possessor" to the subject of inference. Suppose instead that it is through the process of elimination (pāriśesyāt) that it is so directed. The clause "The evidence is pervaded by a member of it" directs the attention to the property-possessor that is an observed precedent, because without this observed precedent one could not know that the establishable property pervades the evidence. But if the discussion of pervasion refers obliquely to the observed precedent, we are entitled to ask what it is that the expression "property-possessor" calls to mind. Assuming that "property-possessor" is not being used redundantly, and given that the property-possessor that is an observed

precedent has already been called to mind, there is only one propertypossessor left over: the subject of the inference itself.

(e) In the passage beginning "[But] repeating what is already established would be expected to be for the purpose of restriction." Dharmakīrti replies to Īśvarasena's argument as outlined above. Isvarasena's argument rested upon an assumption that "propertypossessor" was not being used redundantly. But what warrants making this assumption? The fact of the matter is that repetition (punarvacana) of an expression may be other than pleonastic; it may be a device for emphasizing a restriction. If one were to say, for example, "Only adults are allowed by law to vote; children are not allowed to vote," the second sentence is implied by the first and need therefore not be said. But saying it serves to make the restriction emphatic and absolute. By the same token, we might expect "property-possessor" to be referring explicitly and emphatically to the observed precedent that is referred to obliquely by the clause on pervasion. Lest this seem farfetched, Dharmakirti quotes an example of repetition used for emphasis from a work that Karnakagomin (S: 14) identifies as the Tarkaśāstra, in which evidence is defined as a property that has three features, the second of which is that it is present in what is the same as the subject - the same, that is, in virtue of possessing the property to be established - and it is absent in the absence of the property to be established. This feature can be described concisely by saying "the evidence is present only in what is of the same class," but for the sake of emphasis (avadharana) it is added "the evidence is not present in what is of a different class." Given, then, that repetition would be emphatic rather than redundant, the expression "property-possessor" referring twice to the observed precedent would emphasize that only properties belonging to it would serve as evidence while properties belonging to the subject of the inference would not. Therefore, to avoid such absurd implications it is better, argues Dharmakīrti, to avoid the expression "property-possessor" and to remain with the expression "subject of inference" used synecdochically.

(f) In making his claim for emphasis through repetition, Dharmakīrti refers to the three conditions that a property used as evidence must

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have. Those three conditions are in fact only two, since the third is implicit in the second in Dharmakīrti's formulation. Hayes (1986) has argued that in the original formulation of the three conditions of evidence as given by Dignāga, the three conditions are quite independent of one another. The first condition is that the evidence be a property of the individual in which one wants to establish through inference that a second property is present. This condition is called "paksa-dharmatā." The second condition is that there be an established precedent of some individual, other than the subject of inference itself, in which the evidence and the establishable property occur together. This condition is called "anvaya (association)." The third condition is that there be no known precedent of any individual in which the evidence occurs without the establishable property. This condition is called "vyatireka (dissociation)." Conditions two and three do not say the same thing at all. This is borne out by Isvarasena's quotation from Tarkaśāstra: "yah san sajātīve dvedhā câsams tadatyaye sah hetuh." It is noteworthy that the particle "eva," which is used for restriction and is usually translated as "only," does not appear in this quotation from Dignāga's Tarkaśāstra. But once the particle "eva" is added to these formulations, as was done by Dharmakīrti, the second condition now says that an item of evidence be a property that occurs only in individuals in which the property to be established is present. This condition, also called "anvaya," is different from Dignāga's second condition called "anvaya," and unlike Dignaga's original formulation, this revised formulation renders the third condition apparently superfluous. But it is not really superfluous, says Dharmakīrti, for it serves to emphasize the restriction of the evidence to just those individuals that possess the property that requires establishment in the subject of inference.

(g) Dharmakīrti seems to want to show that the formulation of the three conditions of evidence that he gives has been standard from the very beginning and has not undergone any significant amount of evolution. This whole issue of the formulation of the three conditions of proper evidence is quite complex. Katsura (1986a: 167) reports that in the history of the formulation of the three conditions (trirūpa) that proper evidence must have, there are three discernible stages of development. In the first stage, which is represented by pre-Dignāga

works on logic and some of Dignāga's own work, the particle "eva" is absent from any of the statements of the conditions; in the second stage, which is represented by a number of Dignaga's works including (says Katsura) the Tarkaśāstra, the particle "eva" appears in one but not both of the statements for the second and the third conditions; in the third stage, which is represented by Dharmakīrti's work and which becomes the standard for all post-Dharmakirti Buddhist logicians, the particle "eva" appears in all three statements of the conditions of proper evidence. While it is not clear, at least based on the quotation of Tarkaśāstra that appears in Karnakagomin, that the restrictive particle "eva" occurs in this text. Katsura's scheme of the history of how "eva" was used is most informative. An even fuller account appears in his monograph on the subject written in Japanese (Katsura 1986b: 58-71; 95-105). In any case, the philosophical implications of this issue will be taken up for fuller explanation below in section B.2.1.3.

#### B.2.1.3. Evidence Not Restricted to the Subject (A.1.3.)

(a) In *Pramāņavārttika* 4: 190—193 Dharmakīrti outlines the effect that the Sanskrit particle "eva" has when placed immediately after a head word, a modifier and a verb in a sentence. This passage has been discussed fully in Kajiyama (1973) and in Gillon and Hayes (1982), so we shall offer only a brief explanation here.

(b) A proposition (vākya) may be defined as the attribution of a property to a property-possessor. Normally a proposition is expressed in words by a phrase that comprises a head word that names the property-possessor and a modifier that names a property. Also contained in the phrase, at least implicitly, is a verb. If the verb is a copula or one expressing existence, it is commonly omitted in an actual Sanskrit sentence. Immediately after any one of these components of the phrase it is possible to place the emphatic particle "eva," which is often translated as "only." In fact Dharmakīrti declares in 4: 191 that this particle "eva" is implicit in every affirmative statement even if it is not explicitly part of the verbal utterance.

(c) If the particle "eva" is placed immediately after the head word, the effect is to exclude from consideration the possibility that something

other than that which is named by the head word also possess the property named by the modifier. Dharmakirti's example is the sentence "Parthah eva dhanurdharah (Only Arjuna is an archer)," which means that nothing except that to which the word "Pārtha" can be applied has the property of being an archer. The word "Partha" means descendant of Prtha, mother of Arjuna. Dharmakīrti's use of this particular sample sentence is potentially misleading, because the sentence construed literally is obviously false. The sentence is a hyperbolic way of saying that Arjuna is unsurpassed as a marksman; he is so good that no one else really deserves even to be called a marksman in the same breath as Arjuna. A less misleading sample sentence that would illustrate the logical point under consideration here would be "Only human beings are archers." This gives an example of what Dharmakirti calls qualification in the sense of excluding the qualification belonging to another qualificand (cf. "anyayogavyavaccheda").

(d) If the particle "eva" is placed immediately after the modifier or qualifier in a phrase, the effect is to exclude from consideration the possibility that that which is named by the head word does not possess the property named by the modifier. Dharmakīrti's example is the sentence "Caitrah dhanurdharah eva (Caitra is an archer indeed)." Lest one think that that to which the word "Caitra" can be applied does not have the property of being an archer, the particle "eva" can be placed after the word for archer to emphasize that the property of being an archer does indeed belong to whatever is denoted by the word "Caitra." This is an example of what Dharmakīrti calls qualification in the sense of excluding the qualifier's not belonging to the qualificand (cf. "ayogavyavaccheda").

(e) The issue in Section A.1.3., the passage under discussion here, is one that harks back to such early critics of Dignāga as Uddyotakara, who asked what the full intention is of the statement made by Dignāga that an item of evidence is a property of the subject of the inference. Are we to understand this to be saying "Only the subject has the property used as evidence"? Obviously not, for then there could be no means of establishing that in all cases aside from the subject, about which we must suspend judgement until establishment is forthcoming, the property used as evidence is invariably found in individuals that also have the establishable property in the subject. Therefore, we should understand that Dignāga's intention was to say "The subject has the evidence indeed."

(f) It was mentioned above that the sentence employed by Dharmakīrti to illustrate qualification in the sense of excluding the qualification belonging to another qualificand was potentially misleading. In fact both of Dharmakirti's exemplary statements could be improved so as to illustrate his central point more generally. Rather than using names that apply only to individuals, "Partha" and "Caitra," one could use class names. As we suggested above, a better illustration of excluding the qualifier's belonging to another qualificand would be "Only human beings are archers." A better illustration of excluding the qualifier's not belonging to the qualificand would be "Human beings are only mortal." What these examples illustrate is that the class name that is marked by "eva" or "only" is wider in extension than the unmarked class name. This is an important point to illustrate, for it shows how a well-formed syllogism can be constructed by using simple propositions in which one of the terms is marked by "eva" in order to show that it is the wider term.

(g) Here is a well-formed syllogism in English and in Sanskrit: "Human beings are only mortal. Only human beings are archers. Therefore, archers are only mortal. (manuşyaḥ mārtyaḥ eva. manuşyaḥ eva dhanurdharaḥ. tasmāt dhanurdharaḥ mārtyaḥ eva.)" This tells us that the class of mortals contains the class of human beings, and the class of human beings contains the class of archers, and therefore, the class of mortals contains the class of archers. Thus it is logically equivalent to the familiar Barbara syllogism of classical European logic: "All human beings are mortal. All archers are human beings. Therefore, all archers are mortal."

(h) Having said all this, we can now show that the statement "Evidence is a property of the subject of the inference" in verse A.1. is to be understood as saying "the subject is a possessor of the evidence

indeed," which should in turn be understood as saying "the subject is only an evidence-possessor." As we shall see below in A.1.4., the condition of the evidence's being pervaded by the property to be established can be expressed as "Only possessors of the property to be established are evidence-possessors." From these two statements we can easily see that the conclusion fellows: "The subject is only a possessor of the property to be established."

## B.2.2. Evidence Pervaded by Property to Be Established (A.1.4.)

(a) The passage under discussion is the phrase in Dharmakīrti's verse that reads "tadamśena vyāpto hetuh." The word "amśa" in that phrase normally stands for a part (ekadeśa) of a whole or a constituent member of a collection (samudāya). In this case, however, Dharmakīrti notes that he is exercising the prerogative that any author has to use a word in a slightly unusual sense, provided that due notice is given to how the word is being used. Here the word is being used in the sense of property (dharma).

