

On Backward Causation in Buddhism

The following is an addition to reprint of Dharmakīrti on Compassion and Rebirth (forthcoming with Motilal Banarsidass). Comments are welcome.

In the introduction to the first edition (p. 11 above), I wrote that the translation of Dharmakīrti's verses is accompanied by a complete translation of Prajñākaragupta's commentary "except for one digression [on backward causation] which I consider too interesting to buried in a note and to which I hope to return on a different occasion." In fact, I was able to return to this topic on three different occasions and in the following I draw heavily on three published papers (Franco 2005, 2007 and 2015) and also present some new materials.

The reliability of the Buddha and proofs of rebirth

Before entering the topic of this investigation, let me briefly outline the background and context of the discussion. One of the most important tasks for the Buddhist logicians was to provide a rational justification of the Buddhist religion. However, they had to face the problem that not all components of the Buddha's teaching can be rationally justified. For instance, because past lives usually cannot be remembered, the law of karma cannot be directly verified, let alone its intricacies brought to light.¹ These parts of the Buddha's doctrine can be neither directly perceived nor inferred. They had to be substantiated indirectly by way of the establishment of the trustworthiness of the speaker, that is, of the Buddha himself. This problem is not particularly Buddhist; it was also dealt with by other philosophical traditions such as Nyāya² and Vedānta,³ and other religious traditions such as Śaivism.⁴ An important presupposition for reliability, not only in the Buddha's case, but also in the case of a God

¹ Similarly, certain precepts in the Vinaya also cannot be rationally justified. Cf. Vetter 1984: 40, n. 1; Van Bijlert 1989 119; Tillemans, 1993: 38 and n. 12; see also above pp. 34-35.

² Cf. NBh 556.2-567.7 and NV thereon.

³ Cf. van Beutenen 1971 and Rastelli 2008.

⁴ Cf. SBhT 35.9-10.

like Śiva or of the Rishis who revealed the Veda, consists in great compassion. However, in the Buddha's case, unlike in the case of an eternal God or the primordial Rishis, such compassion cannot be said to be innate, but has to be acquired through repeated practice over many lives. Thus, the proof of the Buddha's reliability presupposes the Buddha's unlimited compassion, which presupposes, in turn, a doctrine of rebirth.⁵

Further, the Buddhist logicians, from Dharmakīrti onwards, had to demonstrate that the process of rebirth occurs in the manner assumed by the Buddhists, that is, without the assumption of a permanent soul that repeatedly takes up new lives in various bodies. This meant that they had to argue, on the one hand, against the Brahminical philosophers who attempted to demonstrate the existence of a permanent soul and who claimed that rebirth is impossible without its assumption.⁶ On the other hand, the Buddhist logicians had to argue against the materialists who denied the very possibility of rebirth. The materialist philosophers argued that the body is the base or support of consciousness and that therefore, when the body is destroyed, consciousness is also destroyed. Consciousness cannot survive without a body, nor move on to another body, just as a fresco which is supported by a wall cannot survive without the wall, nor move on to another wall; or just as the colour of a mango fruit cannot exist without the mango, nor move on to another mango when the fruit has been destroyed.⁷

The Buddhist response to such objections was to establish the autonomy of consciousness, that is, to show that consciousness is independent of the body, or of particular parts of the body that are traditionally associated with the phenomenon of life, notably, the sense faculties and breath.⁸ By showing that consciousness, especially mental awareness in contradistinction to sense perception, is independent of factors such as the body, breath and the senses,

⁵ See chapter 1 above; see also PV II 34. Compassion forms the positive motivation; it is supplemented by a lack of negative motivation; namely, the Buddha does not lie because he has nothing to gain by telling lies.

⁶ On Dharmakīrti's response cf. ch. 5 above.

⁷ Cf. ch. 4 above.

⁸ Cf. Taber 2003.

Dharmakīrti and his followers attempted to establish a causal nexus amongst moments of consciousness, namely, every moment of consciousness has to be produced by the preceding moment of consciousness. Thus, from the present moment of consciousness one can infer its cause, the previous moment of consciousness; and from that moment of consciousness its cause, and so on until one reaches the first moment of consciousness in this life. But this moment of consciousness too has to be the result of an anterior moment of consciousness. And that anterior moment of consciousness cannot but be the last moment of consciousness in a previous life.⁹ The same reasoning applies, of course, to the sequence of moments of consciousness in the previous life, and thus one can infer the life before the previous one. In this way, an infinite number of previous lives are inferred. The process has no beginning, which tallies well with the assumption that *saṃsāra* has no beginning.

Backward causation and pratītyasamutpāda

The Buddhist logicians endeavoured to prove not only past lives,¹⁰ but also future lives; otherwise, all religious striving would be futile. Precisely at this point there arises a problem in connection with the Buddhist doctrine of inference: By means of an inference based on causal relation, one can infer only past causes because according to Dharmakīrti and his followers one can infer the cause from the effect, but not the effect from the cause. For example, one can infer fire from smoke, but not from fuel. Something can always occur to prevent a cause from producing its effect, or more precisely, since what brings about a result is not a single cause but a complex of causal factors, some necessary factor may not occur and the causal complex may be incapable of producing its result. This possibility was unalienable to any causal theory in classical India except for the Lokāyata tradition.

⁹ Actually the Buddhists assume some intermediary states (*antrābhava*) between two lives, but that does not change the argument.

¹⁰ For the proof of the Buddha's compassion as a condition or a presupposition for his reliability, which forms the context of the discussion of rebirth in the *Pramāṇasiddhi* chapter, a proof of past life would suffice.

Determinism and Accidentalism were not a viable option in the major philosophical traditions that professed the possibility of liberation.

How then can future lives be proved?¹¹ According to the Buddhist logicians, only two types of inference are considered valid. The one, just mentioned, is from effect to cause. The other is based on the own-being of things, that is, on an essential property. The common example for that type of inference is: This is a tree, because it is an Aśoka tree.¹² In this inference, one infers from one essential property, such as being an Aśoka tree, another essential property, such as being a tree, which always occurs together with the former property. Both properties belong to the same thing in reality and are not ontologically different from the thing itself or from each other.

If we were to conduct an opinion poll among all Buddhist logicians who attempt to prove future lives, most of them would say that future lives can only be proved with an inference based on an essential property. Prajñākaragupta stands almost alone in claiming that one should infer future lives with an inference based on causality.¹³ The audacity of this counter-intuitive position is clear: If one infers from the present moment of consciousness *as an effect* a future moment of consciousness *as its cause*, this means that the future is the cause of something present, or that something present is produced by something future. How could that be? Moreover, Prajñākaragupta

¹¹ Cf. PVABh 67.19-21 (Ms. 26b1-2): *yadi vijñānapūrvakam vijñānam,^a tathāpi janmādivijñānāt pūrvakajanmavijñānam iti pratīyate^b tasya tatkāryatvāt. bhāvi-janmavijñānam tu kuto 'numīyate? atha samarthakāraṇadarśanāt kāryānumānam, tat tarhi hetvantaram prasaktaṃ kāraṇalakṣaṇam.*

^a P_(Pe) 70b2 = P_(De) 59a4, however, has no equivalent to *vijñānam*: *gal te rnam par śes pa sñon du 'gro ba can yin pa de lta na yañ/*. ^b S.: *pratīyatām*.

“[Even] if a cognition is preceded by cognition, even so, one apprehends (i.e., infers) the [last] cognition of a previous life from the cognition in the beginning of this life, because it (viz., the cognition in this life) is its effect. But how is a cognition of a future life apprehended? If one infers the effect [namely, the future cognition] from seeing a capable cause, then a further reason [additional to *kāryahetu* and *svabhāvahetu*], characterized as cause, would result.”

¹² For a recent major study of Dharmakīrti's theory of inference see Steinkellner 2013.

¹³ Except for his commentators Jayanta and Yamāri, Jitāri seems to be the only other philosopher who endorses this tenet; see Franco 2015 and the summary below.

presents this opinion not as his own, but as Dharmakīrti's and even the Buddha's as is clear the comments on *Pramāṇavārttika* II 49:

sattopakāriṇī yasya nityaṃ tadanubandhataḥ |
sa hetuḥ saptamī tasmād utpādād iti cocyate ||

“The cause is that whose existence always assists [in the arising of the effect] due to the [effect's constant] attachment to it.

For this [reason the Buddha uses] the locative [case-ending in the formula *asmin satīdaṃ bhavati* ‘When this is present, that arises’] and [for exactly the same reason he uses the ablative case-ending when] it is said ‘because of the arising’ [in the formula *asyotpādād idam utpadyate* ‘Because of the arising of this, that arises’].”¹⁴

Thus, by reading the theory of backward causation into this verse, Prajñākaragupta assumes this doctrine to be not only Dharmakīrti's, but also the Buddha's in the general formulation of Dependent Origination. Now let us take a closer look at this highly original, fascinating and counterintuitive interpretation of Dependent Origination. This interpretation does not concern the nature of any of the twelve members of the causal chain. Rather, it is the causal connection between them that is given a new dimension.

The discussion begins with a distinction between two kinds of causes. The word *hetu* is used for a special kind of cause (*viśiṣṭa-kāraṇa*) as defined by Dharmakīrti in the above-quoted verse. The other kind of cause is a mere “helper” (*upakāraka*);¹⁵ it is occasional or accidental to the effect in the sense that even if it is absent, the effect can arise from something else. The body is such a cause for the series or succession of moments of consciousness (*cittasantati*). Thus, such a succession can occur even without the body.¹⁶

¹⁴ Cf. above p. 227.

¹⁵ Cf. PVABh 66.8 (Ms. 25b7):

nopakāraka ity eva hetus tasya ni(r)vartakaḥ^a |
viśiṣṭam eva hetutvaṃ kāryasya vini(r)vartakaṃ || 427 ||

^a Read *nirvartakaḥ*, *vinirvartakam* and *nirvartakatvam* here and in the subsequent lines, against Ms. 25b7 and the Tibetan translation (P_(Pe) 69a2 = P_(De) 57b7: *zlog byed*, *zlog par byed pa*, and *zlog par byed pa ñid*).

¹⁶ Cf. PVABh 66.13-17 (Ms. 25b8-26a1): *yasya tu kadācid upakārasāmarthyam tadabhāve 'pi kadācid upakāro 'nyato 'pi bhavati, viśeṣalakṣaṇaḥ sa nityam anuvartako na bhavatīti yuktam.^a na tannivṛttyāpi^b tannivṛttiḥ. dehasya ca sattā na sarvadopakāriṇī, pūrvacittamātravikāre^c 'pi kadācid vikāradṛṣṭeḥ. tato dehābhāve 'pi*

An opponent objects that Dharmakīrti's definition cannot be true. The Buddha did not define causal relationships the way Dharmakīrti does. The Buddha characterized causal relationships in the form of Dependent Origination. If Dharmakīrti's formulation were true, surely the Buddha, who is the final authority in matters of causation,¹⁷ would not have failed to communicate to us something so important and useful.¹⁸ How can one reconcile the rigorous definition of a cause formulated by Dharmakīrti with the traditional canonical formulation? Prajñākaragupta bridges the gap between the two formulations by interpreting the locative case-ending in the first formulation as expressing a cause.¹⁹ According to this interpretation, *asmin sati* would have to be translated "because of this existing" or "because of this being present."²⁰

It is interesting to note that Prajñākaragupta was not the first to interpret the locative case ending in the Dependent Origination

kadācic cittavikāravihitavikāratvāt tadupastambhād āstaiva^d cittasantatir iti saṃbhāvyyate.

^a *yuktaṃ* absent in Ms and S, but cf. P_(Pe) 69a6 = P_(De) 58a4: *rīgs so*. ^b Perhaps *tannivṛttāv api?* P_(Pe) 69a6 = P_(De) 58a4: *de ni ldog kyañ de ldog pa ma yin no*. ^c P_(Pe) 69a7 = P_(De) 58a5, however, lacks an equivalent to *-mātra-*. ^d Ms. and S.: *āsta eva*.

¹⁷ An ordinary human being cannot apprehend causal relationship pervasively because such an apprehension presupposes the knowledge of all individuals, past, present and future.

¹⁸ Cf. PVABh 67.11-14 (Ms. 26a7-8): *nanu asmin satīdaṃ bhavaty asyotpādād idam utpadyata ity etad eva hetulakṣaṇaṃ bhagavatoktam. na tu sadānuvartakam aparaṃ vicāritam. bhagavān eva ca paramārthataḥ kāryakāraṇabhāve pāramarthikaṃ pramāṇaṃ vyāpyanvayavyatirekagrahaṇād iti pratipāditam. na ca sambhavy upakāravān artho nocyate bhagavatā.*

¹⁹ PVABh 67.16-17 (Ms. 26a8-26b1): *asmin satīdaṃ bhavatīti sadānuvartanam āha. satīti nimittasaptamī. anyathā tadabhāve 'pi bhavane na tannimittako 'sya bhāvaḥ.*

²⁰ The use of the locative of cause (*nimittasaptamī*) is relatively rare, but certainly not unheard of. A well-known verse is often quoted by the Sanskrit grammarians to illustrate this particular usage of the locative, in which all the words indicating cause, namely, skin, tusks, hair and scrotum, appear in the locative (Cf. MBh 2.3.36; cf. also KV 1.1.57):

*carmaṇi dvīpinaṃ hanti dantayor hanti kuñjaram |
keśeṣu camarīṃ hanti sīmni puṣkalako hataḥ ||*

"One kills a leopard because of its skin; one kills an elephant because of its tusks. One kills the female yak because of the hair [of its tail]; the musk deer is killed because of its scrotum."

formula as the locative of cause. Already Devendrabuddhi proposed this interpretation,²¹ which may thus go back to Dharmakīrti himself. Whatever the case may be, Devendrabuddhi most probably relies on an older tradition, which still needs to be traced.²²

Prajñākaragupta's interpretation is probably not faithful to the literal meaning of the formulation of Dependent Origination because it is more natural to interpret *asmin sati* as a locative absolute (*satsaptamī*). Yet, at first sight, the interpretation does not seem to do great violence to the original intention of the formulation. After all, the statement in the locative absolute "when this is present" was in all probability meant to convey the idea of a cause. Why is it so important not only for Prajñākaragupta, but also for Devendrabuddhi and perhaps Dharmakīrti himself to interpret the locative as a locative of cause? The answer, I think, is that if one interprets the locative as expressing a (necessary and) sufficient condition, there is a contradiction between the canonical formulation and Dharmakīrti's doctrine of inference. If one says, "When A is present, B arises," one implies that B necessarily arises when A is present. In other words, A is a sufficient condition for B. For Dharmakīrti, however, the cause is a necessary but not sufficient condition of the effect, and the effect is thereby a sufficient condition for the cause.²³ Put in a locative

²¹ PVP_(De) 25b6: *rgyu mtshan gyi bdun pa*. Cf. also PVT_(De) 96b3-4.

²² While commenting on the member *viññāna* (though discussing relationship between *viññāna* and *manaskāra*, not between *viññāna* and *saṃskāra*) in his *Pratītya-samutpādayākhyā*, Vasubandhu suggests the locative of cause as an alternative explanation of the compound *tajja* (Muroji 1993: 70): *yañ na de'i ched du skyes pa ni de skyed žes rgyu mtshan gyi bdun pa yin pa'i phyir te*. See also the translation by Muroji, p. 149. Vasubandhu then quotes the above verse with an interesting variant in *pāda* d. Instead of "the musk deer is killed because of its scrotum" one reads "the adulterer is killed because of a woman/wife" (*bud med phyir ni byi pho bsad*). On the use of the locative of cause in Pāli see von Hinüber 1994: 32. Further on the use of this locative, see Renou 1957: 177. For more details Franco 2007.