(b) Now saying that the word "subject (pakṣa)" is not being used to signify a collection here may seem somewhat confusing at first, since so much was made in the sections above (A.1.1.; B.2.1.1.) about "pakṣa" signifying the subject matter of the inference, which is the complex state of affairs consisting in the collection of a propertypossessor and the property borne by it. But it is precisely because "subject" is being used synecdochically in the verse that it does not signify collection but rather a part of that collection, namely the property-possessor (dharmin) alone. Therefore, as Karṇakagomin points out (S: 16), it is Dharmakīrti's contention that the passage under discussion here serves to reinforce the claim made earlier that "subject" is being used synecdochically.

## B.2.2.1. Definition of Pervasion (Vyāpti) (A.1.5.)

(a) After establishing that the evidence is a property that is pervaded by the property to be established, Dharmakīrti goes on to say: "Pervasion is the pervasive property's necessarily being there or the pervadable property's being only there." This passage defines the concept of pervasion (vyāpti), which is the single most important concept in Indian theories of inference. We have already discussed pervasion in section B.2.1.1. as a relation that pertains between two properties such that the set of individuals that bear the pervaded property is a subset of the set of individuals that bear the pervasive property. While this way of describing pervasion is clear to people who have some familiarity with elementary set theory, it is not the way of describing pervasion that Dharmakīrti and his contemporaries chose. Describing Indian logic in set theoretical terminology is in many ways more precise than describing it in the terminology employed by the Indians themselves, but it is also obviously anachronistic. So what we shall do here is to set out some of the key terminology used by the classical Indian tradition to describe the relationship between an item of evidence and what the evidence indicates.

(b) First of all it should be recalled that by evidence we mean the property used in an inference to indicate the presence of a second property in the same particular object as that in which the evidence occurs. This second property is conventionally called the establishable property (sādhya-dharma), that is, the property whose presence in the particular object that bears the evidence is not immediately known through the senses and so needs to be established through the indirect means of acquiring knowledge, which is called inference (anumāna). According to the Indian theorists of inference, an item of evidence can serve to indicate the presence of this establishable property only if the property used as evidence is pervaded by the property established through it. The relationship called pervasion is in turn defined in terms of two other relationships that pertain between the evidence and the establishable property.

#### **B.2.2.1.1.** Association and Dissociation

(a) The relation called "association (anvaya)" is the fact of the evidence's occurring in at least one particular object that is known to be a possessor of the establishable property. The fact that one is in need of making use of inference at all in a given situation is a function of one's not being certain whether the establishable property occurs in a given particular object; therefore it follows that the particular object that is known to be a possessor of both the evidence and the establishable

lishable property in the subject of the inference must be some particular object other than the subject of the inference itself. Particular objects that are known to be possessors of the establishable property are collectively called "sapakṣa," which we shall translate by the expression "subjectlike," that is, like the subject in that they are sharers in the establishable property. In Dignāga's account of inference, the *known presence* of the property used as evidence in any subjectlike thing is called "association." But in Dharmakīrti's account of inference, association consists in the evidence's *necessarily occurring* in subjectlike things. This is the significance of the statement in the author's own commentary that reads "Pervasion is the pervasive property's *necessarily being there*," where the pervasive property is the establishable property and "there" is in possessors of the evidence. Pervasion is thus defined positively in terms of association.

(b) The relation called "dissociation (vyatireka)" is the fact of the evidence's not occurring in any particular object that is known to be a non-possessor of the establishable property. Particular objects that are known to be non-possessors of the establishable property are collectively called "vipakṣa" in Sanskrit, a term that we shall translate with the descriptive phrase "unsubjectlike." In Dharmakīrti's account of inference, dissociation consists in the evidence's being restricted to or occurring with only subjectlike things and not occurring with unsubjectlike things. In defining pervasion negatively in terms of dissociation, Dharmakīrti therefore writes "Pervasion is the pervadable property is the evidence and "there" is in the possessor of the establishable property.

### B.2.2.1.2. Knowledge of Association and Dissociation

(a) Dharmakīrti writes "This says that both association and dissociation are made certain individually, each through its own means of acquiring knowledge, as is the property of the subject." According to Karņakagomin (S: 17) the word "this" in this statement refers to the phrase in verse A.1. that reads "Evidence is a property of the subject which is pervaded by its member." This statement, says Karņakagomin, indirectly invokes both association and dissociation, because pervasion consists in these two relations inasmuch as whenever two properties are associated (as Dharmakīrti defines association — see B.2.2.1.), then one of them pervades the other. More particularly, whenever property A is associated (anvita) with property B, then A is pervaded (vyāpta) by B.

(b) The two relations of association and dissociation are logically equivalent in Dharmakīrti's usage of the terms. That is, the association relation holds if and only if the dissociation relation holds. Moreover, the pervasion relation holds if and only if the association relation holds. There is, however, despite the logical equivalence of these relations, a purpose to be served by treating them separately. For even though the two relations are logically equivalent, the means by which we come to know that the relationships hold differs in each case. Our knowledge that the pervasion relation holds between two properties is dependent upon our knowledge that either the association or dissociation relation holds between them, and our knowledge that the association relation holds come to us in a different way than our knowledge that the dissociation relation holds. The question of how it is that we come to know these relations is one to which we shall return later.

# B.2.3. Natural Connection (Svabhāva-Pratibandha) as the Ground of Evidence (A.1.6.)

(a) In giving his account of the three kinds of evidence and what supports them, Dharmakīrti returns to a position that had generally been held before the influence of his predecessor Dignāga. In his discussion of inference, Dignāga departed from the conventions that had existed before him in Indian epistemology, where it was customary to relate the theory of reliable inference to such concepts in metaphysics as causality, necessity and possibility, and to a theory of natural classes. As we shall see below in Section B.2.5., Dignāga rejected the notion of class as a feature of the natural world as it exists independent of our awareness of it. Rather, he argued that the notion of class resides purely in the mind and is superimposed upon the world of particulars by the intellect in its attempts to make sense of the particular objects that it detects by means of the physical senses. Dignāga's system of inference was based entirely on propertypervasion, or, what is very closely related to that, the relations between classes of particular objects that bear the properties in question.

(b) As Dignāga's critics were quick to point out, a system of epistemology that dismisses the reality of classes, or at least relegates classes to the domain of that which is superimposed by the intellect upon the external world, is left with a rather weak account of inference. There is, in such a system, no apparent account for why the mind organizes the data of empirical experience in just the ways it does, nor is there any reason to believe that the ways of organizing data to which we have become habituated are anything but arbitrary. In particular, there is no assurance in a system such as Dignāga's that the patterns that the mind has superimposed upon events is a pattern that those events actually have. If, for example, one observes smoke with fire repeatedly and begins to see a pattern in the occurrences of smoke with the occurrences of other things, there is no assurance that this perceived pattern of concomitance is anything but fanciful. But since inference depends precisely upon the recognitions of patterns in our experience, such that we can predict the likely shape of future experiences by assuming that they will follow the patterns that we have detected so far, to suggest that these patterns reside entirely in the mind and not in events themselves is to suggest that our inferences are not really supported by the events of the world of particular objects, which is after all the practical world in which we must act.

(c) It was left to Dharmakīrti and to other interpreters of Dignāga to try to preserve as much as possible of Dignāga's theory of the pervasion of one property by another and at the same time to try to show that our most important intuitions of events in the world are supported by some reality outside the mind. It was with the notion of the natural connection (svabhāvapratibandha) that Dharmakīrti tried to salvage Dignāga's epistemological theories, although in introducing this seemingly minor modification he ended in changing Dignāga's theories of epistemology almost beyond recognition. More will be said about this concept of the natural connection below in Section B.2.4.2.1.

## B.2.4. The Three Types of Evidence (A.1.6.)

## B.2.4.1. Evidence Based on a Causal Relation

(a) According to Dharmakīrti, there are three types of natural connection. The first is the relationship between a cause and its effects. The paradigmatic case of such a relation is the one that exists between smoke and fire. It is no accident that whenever we see smoke we eventually find fire, according to Dharmakīrti, because the property that is serving as evidence, the property of being smoke (dhūmatva), belongs to an individual that is an effect of the individual that possess the property that requires establishment, the fact of being fire (agnitva). But in saying this, Dharmakīrti invites a natural question: in an inference such as this, what exactly is the subject of the inference? How can it be understood as the possessor of the property that is serving as evidence? Karnakagomin (S: 20) anticipates this question and deals with it at some length. In the paragraphs that follow we shall recapitulate the issues that Karnakagomin raises.

(b) What one might most naturally expect about a circumstance in which it is necessary to appeal to inference rather than to direct sensation is that one has just observed a particular object of some kind but has not observed all the properties of that particular object. In such a circumstance one makes use of the properties in that particular object that are observable, using them as evidence for properties that are for some reason not obsevable in the particular object. What is important here is that since the properties being used as evidence are observable, it should follow that the particular object to which the evidential properties belong is itself an observable object, for it sounds most peculiar to say that a thing that is, say, invisible nevertheless has visible properties. But in this case of inferring the presence of fire from the observation of the presence of smoke, it appears that we are being confronted with a situation in which the particular place where fire is present is out of sight, and at the same time we are asked to believe that smoke is present in and a property of that same particular place, or else it would not qualify as a sign (liṅga).

(c) An alternative way of stating this same problem is to point out that the individual place in which smoke is present is obviously the sky above the fireplace, and not the fireplace itself. But the smokefilled sky is itself free of fire, so it is simply incorrect to say that one can infer from one property, the possession of smoke, the presence of a second property, the possession of fire, in one and the same particular object. This presents a real problem for the Dignāga-Dharmakīrti theory of inferential signs, a problem that according to Karņakagomin was pointed out by Uddyotakara the Naiyāyika and others.

(d) What Uddyotakara pointed out was that if we take seriously the statement that every place that has smoke is a place that has fire, and if we understand a place as a non-partite individual, then we should have to say that smoke itself is possessed of fire, because smoke is a place where smoke is present (S: 20). The followers of the Nyāya system have a solution to this problem, according to Uddyotakara, for they regard an individual as a complex object that has unity and integrity but also has discrete parts. But Buddhists are committed to the view that complex entities do not really exist as realities external to the mind; according to the Buddhists, individuality is superimposed by the intellect upon a plurality of discrete objects that in reality do not have the unity that the intellect attributes to them. Karnakagomin pauses in his commentary to point out that the Naiyāyika solution to this problem is really no solution at all, but he then admits that denying the validity of the Nyāya solution to this problem does not really answer the objections that other philosophers have raised against the Buddhist solutions to the problem.

(e) A possible way of looking at this whole issue of what the subject of the inference is, says Karnakagomin, is to say that the subject of the inference is the place that is observed to be filled with smoke. The property that requires establishment for that place is not that it possesses fire but rather that it has fire below it. One can then correctly say that previous experience has shown that columns of smoke have fire below them, so a pervasion relation can be established between the sign, the fact of being smoky, and the signified property, the fact of being located above a fireplace. But in the case just described, there is no especial appeal to knowledge of causality, for all that is really at play here is a knowledge of the pervasion of one property by another. So while this way of looking at the problem provides a satisfactory answer to critics of Dignāga, who explained inference strictly in terms of pervasion, it still does not adequately describe the problem as Dharmakīrti sets it out. So we must still search for an alternative account.

(f) The alternative account that Karnakagomin provides to illustrate Dharmakīrti's causal view of inference is as follows. One might say that the type of inference being discussed here is one arising from a situation in which fire has been observed in a particular place, but there remains some uncertainty as to what exactly it is that is burning; it could be Kimshuka wood or it could be some other type of firewood. This uncertainty can be dispelled by observing the type of smoke that is rising above the fire, since different kinds of tree give off different qualities and quantities of smoke. It is especially this latter type of inference, in which one determines the type of fire from the characteristics of the smoke, that serves as an illustration of the principle of how knowledge of causal relationships play a role in the process of inference.

#### B.2.4.2. Natural Property as Evidence (Svabhāva-Hetu)

(a) The type of sign known as evidence in the form of a natural property (svabhāva-hetu) is one of the most difficult aspects of Dharmakīrti's philosophy to interpret. The puzzle of how exactly to understand this kind of evidence is not confined to modern interpreters, who themselves have produced a considerable amount of literature on the topic (see B.2.4.2.1.), but goes back to interpreters and critics of Dharmakīrti who wrote their comments shortly after the time of his philosophical career. Karņakagomin (S: 21), for example, quotes a lengthy passage from a criticism of Dharmakīrti's presentation of evidence as natural property that was written by the Mīmāmsā philosopher Umveka, who according to Potter (1981: 346-7) flourished as a commentator on Kumārila Bhaṭṭa and Maṇḍana Miśra between 760 and 790 C.E.

(b) The main features of Umveka's criticism are as follows. The relationship between that which yields knowledge and that about which knowledge is vielded must be a relationship between two distinct things, because there is no such thing as a connection (pratibandha) between an object and itself. A connection, according to Umveka, is necessarily irreflexive; that is, objects between which there is a connection must be different from one another. But when two objects are distinct from one another, then it cannot be said that one of the objects is the same individual (tadātman) as the other. We cannot, for example, say that a piece of cloth has the nature of a water-jug. Similarly, a shinshapa tree is distinct from an acacia tree, so it cannot be said that the one has the nature of the other. The point here is that if being an acacia were the same as being a tree, and if being a shinshapa were also the same as being a tree, then being a shinshapa would be the same as being an acacia. But that is not the case, so being a particular species of tree is not the same as being a tree in general. Moreover, says Umveka, if in an inference using an item of evidence in the form of a natural property it were the case that the establishing property were the same as the establishable property, there would not in fact be any need for inference at all, because the act of observing the property being used as evidence would be exactly the same act as observing the property that supposedly requires establishment. But if the latter property can be observed directly, then there is no need to learn of its presence through an inferential sign. Therefore, if we agree with Dharmakirti that the fact of a thing's being a shinshapa makes known the fact of that thing's being a tree owing to treehood's being the same as shinshapahood, we run into a number of unwelcome consequences.

(c) Karņakagomin replies to Umveka's objections by saying that it is a natural property of a shinshapa that it is a kind of tree. And it is also a natural property of a species of tree that it is a shinshapa. Therefore, it can equally be said of each of these two properties that it has the nature of the other (tadātman). There is, in other words, a relation between the two properties whereby each of the relata has sameness of nature (tādātmya) with the other. But, adds Karņakagomin, since it is not the case that a shinshapa has the same nature as every tree, it is

not the case that the property of being a tree is capable of making known the property of being a shinshapa.

### B2.4.2.1. Modern Scholarship on Dharmakīrti's Notion of 'Svabhāva'

(a) A number of studies have been conducted by modern scholars with the aim of clarifying the concepts surrounding that of the natural property (svabhāva) as used by Dharmakīrti in the Pramānavārttika and other of his epistemological works. The term "svabhāva" appears by itself but also as an element in two key compound phrases, "svabhāva-pratibandha" and "svabhāva-hetu." Steinkellner (1971) studied each of the 347 occurrences of the term "svabhāva" in the PVSV and was able to show how the term fits into the overall context of epistemological and metaphysical technical terminology in this text. In this study Steinkellner showed, for example, that the concept of natural property is closely tied to the concept of causality. He showed that in Dharmakīrti's system that which makes an object real or actual is its capacity to fulfill a purpose (erfüllen eines Zweckes, arthakriyāsamartha), a capacity that belongs to complexes of causal factors that collectively have the ability to produce an effect. This capacity is based upon the svabhava of the causal complex (Ursachenkomplex); the term "svabhāva" therefore has connotations of power (Kraft) and capacity. Moreover, since it is the complex of a thing's causes that make a given thing not only real but an individual with a unique place in time and space, this causal complex is what gives an object its particular identity; the term "svabhāva," being closely related to the power of the causal complex, therefore also has connotations of individuality and identity, that is, the aspect of a thing that makes it what it is and distinguishes it from what is other than itself.

(b) Given this basic understanding of the complex of meanings associated with the term "svabhāva" itself, it is possible to see what role it plays in the compounds "svabhāva-pratibandha" and "svabhāvahetu." We shall have occasion to discuss the whole matter of "svabhāva-hetu" below, but this is an appropriate place for the discussion of "svabhāva-pratibandha." Matsumoto (1981) followed up some of the research presented in Steinkellner (1971) and in particular was interested in the meaning of the term "svabhāva-pratibandha," which he felt had not been given a fully clear treatment by Steinkellner. Matsumoto pointed out that Steinkellner had translated the term into German by the phrase "eine Verknüfung durch den Svabhāva," or "eine Verknüfung durch das Wesen," which reflects the analysis of the compound offered by Dharmottara, who resolves it as a third-case tatpurusha compound: "svabhāvena pratibandhaḥ (connection through the svabhāva)."

(c) There is, however, according to Matsumoto an earlier commentary on Dharmakīrti, namely, Śākyabuddhi, who in his commentary on PVSV resolves the compound as a seventh-case tatpurusha: "svabhāve pratibandhaḥ (connection in the svabhāva)." The difference between these two resolutions of the compound, says Matsumoto, is that in Dharmottara's analysis, the *svabhāva* belongs to the evidence, whereas in Śākyabuddhi's it belongs to the establishable property.

(d) It is Matsumoto's contention that neither of the two traditional commentators provides the correct solution, since each commentator assumes that the term "svabhāva-pratibandha" should be analysed in the same way in every context in which it occurs. A better understanding, he says, can be gained by recognizing that the compound has a different analysis when it occurs in the context of evidence in the form of an effect (kārya-hetu) than it has in the context of evidence in the form of a natural property (svabhāva-hetu). In the former context the compound should be resolved as a sixth-case tatpurusha, and the term "pratibandha" should be understood in the sense of limitation (niyama); therefore, the analysis should be "svabhāvasya pratibandhah (limitation of the svabhāva)". The sense of resolving the compound in this way is that not all the properties of the effect serve as evidence for all the properties in the cause, but rather only a limited number of properties in the effect serve as evidence for a limited number of properties in the cause (see Sections A.2. and A.2.1.). In the case of the evidence as natural property, however, the analysis should be that given by Säkyabuddhi, and the term "pratibandha" should be understood in the sense of "counter-connection."

(e) Matsumoto also contends that the triad of terms that Dharmakīrti

uses meaning connection have an important difference in their usage as technical terms. In his opinion "sambandha" means connection in general, while "pratibandha" and "anubandha" are non-symmetrical relations; a *svabhāva* is related to a *bhāva* by *anubandha*, whereas a *bhāva* is related to a *svabhāva* by *pratibandha*. Apparently what Matsumoto means by this is that in case the extension of property H is a subset of the extension of property S, then H is anubandharelated to S and S is pratibandha-related to H.

(f) There are a number of problems in Matsumoto's theory, most of which are pointed out by Steinkellner in his reply (1984). The principal observation that Steinkellner makes in his reply is that svabhāva-pratibandha is a principle that Dharmakīrti has invented to explain why two properties have been observed to be in a pervasion relation; it is invoked to show that our observation that one property always occurs in the presence of another is not accidental but rather is the function of how things in the world really are. Therefore, the term "svabhāva" in these compounds should be taken in the ontological sense of essence. But in Matsumoto's account wherein "svabhāvapratibandha" means in one context "limitation of properties," the motive for invoking svabhāva-pratibandha is altogether lost. Moreover, it is Dharmakirti's purpose in inventing the concept of svabhāva-pratibandha to show that there is a theoretical unity underlying the two types of evidence that he discusses. But if we understand the compound to have a different sense in each of the two contexts, this underlying unity is entirely lost. As for Matsumoto's intriguing notion that anubandha and pratibandha are directional relations, Steinkellner points out that there is no positive textual evidence in support of this theory in either the writings of Dharmakirti or of the commentators who interpret his works. The terms "sambandha," "pratibandha" and "anubandha" are all functionally equivalent according to Steinkellner. In this and in his other comments on this issue, Steinkellner has provided a very strong case for rejecting Matsumoto's interpretations.