²³ The effect may or may not be a necessary condition for the cause. For instance, smoke is sufficient, but not necessary for fire. A necessary effect, however, is a necessary condition for its cause; cf. the discussion below. Note that Dharmakīrti also allows a general or common effect (*kāryasāmānya*), which is neither sufficient nor necessary for its cause, and in the case of which an inference from effect to cause is not possible.

absolute, Dharmakīrti's doctrine has to be expressed as follows: "When this (*effect*) is present, that (*cause*) arises/has arisen."

The case of the ablative formulation of Dependent Origination is less problematic for Dharmakīrti and his followers and is, therefore, discussed very briefly. The ablative case-ending in the word *utpādāt* ("because of the arising") in the formula *asyotpādād idam utpadyate* conveys that from which a separation (*apādāna*)²⁴ of the agent by way of the verbal action takes place. If this action is the action of arising, that from which the separation of the agent of arising takes place is the source, and the source may be easily interpreted as the cause in general.²⁵

So far Prajñākaragupta's analysis is more detailed, but not significantly different from Devendrabuddhi's. However, at this point he suggests an alternative explanation. Let us bear in mind Dharmakīrti's definition of a cause as formulated above (PV II 49). This definition does not address the temporal direction of the causal relationship; nothing in it points to a necessary precedence of the cause to the effect. This enables Prajñākaragupta to claim that the cause can sometimes lie in the future, and that one can therefore infer a future life by means of an inference from its present effect, a regular inference based on a causal relation.

How should one understand this statement? One possibility is to assume that Prajñākaragupta relies on one of the Sarvāstivāda theories of time. The sources speak of four different Sarvāstivāda theories of time that explain in what manner past and future things can be said to exist.²⁶ However, there is no need to enter into this topic here because, as far as I can see, there is no direct reference to

²⁴ Cf. MBh 2.3.28: *apādāne pañcamī*.

²⁵ Cf. PVABh 67.17-18 (Ms 26b1): *pañcamy apādāne 'pādānatā ca janikartuḥ prabhava iti. prabhavaś ca nimitam eva*. Prajñākaragupta combines here two different, though similar sūtras: 1.4.30: *janikartuḥ prakṛtiḥ*, and 1.4.31: *bhuvāḥ prabhavaḥ*. The examples given for these usages of the ablative case-ending are 1) "The scorpion arises / is born from cowdung," and 2) "The Ganga springs up / originates from the Himalaya" ("The Vitastā springs up / originates from Kashmir"). In the first case the ablative case-ending denotes the source in the sense of the matter from which or out of which an effect arises, in the second case it denotes the source as a point of departure.

²⁶ These four theories are often referred to, e.g., already in Stcherbatsky 1923: 78-80.

any of the Sarvāstivāda doctrines in Prajñākaragupta's discussion here.²⁷

Rather than relying on a special scholastic metaphysics, Prajñākaragupta utilizes a popular belief for his purpose, namely, the belief in omens. He maintains that according to the beliefs or everyday practice of all people (*sarvalokavyavahāra*), it is not the good omens, such as special transformations of the mind, which cause some good fortune (*udaya*, *abhyudaya*, *dge legs*) in the future, rather the future good fortune causes the good omens to appear at the present. Indeed people say that some good fortune must happen because otherwise there would be no transformation of the mind etc. In other cases too, one determines something as a cause in this manner.²⁸

It may be objected that according to Dharmakīrti's definition (PV II 49 quoted above), a cause is something that assists in the arising of an effect, and that a future thing cannot assist because it does not yet exist at the time of the arising. To this Prajñākaragupta replies that there would also not be a cause in the past, because a past cause no longer exists at the time of the arising of the effect.²⁹ What is the difference between inexistence because something has already perished and inexistence because something has not yet arisen?

The opponent can also not claim that the cause must immediately precede its effect. In many cases it can be observed that the cause is

²⁷ However, in the context of yogic perception one can detect certain similarities between Prajñākaragupta's statements and Buddhadeva's relativistic theory of time; thus the possibility of a certain influence of Buddhadeva should be borne in mind (cf. below n. 87).

²⁸ Cf. PVABh 67.28-68.2 (Ms. 26b3-4) (my punctuation here and in the next note differs from Sāṅkṛtyāyana's): *kāraṇaṃ kathaṃ kāryam iti cet, na, tasya kāryatvāt. tathā hi*

vikārāś cetanādīnām udayādeḥ prasādhakāḥ |
tadvikāratayekṣyante^a tac ca kāryatvam ucyate || 435||

ayaṃ vikāra eva na syāt, yady abhyudayaṇa na bhavitavyam. tatkr̥to 'yaṃ vikāra^b iti sakalalokavyavahāraḥ. etāvataivānyatrāpi kāryatvam. bhāvi kathaṃ kāraṇam? tadavyabhicārād eva.

^a Ms: -kṣyente ^b -tavyaṃ tatkr̥to 'yaṃ vikāra illegible in Ms.

²⁹ Cf. PVABh 68.3-5 (Ms. 26b4-5): *nanu ya upakārī sa kāraṇaṃ kathaṃ ca bhāvy avidyamānam upakārī? atītaṃ tarhi kāraṇaṃ na prāpnoti. tad apy asan nopakārīti.*

separated from the effect by some time interval. Prajñākaragupta uses here the example of two awarenesses occurring before and after deep sleep without dreams.³⁰

However, the opponent is far from being convinced. The general formulation of Dependent Origination implies that the cause precedes the effect. For instance, when the Buddha says “From the arising of this, that arises,” he points out that “the arising of this” takes place before “the arising of that.” Similarly, when the Buddha says “*asmin satīdam bhavati*,” he points out that “*ayam*” exists before “*idam*.”³¹ In other words, should it not be assumed that the general formulation of Dependent Origination contains not only a definition of a cause as something that is invariably concomitant with an effect, but also indicates that the cause exists before the effect? According to the opponent, the locative and ablative case-endings indicate a time prior to the one conveyed by the nominative case-ending.³² Prajñākaragupta replies in the negative; the locative and ablative case-endings refer to a cause, not to a specific time.³³

The opponent also questions whether a present participle such as *sat* (existing) can refer to a future object, or whether the word “arising” can refer to something not yet arisen, but here again

³⁰ Cf. PVABh 68.11 (Ms. 26b6-7):

*gāḍhasuptasya vijñānaṃ prabodhe pūrvavedanāt |
jāyate vyavadhāne 'pi^a kāleneti viniścitam || 436 ||*

^a S.: *vyavadhānena*. This verse is quoted in NBhū 501.8-9 which also reads *vyavadhāne 'pi*. Note that the *ālayavijñāna*, even though it is supposed to exist in deep sleep as well (cf. Schmithausen 1987: 36), cannot serve as the *samanantarapṛtyaya*, for although it is immediately preceeding, it is not of the same kind. See n. 123 below.

³¹ How should the locative be translated in this case? Since the possibility of locative absolute is raised only later in the text, the locative here is either *nimittasaptamī* or a normal locative (*adhikaraṇasaptamī*).