(g) Katsura (1986c) has questioned Steinkellner's claim that "svabhāva" is to be taken solely in an ontological sense in the context of the com-

pound "svabhāva-pratibandha." Pointing out that the term "svabhāva" has the double meaning of concept and essence, and noting further that, in the context of Dharmakirti's commitment to the doctrine of radical momentariness, a cause can be related to an effect only conceptually and not actually, Katsura would prefer to interpret "svabhāva-pratibandha" as "universal connection," where "universal" can be understood in the conceptualist's rather than in the realist's sense. There is a problem, however, in introducing the issue of conceptualism at just this point, for it serves to weaken the purpose for which the notion of svabhāva-pratibandbha was introduced in the first place. We are inclined to agree with Steinkellner, and indeed with Katsura, that the notion of svabhāva-pratibandbha was introduced to provide some sort of ontological guarantee that our judgements about some pervasion relations are not accidental and subjective but rather are firmly grounded in the nature of things. In this context the issue of whether or not universals exist outside the mind as features of the world to be discovered is far in the background. It becomes relevant later on in the PVSV, mostly as an aspect of the issue that Dharmakīrti's conceptualism must somehow be reconciled with his wish to find a firm grounding in reality for our judgements that take the form of universal propositions.

(h) Before leaving this issue of the interpretation of "svabhāvapratibandbha," let us mention what Karņakagomin says on the matter. Like Dharmottara, Karņakagomin (S: 23) analyses the compound as meaning connectedness through a natural property ("svabhāvena pratibaddhatvam"), which he further explains as meaning the natural property is connected ("pratibaddha-svabhāvam iti yāvat").

### B.2.4.3. Non-apprehension (Anupalabdhi) as Evidence

(a) As an example of the third type of evidence that Dharmakīrti recognizes, evidence in the form of a non-apprehension, he says that one might reason as follows: "There is no water-jug on a certain specific site, because there is no apprehension of that which meets the conditions for apprehension. If there were, it could only be something whose presence was apprehensible; it could not be otherwise. Therefore, it is described as 'that whose presence meets the conditions for apprehension'." The first phrase in that passage that requires clarifica-

tion is the Sanskrit compound "upalabdhi-lakṣaṇa-prāpta," which is translated by the phrase "that which meets the conditions for apprehension." Karṇakagomin (S: 21) glosses "lakṣaṇa" with the word for instrumental cause, "karaṇa," and he says it refers to such conditions in the object as its being in the presence of unimpaired sense-faculties in the perceiver that would collectively "have the capacity to produce a cognition with its [the object's] appearance (svābhāsa-jñāna-jananayogya)." An object that has come into the presence of such conditions as these, that is, an object that is within the range of the unimpaired sense-organs of an attentive being, is said to be an object that meets the conditions for apprehension.

(b) An inference that has a negative conclusion, that is, that concludes that a given property is absent, presents a number of philosophical difficulties, many of which Karnakagomin deals with in his commentary (S: 21-23). The first issue that the commentator addresses is the question of how an object that is in fact absent can be said to be "one that meets the conditions for apprehension," for an object that is absent can be nothing other than one that fails to meet precisely those conditions. It is, says Karnakagomin in reply, by making a reflective judgement through the intellectual faculty (buddhyā parāmarśa) that one determines that an object meets the conditions for apprehension; one reasons that the object in question was perceived on an earlier occasion in which all the conditions necessary for being aware of it were present, and all those conditions are present again in the present circumstance, so if the object were present it would be apprehended. One cannot reason in that way about an object that is unobservable (adrsya) by its very nature, says Karnakagomin (S: 22), for about such an object it can never be said that one has perceived it before, since it is perpetually unobserved. As for an object that is not unobservable, the fact that it meets the conditions for apprehension is immediately ascertained on its own; it requires no separate act of awareness to learn of a given object that it would be apprehended if it were in the presence of an attentive perceiver with unimpeded functional sense faculties.

(c) The next phrase in Dharmakīrti's passage that requires some attention is the one that reads "If there were, it could only be some-

thing whose presence was apprehensible; it could not be otherwise." Karnakagomin (S: 22) spells out the full line of reasoning as follows. An object such as a water-jug cannot at some times be observable under a given set of conditions and at other times unobservable under exactly those same conditions. Therefore, if a water-jug were present, it would be observed; but it is not observed, and therefore it is not present. Since this line of reasoning would not be sound without the hypothetical clause, the consequence of which is denied in order to show the falsity of the antecedent, it is most important to add the qualifying expression "which meets the conditions for apprehension (upalabdhi-lakṣaṇa-prāpta)" in describing the circumstances under which an object's absence is established through non-apprehension.

(d) As we shall see below in Section B.2.6.1. the three types of evidence that Dharmakīrti has been discussing up to this point will be reduced to two main species, one of which has a subspecies.

B.2.5. Non-objective Nature of Property and Property-possessor (A.1.7.)

(a) Dharmakīrti quotes Dignāga as saying "This entire distinction between inferential sign and that which requires inference is without exception due to the act of distinguishing property from propertypossessor, which is situated in the intellect." This statement from an unidentified work by Dignaga was criticized by Kumarila Bhatta in the Nirālambanavāda section of the Ślokavārttika, vv. 167-172 (Musalgaonkar 1979: 213). Pārthasārathi Miśra, author of the commentary on Kumārila called Nyāyaratnākara, quotes a slightly different version of this statement from the one found in Dharmakīrti. Vācaspati Miśra in his commentary to Uddyotakara's Nyāyavārttika quotes Dignāga's statement twice, each time in a slightly different way. Randle (1926: 51-54) has collected all these differently worded quotations and commented on them, so we shall not duplicate his efforts here. Rather, we shall touch upon the central philosophical point that Dignāga's critics brought forward, and we shall outline Karnakagomin's comments on those points.

(b) Kumārila Bhatta presents Dignāga's position as follows: "although

an external is not present, [a thing] is established, owing to divisions in the understanding that arise from differences in memory traces and words (vāsanā-śabda-bhedôttha-vikalpa-pravibhāgatah), by what is situated in the intellect." Kumārila then goes on to say that a similar view was held by those who understood nyāya, the principles of reasoning. But such a view, he says, must be considered self-defeating, for it offers no account of how it is that these supposed differences in words and memory traces come about if not through variations in stimuli from objects that impinge upon the receptive awareness. Moreover, the very words that those people who hold all distinctions to reside entirely in the mind use to state their view would not exist, so the view if true could never be communicated from one mind to another. It is in the course of spelling out in greater detail the view wherein external objects are denied that Pārthasārathi Miśra quotes the statement of Dignaga. Whereas the version that Dharmakirti quotes says: "This entire distinction between inferential sign and that which requires inference is without exception due to the act of distinguishing property from property-possessor, which is situated in the intellect," the version quoted by Parthasarathi Miśra adds the clause: "It does not depend upon an external presence (na bahih sattām apeksate)."

(c) Karṇakagomin (S: 24) quotes vv. 171-172 of the passage from Kumārila outlined in the above paragraph. His claim is that it misrepresents Dignāga's actual position. Dignāga's position is not that external objects do not exist, but rather that the *identification* of objects as properties and property-possessors is situated in the intellect of the person making use of these notions; being a property and being a property-possessor are not features that are intrinsic to external objects as they are in themselves. Thus an object's functioning as a sign of another object is not a feature of the object itself, but is a use to which the object can be put by an intellect that becomes aware of it. The comments that Dharmakīrti makes after the quotation from Dignāga are intended to affirm the reality of external objects but to make it clear that some of the aspects that we take to be part of the objects is in fact purely subjective. This view may indeed be very close to the one that Kumārila and Pārthasārathi Miśra attribute to the

earlier members of their own school. Their presentation of Dignāga's views may be a more or less deliberate caricature of the views he himself actually presented.

# B.2.6. 'An Effect also Has a Natural Connection' (A.1.8.)

Dharmakīrti states: "An effect also has a natural connection, because its natural property comes into being from that [cause that the effect indicates]." This is in keeping with what he had said earlier: "For when there is a natural connection, one object does not deviate from the other object, because they are of the same nature." It is understood in this context that two properties are said to be of the same nature when they both occur as properties of the same individual. Being of the same nature (tadātmatva), in other words, is to be understood as the fact of coinciding in the same space at the same time. When the property serving as evidence and the property that needs to be established both occur in the same individual, it is precisely their coincidence in that individual that guarantees the non-deviation of the establishable property from the evidence. But in the case of an inference in which the evidence is a property of an individual other than the individual that is the possessor of the establishable property, it is not so obvious what form the natural connection should take. In this passage, Dharmakirti makes it clear that a causal connection between the natural property of the effect and the natural property of the cause serves to guarantee the effect's non-deviation from the cause, that is, the fact that the effect can never arise without the cause. Karnakagomin (S: 25) points out that even though the effect is not in the immediate presence of the cause, its invariable relatedness to the cause is in the form of belonging to the cause's hereditary succession (pāramparya). This account gives rise to a number of problems, which are discussed in the second verse. (See Section B.3.1.)

# B.2.6.1. Three Kinds of Evidence Reduced to Two

The phrase "These two cognitions of what must be inferred" refers to the two principal kinds of sign, namely, the sign in the form of a natural property and the sign in the form of an effect. As Karnakagomin points out (S: 24), there are really only two species of evidence rather than the three that have been discussed so far, because the sign in the form of non-apprehension (anupalabdhi-hetu) is a subspecies of evidence in the form of a natural property (svabhāva-hetu).

#### B.3. The Role of the Causal Relation in Inference

# B.3.1. Difference Between an Inferential Relation and a Causal Relation (A.2.1.)

(a) In his discussion of how an effect can serve as evidence for its cause, beginning with the sentence "If an effect is indicative because it comes into being from that [which it indicates], then the relation between the indicatable and the indicative [holds] throughout, since the relation of product and producer [holds] throughout," Dharmakīrti alludes to an observation that had already been discussed by his predecessor Dignāga at *Pramāṇa-samuccayavṛtti* 2:13. Before looking at the problems that Dharmakīrti and his commentators address, it may be helpful to review Dignāga's position.