³² Cf. PVABh 68.18 (Ms. 26b8):

*saptamyā pūrvabhāvasya pañcamyā ca nidarśanam |
parabhāvaḥ prathamayā tato 'pi ca nidarśyate || 438 ||*

³³ Cf. PVABh 68.21-22 (Ms. 27a1): *na khalu saptamyā pūrvabhāvasyopadarśanam pañcamyā vā. nimittatvamātratvasyopadarśanāt^a. etannimittako 'yam ity arthaḥ.*

^a Delete at least one *tva*? P_(Pe) 71b6 = P_(De) 60a4: *rgyu mtshan tsam žig ñe bar bstan pa'i phyir te.*

Prajñākaragupta points out the symmetry between past and future things inasmuch as both do not exist in the present.³⁴

At this point Prajñākaragupta suggests an alternative explanation of *asmin satīdam bhavati*, according to which the characteristic of the being or arising (*bhāva*) of the one is due to the being or arising of the other.³⁵ The purpose of this alternative is not stated explicitly. Perhaps Prajñākaragupta wants to bring into line the locative and ablative formulations. For according to the locative formulation, the cause is the thing itself; according to the ablative formulation, it is the arising of the thing. Or perhaps Prajñākaragupta tries to account for the word *sati*, which is superfluous under the assumption of a *nimittasaptamī*. Whatever the case may be, this interpretation does not change the main point, namely, that the locative case ending conveys only a causal relation, not existence at a certain time.³⁶ The same holds good, of course, for the ablative formulation (*utpādāt*). It does not convey any division of time, and therefore a time difference, between the objects referred to by the ablative and the nominative, because case endings do not prescribe a certain time, but communicate that the object referred to by the noun is simply a causal factor (*kāraṭvamātra*) for the action referred to by the verb.³⁷

³⁴ Cf. PVABh 68.24-26 (Ms. 27a1-2): *nanu satīti katham bhāvī vyapadiśyate tasyāvidyamānatvād evaṃvyapadeśānupapatteḥ? tathā cotpādo^a 'nutpannasya. nanv atītasyāpi katham sattā yenāsau satīti vyapadiśyate? vinaśtasya ca katham utpādāḥ?*

^a Ms and S.: *tathā notpādo*; cf. P_(Pe) 71b8 = P_(De) 60a5: *de bzīn du ma skyes pa la skyes pa yañ ño že na*.

³⁵ Cf. PVABh 68.27-28 (Ms. 27a2): *athavā asmin satīdam bhavatīti yasya ca^a bhāvena bhāvalakṣaṇam ity anena saptamī*.

^a *ca* should probably be deleted. It does not make sense to me and has no equivalence in P_(Pe) 72a1 = P_(De) 60a6: *yañ na 'di yod na 'di 'byuñ ño zes bya ba (Pe: ba la) gañ gis dños pos dños po mtshon pa zes bya ba 'dis bdun pa yin no*.

³⁶ Cf. PVABh 68.28-29 (Ms. 27a2): *tataḥ satīty anena nimittabhāvamātram lakṣyate. na tu tadā sattvam*.

³⁷ Cf. PVABh 68.31-32 (Ms. 27a3): *na cotpādād iti kālavibhāgaḥ. na khalu vibhaktayaḥ kālaviśeṣavidhāyinyaḥ kāraṭvamātrapratipādana^a sāmārthyāt*.

^a *-tva-* has no equivalent in the Tibetan; cf. P_(Pe) 72a4-5 = P_(De) 60b2: *byed pa po tsam žig ston par nus pa'i phyir ro*.

Backward causation in omens

In the context of the above analysis, Prajñākaragupta repeats the example of omens, this time referring to bad omens (*ariṣṭa*).³⁸ It is commonly said (*vyavahāra*) among the people that an omen of death (*ariṣṭa*) is prompted or caused (*prayukta*, *byas*) by death. In other words, a bad omen is not the cause of misfortune, but its result. This implies that the misfortune that awaits us in the future is causing the ill omen in the present.³⁹

To fully appreciate the force of Prajñākaragupta's argument we must recall the importance of omens in South Asian culture. The belief in omens, good or bad, has been widely spread in all times. The earliest sources for the interpretations of omens are the *Adbhutabrāhmaṇa* of the *Sāmaveda* and the *Kauśikasūtra* of the *Atharvaveda*. Further, this topic appears in practically all literary genres: Epic, Purāṇic and narrative literature (e.g. *Kathāsaritsāgara*), plays, astrological texts (e.g., the *Bṛhatsaṃhitā*⁴⁰) in the grammatical literature (already with Pāṇini, e.g., AA 1.4.39), in philosophical works such as the *Yogasūtra*,⁴¹ and so on. The *Carakasamhitā*, the influential medical compendium of the classical period, contains an entire chapter (*Indriyasthāna*) that deals with various signs of death, some of which are quite astonishing. For instance, the appearance of flower-like shapes on one's nails or one's teeth is a sure sign of death.⁴² Studies on omens, although not numerous, stretch over the

³⁸ Confusingly enough, *ariṣṭa* seems to signify both "auspicious" and "inauspicious" omens (cf. Apte s.v., meanings 2 and 3). It is clear, however, that in the present context Prajñākaragupta uses *ariṣṭa* in the sense of a bad omen that forebodes death (cf. next note: *mṛtyuprayuktam ariṣṭam*).

³⁹ Cf. PVABh 68.29-30 (Ms. 27a2-3): *mṛtyuprayuktam ariṣṭam iti loke vyavahārah. yadi mṛtyur nābhaviṣyan^a na bhaved evaṃbhūtam ariṣṭam iti.*

^a S.: *na bhaviṣyan.*

⁴⁰ In the *Bṛhatsaṃhitā*, eleven chapters deal with various omens (ch. 86-96).

⁴¹ Cf. YS 3.21 (in Wood's translation 3.22). Cf. also further references to the *Mahābhārata*, the *Mārkaṇḍeyapurāṇa* and *Liṅgapurāṇa* in Wood's translation p. 251, n. 3.

⁴² Cf. *Indriyasthāna* 1.22: *puṣpāṇi nakhadanteṣu*. The reason for the prominent treatment of death omens in the *Carakasamhitā* is clear. The physician should avoid

entire field of South Asian studies, from Vedic studies, e.g., on the *Atharvavedapariśiṣṭa*,⁴³ to ethnographic studies of customs and beliefs in present day Mumbai and Chennai. It is remarkable how the living notions in South Asia about omens are still similar to those of the early centuries B.C.E.⁴⁴

As mentioned above, Prajñākaragupta maintains that case-endings do not express temporal relations between the referents of inflected nouns in a sentence; they express various causal relationships between the referents of the nouns and the action referred to by the verb. To substantiate this point he uses the *kāraka*-theory of the Sanskrit grammarians and claims that this theory implies that a past or future thing can be a cause.⁴⁵ According to this theory, the case-endings, with the exception of the genitive ending,⁴⁶ express the fact that the referent of the inflected noun is a cause or a condition (*kāraka*) for the action referred to by the sentence verb. For instance, in the sentence “John cuts wood with an axe,” the referent of “John” is the agent, of “axe” the instrument, and of “wood” the object; they all are causes or conditions for the action of cutting referred to by “cuts.” Now, consider a simple sentence such as “The sprout arises.”⁴⁷ The agent of this sentence is the sprout, but it certainly does not exist before the action of arising. Similarly, in the sentence “He makes a pot” the pot - as object - is supposed to be a cause or a condition for the action of making, but of course it does not exist prior to this action. Therefore, it is not the case that the cause always and necessarily precedes the effect. The opponent attempts to solve the problem by claiming that the pot indeed exists before the action, namely, in the mind of the speaker (*buddhisthatā*).

treating patients who display death omens because their inevitable death will reflect badly on him and his professional skills.

⁴³ Kohlbrugge 1938: 10-17, provides a short survey of omens in various works.

⁴⁴ Cf. Kohlbrugge 1938: 11.

⁴⁵ For the *kāraka* theory see the notes accompanying Joshi and Roodbergen 1980.

⁴⁶ One has to note, though, that some verbs do govern the genitive, e.g., *smṛ*, when one remembers with sadness or regret. Cf. Speijer 1980: §§ 118-123.

⁴⁷ Cf. PVABh 68.32-33 (Ms. 27a3): *kāratvam evāsataḥ katham iti cet, katham aṅkuro jāyate, ghaṭaṃ karotīti^a karṭṛkarmabhāvaḥ*.

^a Ms: *karokatīti*.

The tenet that the referents of words exist in the mind as well as the example “The sprout arises” (*aṅkuro jāyate*)⁴⁸ indicate that Prajñākaragupta has Bhartṛhari and his theory of “metonymical existence” (*upacārikī sattā*) in mind. This doctrine is developed by him in *Sambandhasamuddeśa* 39-51.⁴⁹ According to Helārāja’s commentary on v. 39, *upacāra* is to be understood here in the sense of superimposition (*adhyāropa*). When words are used, the existence of their referents is made known by the words; this existence is different from the one of the external objects and is superimposed by and on the mind.⁵⁰ Thus, even referents of words denoting non-existing objects, such as “a hare’s horn,” have their “metonymical” or superimposed existence and thus such words are capable to convey their meaning.⁵¹

Although the doctrine of “metonymical existence” agrees well with the Yogācāra point of view,⁵² Prajñākaragupta rejects it. In the sentence “He makes a pot,” a real pot is referred to, not to an imaginary one in the mind of the speaker. Not even the crows would

⁴⁸ This example appears in Helārāja’s *Vṛtti* on VP III.1, pp. 154.13, 155.9-10, 155.15-16, etc. Cf. also the discussion in Houben 1995: 265. For Bhartṛhari the same problem arises even when the object referred to by a word already exists; cf. Houben 1995: 267. The example of the pot was also used by Suñeśa. According to Suñeśa, one speaks only metonymically (*upacāra*) of the necessary antecedence of the pot to the action of making; this antecedence is thus transferred from the knowledge of the pot to the pot itself; cf. Chakravarti 1930: 218.

⁴⁹ Cf. Houben 1995: 257ff. Cf. also the translations in Subrahmanya Iyer 1971: 98ff. and Rau 2002: 182ff.; see also Subramania Iyer 1999: 209-212 and 312-313.

⁵⁰ Cf. Helārāja’s commentary in VP III.1, p. 150.11-13 commenting on v. 39ab (*vyapadeśe padārthānām anyā sattaupacārikī*): **vyapadeśe** vyapadeśanimittaṃ śabdena pratyāyane, padapratyāyānām arthānām bāhyānām vastūnām bāhya-vilakṣaṇā sattā buddhyupacāritā. bāhyārthasattāyā hi **anyā** buddhisamārūḍhārthākārārūpā **sattā**. ata eva **upacārikī**tyam. upacāro ’dhyāropaḥ.

⁵¹ Cf. VP III.1, p. 150.17: *abhāvaviśayāṇām śaśaviśāṇādīśabdānām apy ākārol-lekhinī*. Cf. also 150.20f.: *alātacakraśaśaviśāṇādīnām api śabdānām nityam arthair aviṣyogāt sambandhanityatāsiddhiḥ*.

⁵² This is pointed out in Houben 1995: 246. Cf. Helārāja’s *Vṛtti*, p. 150.18-19: *buddhiś ca bahir asaty apy arthe svabījavāsanāparipākavaśād ākāravagraharūpopa-jāyate vaikalpikī*. “And the awareness arises as apprehending the form [of the object] even when the object does not exist externally (i.e., outside the awareness) due to the maturation of the impression from its own seed, [that is, it arises as] a conceptual [awareness].”

eat that, he adds, referring to the popular belief that crows eat everything, even the most bitter and poisonous Kimpāka cucumbers.⁵³

The opponent further objects that causes always precede their effects because one always *sees* the cause before seeing the effect. For Prajñākaragupta, this objection is clearly mistaken. Sometimes it may happen that one first sees the effect or that the cause is not seen at all. One may see the sprout without having seen its seed when it was placed in the ground.⁵⁴ When seeing something, one only apprehends that it exists, not that it is a cause or effect. Therefore, there is no fault in defining the relationship between cause and effect in terms of an atemporal concomitance (or entailment) or non-deviation. If something has another thing that does not deviate from it, precisely this fact constitutes its being the cause of that other thing.⁵⁵ This tenet could be rephrased as follows: If the effect is, was or will be present, the cause necessarily arises, has arisen or will arise because the effect does not deviate from it. What is the use of defining cause and effect as anterior and posterior respectively?

The opponent retorts that this temporal definition is certainly useful because one cannot influence the past, only the future. A motivation is possible only if a cause precedes its effect. As for the inference of future objects or lives, one can use the capable cause as a

⁵³ Cf. PVABh 68.33 (Ms. 27a3-4): *buddhisthatayā kārakatve nātra tasya kākair bhakṣaṇam*. Cf. Boethlingk 1870-73, nr. 754 (276):

*asadbhir asatām eva bhujyante dhanasaṃpadaḥ |
phalaṃ kiṃpākavṛṣasya dhvāṅkṣā bhakṣanti netare ||*

„Nur schlechte Menschen geniessen der Schlechten Reichthümer: die Kimpāka-Gurke essen die Krähen und sonst niemand.“

Cf. also 1582 (615):

*kavayaḥ kiṃ na paśyanti kiṃ na bhakṣanti vāyasaḥ |
madyapāḥ kiṃ na jalpanti kiṃ na kurvanti yoṣitaḥ ||*

„Was sehen nicht die Dichter? Was fressen nicht die Krähen? Was schwatzen nicht die Trunkene? Was thun nicht die Weiber?“

⁵⁴ Cf. PVABh 69.4 (Ms 27a4):

*yasyopalabdhiḥ prathamam tat tasya yadi kāraṇam |
na khalāntargataṃ bījaṃ hetuḥ syād ankurodaye || 439 ||*

⁵⁵ Cf. PVABh 69.9 (Ms. 27a5): *avyabhicāraṇīyatve tad eva kāraṇatvam*. The Tibetan translators may have read *kāraṇam* instead of *kāraṇatvam*. Cf. P_(Pe) 72b1 = P_(De) 60b5: *de ñid rgyu yin no*. However, NBhū 502.22-23: *tad eva kāraṇatvam*.

reason.⁵⁶ For example, someone who wants a good life in the future will be motivated to do something about it now. If, on the other hand, causes were in the future and their effects in the past, one would be powerless in regard to these causes, and this would lead to determinism and fatalism. Not at all, replies Prajñākaragupta, because the concomitance between cause and effect does not imply that the cause *always* exists before the effect; it could also be the other way round. Something that exists before the effect can be a cause, but inasmuch as it does not deviate from a future entity it can also be its effect.⁵⁷

Of course, the other type of inference, which is based on an essential property, could also be used to prove future lives. However, this procedure would be cumbersome and tedious: If something is in one's hand, why should one try to hold it with the foot? If something can be cut with a finger-nail, who would take the trouble to cut it with an axe?⁵⁸

Backward causation and general validity (prāmāṇya)

The above does not exhaust what Prajñākaragupta has to say about backward causation; future objects play an important role in three other contexts, namely, in the discussions of the relationship between a valid cognition and efficient action, of the scope of *vyāpti*, which as

⁵⁶ PVABh 69.14 (27a6):

pūrvatve kāraṇasyeṣṭa upādānaṃ tadarthinām |
paratve (cā)^anumānaṃ yat sāmāthyāt tad bhaviṣyati || 441 ||

^a *cā* added by Sāṅkṛtyāyana for metrical reasons.

⁵⁷ PVABh 69.17-18 (Ms. 27a7): *na hi prāgbhāvīnaḥ kāraṇatvaṃ na vidyate. kāryatvaṃ api tu tasya bhāvavyabhicārāpekṣayā bhavatīti bhāṇyate*. Thus, the causal connection is not determined by a temporal aspect. For this reason, an interpretation of “*asmin sati*” as *parasaptamī* would be equally inadmissible for Prajñākaragupta. On *parasaptamī* cf. Renou, *Terminologie grammaticale*, s.v.