(b) In his discussion of an inference in which certain properties of fire can be inferred from the observation of certain properties of smoke, Dignaga made no explicit reference to the causal relation between fire and smoke. Inference according to Dignāga is a process that takes place between two simple entities that each have the potential of being apprehended directly through the senses. Therefore, the sign in an inference must be a simple sensible property whose potential of being sensed has been realized, and what is indicated by the sign must be a simple sensible property whose potential of being sensed has somehow been impeded. What is important to remember is that Dignāga is committed to the position that only simple properties are directly sensible, whereas property-possessors, which are complex things constructed by the intellect, are never sensible. Propertypossessors, therefore, cannot play the roles of either the sign or that which is indicated in an inference. Fire and smoke, in Dignāga's scheme of things, are both complex property-possessors rather than simple properties. The properties of fire and smoke are such data of the senses as colours, sounds, odours and so forth. And so one cannot say, strictly speaking, that smoke serves as a sign of fire. Rather, one

can say only that the properties of smoke that never occur except in the presence of given properties of fire can serve as signs for just those properties of fire. Dignāga's statement of the matter was:

An object has many properties. But we do not become aware of them all through the inferential sign.... We cannot by means of smoke become aware of what kind of special features the fire has, as for example what kind of flames it has or what temperature, because the sign is [erratic] with respect to those features. (Hayes 1988: 244)

(c) Dharmakirti's treatment of this issue is necessarily somewhat more complicated than Dignāga's, because Dharmakīrti has committed himself to the position that one complex thing can serve as evidence for the existence of another. Smoke, to use his example, can serve as evidence for the existence of fire, and this is so because fire is a cause of smoke and an effect can as a rule serve as evidence for the existence of its cause. But a causal relation between two complex things is not exactly parallel to the inferential relation between them. In a causal relation, it is the complex thing taken as a whole that causes a second complex thing taken as a whole to arise. If the inferential relation were quite parallel to this, then the effect as a whole would give rise to knowledge of the cause as a whole. As Karnakagomin points out (S: 12), what would follow from this parallelism is that a person could, by observing no more than a column of smoke, infer not only that a fire was present but also what kind of fire it was, such as whether it was one that was burning grass or one that was burning leaves. But that, of course, is not the case. Observation of an effect gives rise to knowledge of only the most general features of the cause, namely, to those properties that occur in every species of fire. This is so, says Dharmakīrti, because the more specific features of the cause are erratic with respect to the effect; that is, sometimes they are present in the cause when the effect occurs and sometimes they are absent. No feature of the cause that may be absent when the effect is present is restricted to the effect, and therefore no such feature of the cause is indicated by the effect.

(d) By supporting Dignāga in his claim that some but not all the properties of an effect produce knowledge of some but not all properties of its cause, Dharmakīrti apparently finds himself in a

dilemma. If it is the natural relation between cause and effect that provides a warrant for the inference of a cause from its effect, then the metaphysical relation should be isomorphic with the epistemic relation; that is, it should be the case that the cause in its entirety produces the effect in its entirety if, and only if, knowledge of the effect in its entirety produces knowledge of the cause in its entirety. But, as we have seen, Dharmakīrti holds that the cause in its entirety produces the effect in its entirety but that partial knowledge of the effect produces partial knowledge of the effect. Therefore, the metaphysical and the epistemic relations are not isomorphic. And so it would appear that Dharmakīrti must abandon his initial claim that it is the natural relation between cause and effect that provides a warrant for the inference of a cause from its effect. In laying out the problem and his solution to it, Dharmakīrti says:

It might be argued that this entails that the relation of product and producer holds partially. That is not the case, because when the specific property that is produced by those is grasped, it is accepted; and when the general properties that are particularized by the specific property that is a sign are grasped they are accepted. In case the intention is to express an unparticularized general characteristic, that is not admitted, because it is erratic.

Since it is not immediately obvious what this statement means, we avail ourselves once again of Karnakagomin's commentary (\$28.7-15). According to Karnakagomin, Dharmakirti's position does not entail the unwanted conclusion that some but not all properties of the cause produce some but not all properties of the effect. It is true that one would be forced to hold this unwanted conclusion if one held, without qualification, as Dignāga did, that some but not all properties of the effect indicate some but not all properties of the cause. But in fact, says Karnakagomin, Dharmakīrti did not hold that some but not all properties of the effect indicate some but not all properties of the cause. On the contrary, he held that under the proper circumstances all properties of the effect do indeed indicate all properties of the cause. In other words, every property of the effect has the potential to produce knowledge of some property in the cause, and for every property in the cause there is some property of the effect that indicates it.

(e) In summary, Dharmakīrti's position differs from Dignāga's in the following ways. Dignāga's position is that the particular properties of the cause cannot be indicated by the inferential sign. But Karṇa-kagomin says that Dharmakīrti accepts that the particular properties of the cause can be indicated, provided that one grasps a particular property of the effect that is produced by them. The relevant passage in Karṇakagomin's commentary reads:

nâmśena janya-janaka-bhāva-prasangah. niramśatvena vastunah sarvathā janyajanakatvâbhyupagamāt. gamya-gamaka-bhāvasyâpi sarvathâbhimatatvāt. tad āha. *tajjanyêty* ādi. yadi hi kārasya taih kārana-gatair viśeşa-dharmair janyo yo viśeşah sa grahītum śakyate jñāpaka-hetv-adhikārāt. tadā *tajjanya-višeşa-grahane* 'bhimatatvat kāranagata-višeşadharmānām gamyatvasya. tathā hy aguru-dhūma-grahane bhavati eva tadagner anumānam. (S28.7–12)

[Dharmakīrti's view] does not entail [the unwanted view that] the relation between product and producer holds partially, because it is accepted that the product is related throughout to the producer, because an actuality is non-partite. Because it is accepted that the indicatable is also related throughout to the indicative. Therefore [Dharmakīrti] says: "when the specific property that is produced by those is grasped" etc. Because suppose the effect's particular property, which is produced by the particular properties in the cause, can be grasped. In that case [it is accepted that the indicatable is related throughout to the indicative], because it is accepted that the particular properties in the cause can be indicated "when one grasps the particular properties that are generated by them." For example, when one grasps the smoke of aloe, it is indeed the means of inferring its fire.

Moreover, whereas Dignāga's position is that the general properties of the effect cannot indicate the cause, Karnakagomin says that Dharmakīrti accepts that general properties of the effect are indicative provided that one grasps them as particularized by the specific property that is being used as a sign (linga). What is being used as a sign in the standard example is smoke, or more precisely, smokehood, the property of being smoke. A property more general than smokehood is substantiality. Dignāga said that smoke's property of being a substance plays no role in inference. But Karnakagomin's Dharmakīrti says that the property of being a substance does play a role, provided that it is specifically smoke's being a substance that one is taking into consideration. Thus the general property of being a substance is indicative provided that it has a particularizer (upādhi) in the form of the specific property which is the evidence (hetu) or the sign (linga). A general property of the effect that is properly particularized by the property serving as evidence can itself be indicative of the effect, says Karnakagomin, because "the substantiality and so forth that are particularized by smoke do not deviate from fire." Monarathanandin offers an interpretation of Dharmakīrti's position similar to the interpretation given by Karnakagomin. Manorathanandin says:

yadi dhūmatva-višesitam pārthivatvam hetuh kriyate, tadêstam eva; vyabhicārâbhāvāt. yadi ca kāraņa-gata-cāndanatvâdi-višesa-janito dhūmasya višesah sakyo niscetum, tadā cāndanatvâdayah gamyā isyante. (DS258)

If the fact of being earthen particularized by smokehood is made the evidence, then it is accepted, because there is no deviation. And if one can ascertain the specific property of smoke that is produced by the particular property such as the fact of being sandalwood that is in the cause, then properties [in the case] such as that of being sandalwood are accepted as indicatable properties.

# B.3.2. The Connection Between Causality and Sameness of Nature (A.2.2.)

(a) As has already been stated in Section B.2.4.2., Dharmakīrti considers a property to be a natural property only if it shares the same nature with that which it identifies. In this section Dharmakirti further clarifies this basic idea by pointing out that one thing can be said to have the nature of another thing only if both things have exactly the same set of causes, or, in other words, only if neither of the things requires any more causes to come into being than the other. To illustrate the concept of sameness of nature by using one of the stock examples of Buddhist abhidharma literature, the property of being decomposable or impermanent (anityatva) has the nature of the property of having been composed (krtakatva) of smaller parts. To say that these two properties have the same nature is to say that neither of them requires any further causes to bring it into being than are required to bring the other into being. A composite thing such as a water-jug comes into being when its various components are assembled. Assembling those components is what brings the water-jug into being, and it is also what gives the water-jug the twin properties of being composed (krtakatva) and of being decomposable or impermanent (anityatva). In the case of these two properties, neither can occur without the other owing to the fact that they have precisely the same cause and can therefore be said to have the same nature. And it is this

sameness of nature that serves as the natural connection between the two properties that is supposed to ensure an inference from one to the other.

(b) Although an inference involving a natural property is ensured by sameness of nature, it must be borne in mind that such inferences are secure only in case the property being used as evidence is pervaded by the property that needs to be established. The fact of being human and the fact of being an animal have the same nature, for the causal conditions that are necessary to bring a given person into being are sufficient to give that person the twin properties of being human and being an animal. But one cannot, of course, legitimately conclude from observing in an individual only the property of being an animal that the individual in question is a human being, because the property of being an animal occurs in a larger number of individuals than does the property of being human.

# B.3.3. Some Problems in Dharmakirti's Theory of Natural Connection

(a) As was stated above (B.2.3.) the apparent purpose behind Dharmakīrti's addition of the discussion of natural connection (svabhāva-pratibandha) to his discussion of the inferential process was to affirm that, between some properties at least, the pervasion relation is not accidental. If there is some kind of natural connection between two properties, then it is no accident that every time one of the properties has been observed in the past it has been accompanied by the other. Without such a natural connection, one can never be certain whether or not patterns observed in the past will be repeated in the future. Dharmakīrti's hypothesis of a natural connection between an inferential sign and what the sign indicates does, however, raise some problems. Some of these problems will be dealt with at length in later sections of the PVSV. At this point we shall offer a simple summary of them.