⁵⁸ Cf. PVABh 69.4:22 (Ms. 27a8):

ko hi hastagataṃ dravyaṃ pādagāmi kariṣyati |
paraśucchedyatāṃ ko vā nakhacchedye sahiṣyate || 442 ||

On *hastagata* in the meaning of “in one's hand” cf. Speijer 1980: § 197. Prajñākaragupta evokes perhaps KS 1.2.28: *ko hy abālīṣo hastagataṃ paragataṃ kuryāt*. The meaning is, of course, quite different.

a universal concomitance covers objects in all three times, and of yogic perception of past and future objects.

The discussions of efficient action and universal concomitance appear in the extensive comments on PV II 5a: *prāmāṇyaṃ vyavhāreṇa* (PVA(o) 63.13ff.): “The validity [of a cognition is understood] by everyday practice.” “Everyday practice” in this connection is understood as “efficient action” (*arthakriyā*) or more precisely, if we follow Prajñākaragupta’s understanding, the action of the object that is attained. This action and its cognition obviously occur after the valid cognition which brings it about (*sādhanañjāna*). Earlier commentators, such as Arcaṭa and Dharmottara, have already dealt with the fact that valid cognitions do not always actually bring about efficient actions, for they cannot force the perceiver to act; and further, although these valid cognitions are called *sādhanañjāna*, they do not actually produce the action, which consists, say, in the later obtainment of a desired object. The discussion is philosophically important, but I cannot do it justice here. After refuting his predecessors, Prajñākaragupta proposes a different solution: A cognition is valid because it makes known the own nature of the action of the object (*arthakriyāsvarūpa*), which is determined identity of nature or causality (*tādātmyatadutpattiprabhāvataḥ*). Concerning the second alternative, one could expect Prajñākaragupta to say that the object that produces the cognition also produces the object (or its intended action) that is later obtained, but Prajñākaragupta opts for the opposite solution. The object that is later attained produces the object that produces the cognition:

“Or a necessary effect is a cause because the cause is pervaded by that [effect]. Whatever is a different⁵⁹ pervader, is nothing but a cause because without it the [effect] does not exist.

[Objection] How could something non-arisen be a cause?

[Reply:] How could something that has already arisen [and vanished] be [a cause]? Thus, the fault is common to both.”⁶⁰

⁵⁹ The qualification is necessary in order to exclude a pervader that consists in own nature.

⁶⁰ PVA(o) 70.10-13: *atha vā tad avaśyaṃbhāvikāryaṃ kāraṇam eva, tena vyāptatvāt kāraṇasya. yac ca vyatiriktaṃ vyāpakam, tat kāraṇam eva, tena vinā tadabhāvāt. anutpannaṃ katham kāraṇam, utpannam api katham iti samāno doṣaḥ.*

The opponent quotes the Dependent Origination and other formulations of causation that are used in everyday practice and denies that a future thing can have existence, origination or activity.⁶¹ Prajñākaragupta responds first that existence, arising or production, activity and so on are not something different from the thing itself, that is, they are only properties of things that are not ontologically different from the things themselves. Further, if the opponents claims that the cause exists immediately before the effect, he will not be able to account for the conceptual constructions of a person who awakes after a long sleep, for they are due to repeated practice in a remote past.⁶² Therefore, if causal relation is understood in terms of invariable concomitance alone, it applies to a future thing too, also (especially?) for a cause which has a necessary effect. Therefore, a future thing is also a cause.⁶³

Backward causation and vyāpti

In connection with the discussion of future cause, Prajñākaragupta rightly points out that universal concomitance or entailment (*vyāpti*) is not restricted to certain places or times (*prādeśikī*), and if it were, that is, if it were not to apply to future things as well, it will not be a universal concomitance.⁶⁴ PVA(o) 72.10-11:

bhāvīrūpāpratītau na vyāpakatvaṃ pratīyate |
prādeśikī na hi vyāptir avyāptiḥ sā tathā bhavet ||208||

⁶¹ PVA(o) 70.14-17: *nanv asmin satīdaṃ bhavati, asyotpādād idam utpadyate, etad atra vyāpriyate, etad anena kriyate iti kāryakāraṇabhāvaṃ avagacchanti laukikāḥ. na ca bhāvīnaḥ sattā, nāpy utpādaḥ, na ca vyāpāraḥ, nāpi kārāṇaṃ tena, avidyamānatvāt tadānīm.*

⁶² PVA(o) 71.6-7: *suptasya ciraṃ utthitasya ye vikalpāḥ, teṣāṃ pūrvābhyāsād utpādo na syāt, anantarabhāvitvābhāvāt.*

⁶³ PVA(o) 71.10-11: *avinābhāvitāmātraṃ tu bhāvīny api vidyate 'vaśyaṃbhāvikāryasya kārāṇasyāpi. tato bhāvīny api kārāṇaṃ.*

⁶⁴ PVA(o) 72.10-11:

bhāvīrūpāpratītau na vyāpakatvaṃ pratīyate |
prādeśikī na hi vyāptir avyāptiḥ sā tathā bhavet ||208||

“If the nature of a future thing is not perceived, [its] being a pervader is not perceived. Indeed, pervasion is not local (i.e., is not limited to place and time. [Were it to be local] it would be a non-pervasion.”

Although the discussion is not further developed in this context, this is one of the strongest arguments for the existence of future things, at least in some form. When one claims for instance that there is a concomitance between smoke and fire, one means, of course, that the concomitance holds good also in the future, that is, also for future smokes and fires. And if one maintains that such concomitance holds between individuals, and not between the universals ‘being-somke’ and ‘being-fire’, which the Buddhists in any case reject, one has to allow some form of existence (perhaps potential existence?) to such individuals. Otherwise, one would have to accept that there is a relation (*vyāpti*) without relata (*vyāpaka* and *vyāpya*).

Future Cause and Perception of Yogis

Yogis were widely believed to have direct or immediate perception of past and future objects.⁶⁵ Should one understand that past and future objects actually produce their perceptions? If so, how do they act across time? And if not, how can they be said to be immediately perceived? Doesn’t the notion of direct perception (*pratyakṣa*) entail the existence of the object that appears in it? Or if its object is said not to exist, how can its perception considered to be true? Prajñākaragupta deals with these questions in his commentary on *Pramāṇasiddhi* chapter verse 138. His comments are rather extensive; they cover five and a half dense pages in Sāṅkṛtyāyana’s edition. I will therefore limit myself to the most important points.

Prajñākaragupta’s first argues that the definition of perception is not, as the etymology of the word *pratyakṣa* would suggest, an awareness that depends on the senses, but an immediate awareness of a truly existing object,⁶⁶ or an immediate true awareness of an object.⁶⁷ The words “perception” and “perceiving in an immediate

⁶⁵ The perception of past and future objects is already mentioned in the *Yogasūtra* as one of the *siddhis*. Cf. YS 3.16.

⁶⁶ PVABh 112.1, k. 604: *sākṣātkaraṇam evāśya bhāvasyāstītvam ucyate*.

⁶⁷ PVABh 111.12: *sākṣātsadbhūtapadārthavedana*.

manner” have the same referent.⁶⁸ Now, one may object that the definition is too narrow because past or future object is remote, not immediate. The surprising answer is that this is not so. If an object is directly perceived, then it is not remote.⁶⁹

A similar reasoning holds good for the *existence* of past and future objects. If they are immediate objects of perception, they exist! The immediate perception of a thing is called existence, or, in other words, existence means to be perceived in an immediate manner. If something is never perceived by anyone, it is like the horn of a rabbit, it does not exist.⁷⁰ Even the object of inference is something that has been, is, or will be immediately perceived.⁷¹

Some unnamed opponents argue that existence only means to be connected with the present time, not to be immediately perceived; otherwise this will undermine the assertion that perceptions of the yogis are directed at past or future objects. Furthermore, seeing present things is not something special for yogis; everybody does that.⁷² Prajñākaragupta answers that time in fact does not exist.

Prajñākaragupta's Notion of Time

At this point Prajñākaragupta clarifies his notion of time. Time taken as an independent and permanent entity does not exist. There is no apprehension of time by any means of knowledge.⁷³ What one

⁶⁸ PVABh 111.11: *sākṣātkaraṇārtho hi pratyakṣārthaḥ*.

⁶⁹ PVABh 111.22:

*sākṣātkaraṇasadbhāve katham asya parokṣatā |
sākṣātkṛtaḥ parokṣaś ced aparokṣo na vidyate || 601*

⁷⁰ PVABh 112.5–6: *yadi tu na kenacid dr̥ṣṭam dr̥śyate drakṣyate vā, tadā ca(?) śaśaviṣāṇāyamānam asad eva.*

⁷¹ PVABh 112.3–4: *tatrāpi tathābhūtasyaivānumānam sākṣātkṛtam kriyamānam kariṣyamānam cānumīyate 'nyathānumānāpravṛtteḥ.*

⁷² PVABh 112.7–9: *nanu vartamānakālasambandho 'stitvam, na sākṣātkaraṇam. tathā ca yoginām atītānāgatapadārthasākṣātkaraṇam bhavadbhir iṣyate. vartamānatāmātradarśane tu nāsāv atītādidarśī. tataḥ sarvajanasamānatā katham asya śāstrītvam yogitvam veti pare uktavantaḥ.*

⁷³ PVABh, 112.10:

*na pramāṇena^a kenāpi gatiḥ^b kālasya vidyate |
rūpādīmātrasya gatiḥ^b pratyakṣād anumānataḥ || 606 ||*

^a S: *pramāṇana* ^b S: *gati*

apprehends are only visible objects; one does not apprehend any connection of these with time.⁷⁴ Perception makes us aware of certain forms of objects, but we do not perceive time. And without any perception of time, there is also no inference of time, for the latter depends on the former.⁷⁵

The opponent objects that time can be grasped or inferred by the awareness of slow (*cira*) and quick (*kṣipra*) movements. Prajñākara-gupta replies that the awareness of a certain process as slow or quick does not make time to stand before our eyes.⁷⁶ And, again, if we do not see time, we cannot infer it. Consider, for instance the production of a pot. A pot is produced by putting together its constituent parts. What we see is that the parts are assembled slowly or quickly; we do not see time. But if this is the case, what is the referent or the meaning of “slow” (*cira*)? Prajñākara-gupta answers that it is a succession (*krama*). When the pot is completed by way of a slow succession (*mandakrama*) of parts, we say that it is produced slowly.⁷⁷

The opponent objects: How is slow succession possible without time? Prajñākara-gupta replies that it is possible because the cause that would effect the assemblage of the parts is missing, and it is missing because its cause is missing, and so on, without any beginning, for *samsāra* is beginningless.⁷⁸ Furthermore, if slow or quick succession occurred by the force of time, what would be the role of the causes? If time were responsible for the effect, the causes would become superfluous.⁷⁹

⁷⁴ PVABh, 112.12: *pratyakṣeṇa rūpādīnāṃ svabhāva eva kevalam upalabhyate na kālādiyogaḥ*.

⁷⁵ Before time can be inferred its connection with the *liṅga* has to be perceived at least once. Thus, if time is never perceived, it cannot be inferred.

⁷⁶ PVABh, 112.17: *ciraṃ kṛtaṃ ityādaḥ ghaṭādikam evābhāsate. na tu tatrāparaḥ kālāḥ*.

⁷⁷ PVABh, 112.21: *mandakrameṇa yā ghaṭādyavayavānāṃ pariniṣpattiḥ samāptiś cīrārthaḥ sa*.

⁷⁸ PVABh, 112.22–24: *sādhanaśannidhānamātreṇa tadupapatteḥ. sādhanaśannidhānaṃ ca sannidhānakāraṇābhāvāt. sannidhānakāraṇābhāvo 'pi tatkāraṇābhāvata ity anādir eṣa hetuprakramaḥ. tato na kālo nāma kaścit*.

⁷⁹ PVABh, 112.26: *kālāḥ kāryānāṃ pravartakaḥ kim atra kāraṇānāṃ vyāpārasya phalam?*

One may object that time alone, without the causes, is not capable of producing results or that the causes alone, without time, cannot produce a result. But this is not correct, because this would only mean that time is one of the causes of production, and this supposition cannot be verified. The determination of something as cause comes about by means of the determination that the effect is present when a certain thing is present and that it is absent when that thing is absent. But time is never absent because it is assumed to be an eternal and all-pervading entity. Therefore, it cannot be determined as a cause.⁸⁰

Now, the opponent attempts to divide time into various time-units that are brought together in a sequence.⁸¹ When this fails, he suggests that succession itself is time.⁸² Then he suggests that time is the movement of the sun, etc., but Prajñākaragupta replies in the same manner as above that the movement of the sun is not something different from the sun.⁸³

So if time does not exist, and if to exist means to be perceived in an immediate manner, what is the difference between past, present and future objects? Prajñākaragupta concludes that being a past object means to have been seen, being a present one means being seen, and being a future object means to be something that will be seen.⁸⁴ Speaking of time as a separate thing, for instance, when one says: “the time of this thing,” is similar to saying “the body of this torso.” In the same manner people ask (k. 611): What [kind of] time has arisen for you (*kaḥ kālo bhavato jātaḥ*) which simply means “Are you well?”

⁸⁰ PVABh, 112.26–29: *kāraṇam antareṇa na kālaḥ samartha iti cet. kāraṇabhāvābhavābhyām eva tarhi kāryāṇām utpādaḥ, kālas tu na samarthaḥ. yadi tu kālābhāve kāraṇānām asāmarthyam, yuktaḥ kālasya kāraṇabhāvaḥ. na cābhāvaḥ kālasya vyāpinityatvāt.*

⁸¹ PVABh, 112.29–30: *athāparāparakālasamavadhānāpekṣakāraṇād utpattis tad evāparāparakālasamavadhānam kutaḥ? kāraṇāntarād iti cet, tata eva tarhi kāryakramaḥ kiṃ kālena?*

⁸² PVABh, 112.30–31: *krama eva kāla iti cet, na, sahitāsahitabhāvasya kramatvāt. sa ca padārtharūpa eveti nāparaḥ kālaḥ.*

⁸³ PVABh, 112.31–33: *athādityādigatir eva kālaḥ. na, ādityādisvarūpavyatirekeṇa gatya bhāvāt. tac ca svarūpaṃ pratyakṣagamyaṃ eva.*

⁸⁴ PVABh, 112.34:

*drṣṭatātītakālatvaṃ drśyatā vartamānatā |
bhāvitā drakṣyamānatvaṃ iti kālavyavasthitiḥ || 609 ||*

This question is correct inasmuch as it refers to a particular state of a person; it is not about time conceived as an entity.⁸⁵

Past or future objects are, therefore, objects that are not seen now. And to say that yogis see the past or the future means that they see what is not being seen, that is, not being seen by other people. Therefore, being past and being future depends on not seeing by ordinary people. The yogi himself sees the past and the future objects as present; only after coming out of the meditation he determines them as past or future.⁸⁶

Yamāri on Faithfulness and Novelty in Commentaries

A manuscript of Yamāri's famous commentary on the PVABh, the *Pramāṇavārttikālaṅkāraṭīkā Supariśuddhā*, also known as the *Pramāṇavārttikālaṅkāranibandha*, has recently become accessible to us through a cooperation agreement with the China Tibetology Research Center (CTRC) in Beijing. The first chapter of this commentary, on the Pramāṇasiddhi chapter, is now in the process of being edited for the first time by a team of scholars in Leipzig University on the basis of photocopies that are kept in the CTRC. At present, we have a preliminary edition of the section that covers PVA on the first fifty verses of PV and I was able to read the commentary on vv. 5 and 49, but not yet on v. 138. On the whole, Yamāri contents himself to explain Prajñākara Gupta's words and does not digress except for a single point, which concerns the novelty of Prajñākara Gupta's theory and the freedom of commentators to develop the theories of the text they comment on.