(b) The main problem facing Dharmakīrti's account of natural relations in general is that the account is essentially circular. According to Dharmakīrti, the process of inferring the occurrence of one property on the basis of the observation of another property is reliable

in providing knowledge only when the property used as evidence is pervaded by the property that is inferred from it. Therefore, the inference is reliable only to the extent that one has reliable knowledge of the pervasion relationship. And it is the difficulty of securing knowledge of the pervasion relation that presents the greatest obstacle to Dharmakirti's theory. The pervasion relation between two properties consists in the fact that every individual that possesses the pervasive property also possesses the pervaded property. Now there are in theory only two ways of knowing that a pervasion relation holds. The first way is to know of every individual of the past, present and future whether or not it possesses each of the two properties in question. Of course this method is impractical for anyone who is capable of being aware of only a fraction of the history of only a region of the universe; and anyone capable of having knowledge of all the universe at all times in history would be omniscient and therefore in no need of making use of inference in the first place. So this first method is worthy of consideration only for purely theoretical purposes. The second way of knowing that a pervasion relation holds is the one that is in fact suggested by Dharmakīrti. It consists in knowing somehow that the patterns that one has noticed in past events were not observed by chance alone but rather are representative of the very structure of things. But this additional knowledge turns out not to be helpful in all circumstances. The knowledge that there is a causal relation between the possessor of the property used as evidence and the possessor of the property being inferred is relevant only in the case of properties between which there is a known pervasion relation. And similarly, the knowledge that the property used as evidence and the property being inferred both occur in the same individual is likewise relevant only in case one knows that there is a pervasion relation between the properties.

(c) Let us review the limitations that Dharmakīrti sees on the usefulness of knowledge of a causal relation by considering the relation between a cloud of smoke and the fire that produced it. Whenever a cloud of smoke comes into being, it must have been produced by a particular fire, and the particular fire must be the result of the combustion of a particular kind of fuel, such as straw. And therefore it

can be said that burning straw was in fact part of the cause of the cloud of smoke. And yet Dharmakirti rightly wants to avoid having to say that by observing simply a cloud of smoke one can know specifically that straw, and not leaves, are on fire beneath the cloud of smoke. His way of avoiding having to say this is to say, in effect, that the causal relation between smoke and fire validates a perceived pervasion between two properties only if there is in fact a pervasion relation between them. A similar comment can be made of Dharmakīrti's account of the validation of the pervasion relation between two properties having the same nature; in that case too, the fact of two properties having the same nature validates a pervasion between the two properties only if there is in fact a pervasion relation between them. But at this point we have gone the full circle: the pervasion relation can be known to hold only when it is validated by knowledge of a natural connection, but one can know that the natural connection is relevant only when it is a connection between two properties that are known to be related through pervasion.

(d) There is a further special problem facing Dharmakīrti's account of the causal relation, which according to him is a natural connection that confirms that one property is pervaded by another by nature rather than by accident. A causal relation can provide this confirmation only if it is itself well established. But the difficulty of establishing that there is indeed a causal relation between two things is bound to be greater than the difficulty of showing simply that the two things have always been observed occurring together. Knowledge of a causal relation is more rich in information than knowledge of mere concomitance; knowledge of a causal relation consists in knowing not only that there is a concomitance but also why. Thus Dharmakirti's strategy for arriving at a higher degree of certainty than is possible by grounding one's beliefs on the mere assumption that the concomitances of the future will be essentially the same as those of the past is likely to fail for the simple reason that one is less likely to be certain that a true causal relation exists than that a concomitance exists.

(e) There are also special problems attending Dharmakīrti's account of the relation between properties that have the same nature. As we have noted above, two properties are said to have the same nature

when they have exactly the same set of causes, and they have the same set of causes only when they occur as properties in the same individual. To say of two properties that they have the same nature is therefore tantamount to saying that they are coincident in the same individual property-possessor. One of these special problems of this view derives from the fact that a property is supposed to occur uniformly in all physical parts of the individual that possesses it. The property of being a tree, for example, should occur equally in the trunk, the roots, the limbs, the twigs and the leaves - in other words, in every physical part of an individual tree. But the property of being a specific kind of tree, such as an oak, must also occur in every physical part of the tree. But this means that if the property of being a tree and the property of being an oak both occur uniformly throughout the same individual, the properties are not physically separated. Occupying exactly the same physical space at the same time, the properties are indiscernible. And if the properties are indiscernible, then to observe one of them should be to observe the second automatically. And thus, if one can observe any property in an individual, it should be possible to observe all properties in that individual, and it should therefore be unnecessary to use inference to discover any of the properties of an observable thing. It is this consideration that lies behind Umveka's criticism of Dharmakīrti, which has been discussed in Section B.2.4.2. It is also this consideration that lies behind objections raised by other Mīmāmsikas that come up for discussion in PVSV beginning at verse 39. Succinctly stated, the issue discussed there is the problem that arises from the fact that the property used as evidence is inseparable from the individual in which it occurs, and the property to be inferred is also inseparable from the individual in which it occurs. From this it follows, say Dharmakīrti's critics, that if the evidence and the property to be inferred occur in the same individual, awareness of one is contained in awareness of the other. And therefore, when both properties reside in the same individual, the process of inference yields no new knowledge.

#### B.4. Evidence in the Form of Non-apprehension

### B.4.1. Non-apprehension as Evidence of Absence (A.3.1.)

Evidence in the form of non-apprehension (anupalabdhi-hetu) is

distinguished from evidence in the form of an effect and evidence in the form of a natural property. Non-observation, unlike the observation of an effect or of a natural property, primarily gives rise to a negative form of knowledge, in particular to the knowledge that some imagined property is not actually present. The practical advantage of knowing that an imagined property is not actually present is that one having such knowledge does not act inappropriately. Inappropriate action, which consists in acting as if the imagined property were present when it is actually absent, can take one of three forms. An inappropriate mental action is holding the belief (jñāna) that something is present (sat) when it actually is not; an inappropriate verbal action consists in speaking (sabda) as if something is present when it actually is not; and inappropriate bodily action consists in behaving (vyavahāra) as if something is present when it actually is not. In general, then, Dharmakīrti holds that non-apprehension of an imagined property results in a person's inactivity (apravrtti), by which he means not acting as if the imagined property were actually present.

## B.4.2. Limits on Non-apprehension as Evidence (A.3.2.)

Dharmakirti shows that he is aware that the failure to observe something is not always sufficient evidence for establishing that the unobserved property is absent or non-existent. Some properties are too remote in space or time from the would-be observer to be observed; failure to observe such properties does not provide evidence that they do not exist anywhere at all. Other properties, such as the thoughts and attitudes in others' minds, are by their very nature beyond the range of the senses; failure to observe properties that are impossible to observe also does not constitute evidence of their nonexistence anywhere or even of their absence from where the would-be observer happens to be located. In order to avoid being committed to the overly narrow position that whatever has not been observed does not exist, Dharmakirti adds the important qualifying phrase "provided that it has the characteristics of evidence" in his statement that "nonactivation results in cognition of an absence." What he means by the characteristics of evidence is that the property in question be one "that meets the conditions for apprehension," the qualifying phrase that is discussed in more detail in Section B.2.4.3.

#### B.4.3. Non-apprehension and the Problem of Infinite Regress (A.3.3.)

## B.4.3.1. Statement of the Problem

(a) Dharmakīrti's position is that the knowledge of absences is a kind of conceptual knowledge that arises as a result of the process of inferential reasoning (anumāna), rather than being a kind of sensory knowledge (pratyakṣa) that arises immediately. This thesis leads to two problems. The first has to do with whether the thesis entails an infinite regress and is therefore insupportable; the second has to do with whether for the property of absence there can be an observed precedent, without which no inference of absence would be possible. Both of these problems are treated rather briefly by Dharmakīrti and Manorathanandin (DS: 259-260) and at some length by the commentator Karnakagomin (S: 30-34).

(b) There is little need for clarification on the question of whether the thesis that knowledge of absences is mediated knowledge leads to an infinite regress and is therefore ultimately insupportable. The potential worry here is one that stems from the supposition that the inferential knowledge of a sensible property's absence rests upon knowledge of the absence of sensory knowledge of the property's presence. But what sort of knowledge is this knowledge of the absence of sensory knowledge of a sensible property's presence? If knowledge of the absence of knowledge is itself sensory knowledge, it would seem to be a counterexample to the stated rule that knowledge of absences is inferential. And if there is this one instance of an immediate knowledge of absence, there seems to be no good reason to suppose that knowledge of the absence of a sensible property could not also be immediate. On the other hand, if knowledge of the absence of knowledge is inferential knowledge, then it must rest on a further bit of knowledge, namely, the knowledge of the absence of knowledge of the absence of knowledge; in this case, we should have an infinite regress.

(c) A second problem confronts Dharmakīrti's thesis that knowledge of absence must be mediated through an inferential sign. A property serving as evidence is capable of yielding new knowledge only when it is known to be pervaded by the property to be inferred. But knowledge of pervasion is gained by knowing that the property to be inferred has occurred with the inferential sign in an observed precedent (dṛṣṭānta), that is, in something other than the subject of the inference. And when the property to be inferred is absence, then in order to be inferable it must have been observed in something other than the subject of the inference. But of course if absence were indeed a property of the precedent, it would mean that the precedent could not have been observed. In the absence of an observed precedent there can be no knowledge of pervasion, and in the absence of a knowledge of pervasion there can be no inference. Therefore, it would seem, there can be no such thing as an inferential knowledge of absence. And this would seem to force one to conclude that if absence is known by any means at all, it must be known directly through the senses.

# B.4.3.2. Resolution of the Problem (A.3.4.)

(a) Dharmakīrti's reply to these two anticipated objections is characteristically brief and subtle. They key to understanding it is to realize that, in Dharmakīrti's opinion, the real purpose behind many kinds of inference is not simply to gain new knowledge about the objects of the natural world in themselves, but rather to gain new knowledge about all the various conventions that human society has imposed upon those objects. This is the purpose even of many inferences that are about objects that are actually present. The objects of the natural world reveal their intrinsic properties to the senses. What natural objects cannot reveal about themselves, however, are their extrinsic properties, such as the names that human beings have applied to them, and all the uses to which human beings have found for them. These extrinsic proeprties all belong not to the objects themselves but to the realm of human enterprise (vyavahāra). And it is the need to know about this human enterprise that motivates many inferences.

(b) To explain this a little further, every human being with normally functioning senses can see, hear, smell or otherwise sense the thousands of specimens of birds, animals, plants and rocks that an average person comes into contact with in the course of a normal day. But only ornithologists, zoologists, botanists and geologists know the

names that have been given to all the species of birds, animals, plants and rocks that everyone is regularly seeing. The ornithologist learns that certain sensible properties of a bird are the criteria for a particular name to be applied to the bird; those properties may be sensed by everyone, but it requires an expert to take those sensed properties as signs of the various extrinsic properties that human beings have added to the natural properties. The example that Dharmakirti gives to illustrate this principle is that of the cow. Everyone with functioning eves can see the visible features of a cow, such as its dewlap and various other characteristic features. But even if a person sees all these visible characteristics, he may not be aware of the fact that by the conventions of human society an animal that possesses all those features is called a cow. Therefore it requires a special effort to make the person aware of the fact that what he is seeing has a property that he cannot possibly see, namely, the property of being called a cow by human beings, a property that belongs not to the animal itself but to the animal in its relation with human enterprise. In drawing inferences in which the subject matter is the absence of a given thing, suggests Dharmakirti, it is not necessarily that one is piecing together a number of clues to figure out that the thing is present or absent. In many cases absence, like the dewlap of a cow, is sensible. But an additional mental effort may be required to become fully aware of what the absence belongs to. Further effort may also be required to become aware of the fact that one is actually aware of an absence.

(c) The study of how it is that one comes to be aware of absence, and how one can differentiate between acts of non-apprehension that signify non-existence and acts of non-apprehension that accompany the existence of non-sensible properties, is important for Dharmakīrti's overall agenda of providing a rational foundation for the teachings of Buddhism. With a Buddhist context it is considered important for one's happiness that one be fully aware of the absences of things that people are normally inclined to presume are present. The most important example of an absence of this type in the Buddhist context, of course, is the absence of a self (ātman), for it is the presumed presence of a real and lasting self that is said to be the basis of all counterproductive strategies to find contentment and satisfaction. Therefore, becoming aware of the absence of a self, or at least of a self as anything other than a socially mediated convention, is a most important goal to strive to attain. Perhaps one more example will illustrate this. There is (we sincerely hope) no crocodile sitting in your lap as you read these words. The absence of the crocodile is available to the senses, but it may not have been until you read these words that the thought "There is no crocodile in my lap" occurred to you, and you may therefore have missed the full richness of the experience of having a crocodile-free lap, such as the emotional satisfaction that usually attends the realization that one is not about to be become a reptile's next meal. Similarly, according to Buddhist teachings, becoming fully aware of the absence of an enduring self provides the conditions necessary for experiencing the full and lasting satisfaction that attends being liberated from being concerned with oneself.

B.4.4. Two Kinds of Circumstance in Which There May Be a Lack of Apprehension (A.3.5.)

As we have already noted, not all non-apprehension yields certainty as to the absence of the property that is not apprehended, because the reason that a property is not apprehended might be that it is not apprehensible. In general, the way that one becomes certain that some property is absent is to become aware of the presence of some property that is incompatible with it. Thus, for example, the simple failure to see or otherwise sense an enduring self does not establish that there is no self, because the self is supposed to be the sort of thing that cannot be apprehended through the senses in any case. Therefore, non-apprehension of a self can lead only to uncertainty (samsáya) as to whether an enduring self is actually present. In order to arrive at certainty (niścaya) that there is no enduring self, it is necessary to become aware that the notion of a self is a notion of something that cannot possibly occur in reality. And the way to do this is to point out that the self, if it were as it is generally conceived to be, would have two or more properties that cannot possibly occur together. The very idea of an enduring self, for example, is that it remains the same while undergoing change; the heart of the Buddhist strategy in becoming aware of the absence of a self, therefore, is to realize that the property of remaining the same is fundamentally

incompatible with the property of undergoing change. Similarly, the heart of the Buddhist strategy in coming to be convinced of the absence of universals and of a supreme lord of creation is to become aware that the very ideas of such things involve their having properties that cannot be coincident in a single property-possessor. In the verses that follow, Dharmakīrti endeavours to set down guidelines by which one can arrive at certainty about absences.

#### B.4.5. Types of Non-apprehension (A.4.-A.5.1.)

(a) In PV Dharmakīrti enumerates altogether eight methods by which the absence of something can be inferred. Four basic methods are named in A.4. These four are explained in A.4.5., where two of them are said to incorporate a second method each that is to be regarded as a species of the basic method. This gives a total of six methods explained in A.4.5. Two further methods are discussed in A.5.1., yielding a total of eight. In the Hetubindu Dharmakīrti enumerates three methods of inferring an absence, and in the Nyāyabindu he enumerates eleven. In the following paragraphs we shall present a comparison of these different enumerations.

(b) The simplest enumeration of the methods of inferring an absence is that which is found in the Hetubindu (Steinkellner, 1967 ed.; 84– 85; 1967 tr: 69). The three methods enumerated in that text are as follows:

(1) When a relation between a cause and effect has been established, then the non-apprehension of the cause serves as evidence for the absence of its effect. This is the counterpart of the third basic method enumerated in A.4.5.

(2) When a pervasion relation has been established between two properties, the non-apprehension of the pervasive property indicates the absence of the pervaded property. This method is mentioned in A.4.5., where it is said to be included as a special case of the fourth basic method.

(3) Absence of a thing is indicated by the non-apprehension of its natural properties, provided of course that the thing meets the conditions for apprehension. This method corresponds to the fourth basic method explained in A.4.5.

(c) The enumeration of methods of inferring an absence in PVSV (A.4.5.) includes all those of the Hetubindu and adds two further basic

methods, which have in common that they are not based on the nonobservation of anything but rather are based on the observation of something whose presence is incompatible with some other thing, which can then be inferred to be absent.

(d) The most comprehensive enumeration of methods of inferring absence is that which is found in Nyāyabindu 2: 30-42 (Malvania 1955 ed: 124-140). That enumeration comprises the following types of evidence by which one can infer the absence of something.

- (1) Non-apprehension of its natural properties (svabhāva-anupalabdhi). For example, because there is non-apprehension of that which meets the conditions for apprehension here, there is no smoke. This corresponds to the third method enumerated in Hetubindu and the fourth basic method in A.4.5.
- (2) Non-apprehension of its effect (kārya-anupalabdhi). For example, because there is an absence of smoke here, there are no causes of smoke whose potentials are unimpeded.
- (3) Non-apprehension of its pervasive property (vyāpaka-anupalabdhi). For example, because there is an absence of a tree here, there is no Shinshapa tree. This corresponds to the second method in the Hetubindu and to a species of the fourth basic method in A.4.5.
- (4) Apprehension of what is incompatible with its natural properties (svabhāva-viruddha-upalabdhi). For example, because there is fire here, there is no feeling of cold. This corresponds to the first basic method in A.4.5.
- (5) Apprehension of an effect of what is incompatible with it (viruddhakārya-upalabdhi). For example, because there is smoke here, there is no feeling of cold. This corresponds to the second basic method enumerated in A.4.5.
- (6) Apprehension of what is pervaded by what is incompatible with it (viruddha-vyāpta-upalabdhi). For example, because the disappearance of a being, even of one that has come into being, requires a further cause, it is not inevitable.
- (7) Apprehension of what is incompatible with its effect (kārya-viruddhaupalabdhi). For example, because there is fire here, there are no causes of cold whose potentials are unimpeded.
- (8) Apprehension of what is incompatible with its pervasive property (vyāpaka-viruddha-upalabdhi). For example, because there is fire here, there is no feeling of hoarfrost. This corresponds to a species of the first method enumerated in A.4.5.
- (9) Non-apprehension of its cause (kārana-anupalabdhi). For example, because there is no fire here, there is no smoke. This corresponds to the first method enumerated in Hetubindu and to the third basic method enumerated in A.4.5.
- (10) Apprehension of what is incompatible with its cause (kāraṇa-viruddhaupalabdhi). For example, because this person has the peculiarity of

having a fire nearby, he does not have such peculiarities as goose flesh and so on. This method is discussed in Section A.5.1.

(11) Apprehension of an effect of what its incompatible with its cause (kāraņa-viruddha-kārya-upalabdhi). For example, because there is smoke, this place does not have a man who is endowed with such peculiarities as goose flesh and so on. This method is also discussed in A.5.1.

After giving this enumeration in the Nyāyabindu, Dharmakīrti states that all eleven can in fact be seen as types of one basic method of inferring an absence, namely, the method of non-apprehension of the natural properties (svabhāva-anupalabdhi) of that the absence of which one becomes aware.

#### B.5. Inference from Cause to Effect (A.7.-A.8.1.)

As has been suggested in Section B.1., Dharmakirti evidently felt obliged, in discussing the limits within which the process of inference is capable of yielding certain knowledge, to keep open the possibility of preserving the basic teachings of Buddhism intact. Perhaps the most fundamental doctrine of Buddhism is that certain kinds of unwholesome (akuśala) mental properties are causes of discontent (duhkha), and when the these unwholesome causes are eradicated, their unwanted effect does not arise. The possibility of inferring the absence of an effect from the absence of a cause is, as we have already seen, covered in Dharmakīrti's account of inference. Knowledge of the absence of fire is said to yield knowledge of the absence of smoke. Similarly, knowledge of the absence of attachment, aversion and delusion - the traditionally accepted root causes of discontent should yield knowledge of the absence of discontent itself. But while inferential knowledge of the absence of the effect is covered in Dharmakīrti's theory, it is not obvious his theory allows for the possibility of inferential knowledge of the future arising of the effect. That is, there seems to be no means of knowing through inference that when all the root causes of discontent are present, discontent will be the eventual outcome. But if one cannot acquire such knowledge inferentially, then it would seem that one cannot acquire it at all, for the only means of acquiring knowledge that Dharmakirti accepts other than inference is sensation (pratyaksa), which is capable of yielding knowledge only of things that are presently contacting the senses and is therefore quite incapable of yielding knowledge of future mental properties. In short, it would appear that Dharmakirti's epistemological theory does not allow knowledge of the cardinal principle of Buddhism, namely, that the presence of unwholesome mental properties will certainly give rise to sorrow in the future. But in A.7. and A.8. Dharmakīrti makes it clear that he holds that, within certain limitations, it is possible to have inferential knowledge in which causes, rather than effects, play the role of evidence.

First of all, in A.7. and A.7.1., Dharmakirti makes it known that he considers it possible to draw an inference in which causes are used as evidence, and inferences of this type fall into the general category of those in which the evidence is a natural property (svabhāva-hetu). It will be recalled that in previous discussions, such as in Section A.2.2., it was stated that a natural property can serve as evidence for that which requires nothing more than the presence of the evidence to come into being. In other words, a natural property can serve as evidence for that for the existence of which the presence of the evidence is a sufficient condition. It can be said in general that for any effect a sufficient condition for its coming into being is the collection of all its necessary causal conditions. Therefore, the collection of all the causal conditions necessary to produce an effect may be regarded as being very much but not quite like a natural property of the effect; this collection of causes may be seen, says Dharmakīrti, as a virtual natural property (svabhāva-bhūta). Thus it is established that if the presence of the collection of all the conditions necessary to cause an effect to arise can serve as evidence for an establishable property, then the type of evidence that the collection would be is that which Dharmakīrti calls evidence in the form of a natural property.

Secondly, what remains to be clarified is what the nature of the property is that is establishable through such evidence. What can be established through evidence in the form of a collection of necessary causes is not the actual arising of the effect, says Dharmakīrti, but rather just the potential of the effect to arise. Since this potential may be impeded at some point and thus fail to produce its anticipated effect, there can never be certainty in drawing inferences concerning the future results of present conditions. So, in summary, Dharmakīrti holds that the natural fruition of the collection of all necessary causal conditions requires no more than the collection of those conditions itself, but since that natural fruition may always be arrested by an unpredicted impediment such as, according to Manorathanandin (DS: 262), a mantra, there can never be certainty that the collection of all necessary causal conditions will indeed fructify naturally.

### B.6. Inference of Sibling Effects (A.9.-A.10.1)

By combining the two principal types of evidence by which one can draw an affirmative inference, it is possible, says Dharmakīrti, to account for one further type of inference that is very much a part of daily life. By having a sensation of one kind of property, such as an odour, it is possible to predict with a reasonable degree of certainty that the possessor of the sensed property will also possess another sensed property. By smelling the fragrance of a rosebush, for example, one can predict that somewhere nearby there will also be a rosy hue to be sensed. Or by seeing the colour and shape of an apple, one can predict that biting into it one will experience a pomaceous taste. In these cases the sensed property is said to be an effect of a set of conditions that have the potential to produce other effects as well. In fact, inferences of this sort comprise two stages. In the first inference, the sensed property is evidence in the form of an effect, which yields knowledge of a set of causal conditions. This set of causal conditions then serves as evidence in a second inference for the potential arising of an effect that is a sibling of the property that was sensed in the first inference. In the second inference, the evidence is in the form of a virtual natural property, which as we saw above yields knowledge only of potentials that may in fact be impeded. The beautifully coloured apple that showed promise of tasting sweet may turn out to have a bitter taste.

#### NOTES

<sup>1</sup> The salutation in Gnoli (G1.1) reads "namo buddhāya," while in Malvania (M1.1) it reads "namah sarvajñāya." The Tibetan translators (D4216.261b.1) support Malvania with their "thams cad mkhyen pa la phyag 'tshal lo." The salutation in the Tibetan translation of the verse text (D4210:94b.1) is to Mañjuśrīkumārabhūta ('Jam dpal gzhon nur gyur pa).

<sup>2</sup> The Tibetan translation of this sentence gives a different sense from the Sanskrit. It reads "grub bzhin du bstan pa'i phyir yang smos pa yin par yang dogs par 'gyur te," which would most naturally be translated as "Repetition would also be expected for the purpose of explaining while establishing." It is likely that this Tibetan translation is

faulty or was based upon a different Sanskrit reading from the one that has come down to us. Compare Sāmkrtyāyana's translation into Sanskrit: "siddhau niyamārtham api vacanam āśańkyeta" (S: 14). His Sanskrit translation is evidently influenced by Karnakagomin's commentary, for a more literal translation from the Tibetan would give us "siddhau pradarśanārtham punarvacanam api śankyeta." But the Sanskrit that we have reads "siddhe punarvacanam niyamārtham śankyeta." Note that in their translation of the passage parallel to this in Hetubindu, Prajñāvarman and Dpal brtsegs raksita provide us with a nearly perfect rendering of this sentence: "grub kyang nges par bya ba'i phyir yang smos su dogs par 'gyur te" (D4213: 238b.4), which Steinkellner (1967 ed: 31) translates into Sanskrit as "siddhe 'pi punarvacanam niyamārtham śańkyeta" and into German as "... [so] könnte man [immer noch] vermuten, daß es sich [hier] um ein nochmaliges Nennen [dieses Bescshaffenheits trägers «des Beispiels»] zum Zwecke der Einschränkung [auf ihn allein] handelt" (1967 tr: 34). Given, however, that the sentence in question is giving Dharmakirti's reply to the line of reasoning in the immediately preceding sentence, one would expect that "kyang" in the Tibetan translation is being used adversitively here rather than in the sense of inclusion (samuccaye) and should therefore be translated into Sanskrit by "tu" rather than Steinkellner's "api."

<sup>3</sup> Malvania (2, n. 2) reports that a short comment appears in the manuscript immediately after the word "hetu" (G3.15, M2.19), along with a note explaining that the short comment (avacūri) was written into the manuscript by a scribe. The scribe's interpolation reads: "yadā kāryagatāh svabhāvā vivaksyante tadā tesām kāranam hetu janakam yadā tu kāranagatā esām kāryam hetur gamakam. (When the natural properties located in the effect are under discussion, then their cause is a *hetu* that produces, but when located in the cause their effect is a *hetu* that indicates.)" This interpolation neatly conveys the two senses of the word *hetu*. The Tibetan translators consistently translate the word "hetu" in the sense of what produces (janaka) by the term "rgyu", and the word "hetu" in the sense of what indicates (gamaka) by the term "gtan tshigs". We have followed their lead in translating the former as "cause" and the latter as "evidence". Gnoli, incidentally, reports the same interpolation, which he says (G3, n. 16) was added by "some reader", but he deciphers it, probably erroneously, to read "svabhāvādi vaksyante" instead of "svabhāvā vivaksyante."

<sup>4</sup> This sentence is so compact in the original Sanskrit as to be almost impossible to interpret without the benefit of commentaries. The Sanskrit sentence (G3.17-18) reads: "na. taj-janya-viśesa-grahane abhimata-tvāt linga-viśesa-upādhīnām ca sāmānyānām." A more literal translation would be "No, because it is accepted when there is a grasping of the specific property producible thereby and of general properties that have the specific property which is a sign as their particularizer." This, incidentally, would also be an accurate literal translation of the Tibetan rendering of this sentence (D4216.262b.6-7; P5717.406a.5-6), which reads "ma yin te, des bskyed par bya ba'i khyad par dang, rtags kyi bye brag gi khyad par can gyi spyi rnams gzung na, yin par 'dod pa'i phyir ro." A translation following all of Karnakagomin's glosses (\$28.7-15) on this passage would be as follows, his glosses being indicated by the material in square brackets: "No, because when a specific property [of the product] that is produced by those [specific properties of the producer] is grasped, [they are] accepted [as indicatable]; and when the general characteristics of the product that are particularized by the specific property that is a sign [are grasped, they are accepted as indicative.]" Exactly the same Sanskrit passage appears in the Hetubindu (Steinkellner 1967 ed: 67). Steinkellner (1967 tr: 57-58)

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translates it as follows: "Nein, weil, wenn man die durch die [besondereren Beschaffenheiten der Ursache] hervorgebrachten Besonderheiten [der Wirkung] erfaßt, [auch an die besonderen Beschaffenheiten der Ursache] und [ebenso] an die allgemeinen [Beschaffenheiten der Wirkung], die durch das besondere Anzeichen charakterisiert sind, gedacht ist."

<sup>5</sup> The Sanskrit for this passage reads "svabhāve bhāvo 'pi bhāvamātrānurodhini [hetuh]." Because this passage is in verse, its phrasing is particularly compact and could therefore pose some problems in interpretation. Fortunately, however, there is a counterpart of this passage in the Hetubindu, the Tibetan translation of which reads "de la srub pa'i chos kyi ngo bo tsam dang ldan pa can ni bsgrub par bya ba'i chos kyi rang bzhin gyi gtan tshigs yin no." (D4213.240a.8) Steinkellner's (1967 ed: 39) reconstruction of this passage into Sanskrit reads "tatra sadhanadharmabhavamatranvayini sādhyadharme svabhāvo hetuh," which he translates: "Dabei ist mit Bezug auf eine zubeweisende Beschaffenheit, die sich an das bloße Vorhandsein der beweisenden Beschaffenheit anschließt, das Eigenwesen Grund." (Steinkellner 1967 tr: 39.) The passage could be rendered into English as "In that context, a natural property is evidence for a property to be established that is a consequent of the mere presence of the establishing property." On the basis of this parallel prose passage in the Hetubindu, we take the phrase "bhavo 'pi" in the verse of PV to stand for "svabhavo 'pi," an interpretation that is supported by the Tibetan translation "ngo bo yang" and by Manorathanandin's commentary, which reads "bhavo 'pi svabhavo 'pi hetuh svabhäve sadhye. Kidrse hetor bhävah kevalo bhävamätram tadanuroddhum anuvarttitum sīlam asvēti bhāvamātrānurodhi tasmin." (DS: 259) Notice that Manorathanandin's commentary also treats the compound "bhāvamātrānurodhini" as meaning "that which is prone to follow the presence of the evidence (hetor bhavah kevalo ... tadanuroddhum anuvarttitum śilam asya)." Karnakagomin's treatment of the compound is "bhāvamātrānurodhini hetusadbhāvamātrānurodhini," which is similar in that it interprets "bhāva" as presence (sadbhāva) and specifies that it is the evidence (hetu) whose presence is in question here. The Tibetan translation, by rendering this occurrence of "bhava" as "yod pa," also interprets it in the sense of presence.

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