⁸⁵ PVABh, 113.4:

kaḥ kālo bhavato jātaḥ sūthitatvādi kiṃ tava |
tatsvarūpaviśeṣasya praśne yuktam idaṃ vacaḥ || 611 ||

⁸⁶ PVABh, 113.7–9: *tasmād atītādi paśyatīti ko 'rthaḥ? anyenādṛśyamānaṃ paśyati tad dṛśyamānatayā vartamānaṃ eva tāvatā tad iti na doṣaḥ. anyāpekṣayā tasyātītāditvam. tasmād yad sākṣātkṛtaṃ tad evāstīti nātītād akṣavyāpāras tasya sākṣātkṛtatvenāsthivāt.* This theory may have been inspired by Buddhadeva's theory of time. However, there is a decisive difference between the two theories: For Buddhadeva, the relative time relations are between objects; for Prajñākara Gupta they are relative to the perceiver.

Obviously, the doctrine of the future cause (*bhāvikāraṇavāda*) is absent in Dharmakīrti's writings and it seems unlikely that he would have accepted it. This novelty or creativity on the part of Prajñākaragupta did not escape the notice of other Buddhist philosophers and commentators, who accused Prajñākaragupta of being unfaithful to Dharmakīrti.⁸⁷ On this point, Yamāri comes to Prajñākaragupta's defence (ms. fol. 62b7f.):

“And this [PVABh] is a Bhāṣya on the Ācārya (i.e., on the PV). But this [doctrine of future cause] is not acceptable for the Ācārya because it is not stated anywhere [in his writings]. Therefore, this fault of independence causes nothing but contempt for the Bhāṣyakāra (i.e., Prajñākaragupta). Therefore, [the Bhāṣyakāra] says: “We see correctly” (PVA(o) 74.5-6). The following is the meaning: Indeed, just because something is not stated directly, it does not [mean that it is] not accepted. Nor [does it mean that] someone who says [something not directly stated] commits the fault of independence because explanations of things that do not appear in the *mūla* is observed everywhere [in all commentaries]. Why go far? Since all the details stated in the [*Pramāṇa*]vārttika are not stated directly in the Buddha's word, does [Dharmakīrti himself commit] the dual faults of stating something unaccepted and independence? Therefore, what establishes/proves the own doctrine or does not contradict [and] is pleasant in argumentation, should indeed be appropriated. Thus, because [the doctrine of the future cause] is connected to [these] three qualities, it is correct.”⁸⁸

The same point is repeated in the commentary on v. 49. However, here the opponent, like a good philologist, also quotes specific verses

⁸⁷ This novelty is quite obvious and was also noted by Jaina philosophers who refer to the *bhāvikāraṇavāda*, for instance, Anataavīrya in the SVT p. 196: *prajñākaraguptasyaiva mataṃ na dharmottarādīnām iti manyate*. See also PKM 380.17: *nanu prajñākarābhīprāyeṇa bhāvirohinyudayakāryatayā kṛttikodayasya gamakatvāt ...*

⁸⁸ PVAṬS 62b7f: *ācārye ca bhāṣyam etat. ācāryasya cāniṣṭam etat, kvacid anukteḥ. tataḥ svātantryadoṣo bhāṣyakārasya nidākara evety āha — yuktam paśyāma*_[PVA(o) 74.5-6] *iti. ayam arthaḥ — na khalu sāksān noktam ity evāniṣṭaḥ. nāpi tadvaditūḥ svātantryadoṣaḥ, mule 'nudbhinnārthakathāyāḥ sarvatra darśanāt. kiṃ vā dūragamanena? vārttikoktaprapaṇcasya sarvasya pravacane sāksād anukteḥ, kiṃ nāniṣṭisvātantryadoṣau? tasmāt svamatasya sādhanam avirodhi vā vicāraramyam upādeyam eveti guṇatrayayogād yuktam iti.*

from Dharmakīrti's work that contradict, or at least seem to contradict, the doctrine of the future cause. The opponent thus makes twofold charge: first, as above, that the doctrine was nowhere stated by Dharmakīrti⁸⁹ and second that there is a contradiction in it, namely, to Dharmakīrti's teachings.⁹⁰ On the first charge Yamāri responds along the same lines as above. A mere non-statement of the doctrine by Dharmakīrti cannot be used against Prajñākaragupta. It is nowhere the case that a commentary and the work commented on have exactly the same wording (*ekam evākṣaram*). Some parts of the *mūla* are inevitably developed by the commentator. Indeed, it is not the case that all the particular statements of Dharmakīrti can be found in the *Pramāṇasamuccaya* or in the Buddha's word.⁹¹

As for Dharmakīrti's statements that contradict the doctrine of the future cause, the opponent quotes the following: PV I 7 = PVin III 64: *arthāntarānapekṣatvāt sa svabhāvo 'nuvarṇitaḥ*. "The [arising of an effect (*kāryotpāda*) is said to be the own nature [of the complete cause] because [the cause] depends on nothing else."⁹² PV III 247 (=246) (see also TSP 204.21-22): *asataḥ prāg asāmarthyād*. "Because something that does not exist before has no capacity", and perhaps the clearest statement in PV I 33c = PVin II 64c: *paścādbhāvān na hetutvam*. "Because it arises later, it is not a cause."

However, Yamāri claims that there is no contradiction between the above statements and the doctrine of the future cause. The intention of the statement (PV III 247a) "something unreal ..." is only to negate that cause and effect arise at the same time.⁹³ This is the case because the verse concludes with the statement (PV III 247d) "therefore, the object does not [arise] together with its

⁸⁹ PVATS 106a2: *svātantryam etad bhāṣyakārasya ācāryeṇānuktatvāt*.

⁹⁰ PVATS 106a2-3: *virodhaś ca tadvāci*.

⁹¹ PVATS 106a3-4: *tathā hy anuktimātraṃ tāvan na dūṣaṇam. na hi vyākhyānavyākhyāyayor ekam evākṣaraṃ kvacit. pustakāntaramātraṃ hi tadā syāt. avaśyaṃ hi kiñcid vyutpādayitavyaṃ vyākhyātrā. na hi vārttikoktaviśeṣāḥ sarve dignāge pravacane vā sākṣāt sambhāvinaḥ*.

⁹² See also the annotated German translation in Steinkellner 2013: 17.

⁹³ PVATS 106a4: *yat tūcyate — asata ityādi tatra hetuphalayoḥ sahabhāvaniṣedhe tātparyam*.

cognition.”⁹⁴ As for the statement (PV III 247c) “all causes exist before [their effects]”, it is only an indication (*upalakṣaṇa*) or an indirect statement that they do not arise at the same time.⁹⁵

The opponent objects that Dharmakīrti could not have rejected the doctrine that cause and effect may arise at the same time because when the reason and the property to be proved belong to two different entities, the causal relation is nothing but concomitance between two things, not the actual production. Therefore, when color and flavor are concomitant with each other in a certain object, they stand in causal relation even though they arise at the same time.⁹⁶

Yamāri does not deny this Abhidharmic doctrine, but claims that the rejection of cause and effect arising at the same time was made by Dharmakīrti only in dependence on everyday practice of the people (*lokavyavahāra*) and such practice does not recognize anywhere causal relation between two things that arise at the same time such as the left and right horn of a cow. On the other hand, everyday practice does recognize the existence of a future cause.⁹⁷

Who are the targets of these negations? Perhaps the Sarvāstivādas, who profess the doctrine of *sahabhū-hetu*, but certainly the Vaiśeṣikas. Towards the end of the digression Yamāri mentions them explicitly: “According to the Vaiśeṣikas, on the other hand, the relation between cause and effect among entities that arise together [is maintained] while relying on Āgama, not [by relying on everyday practice of] the people.”⁹⁸ Unfortunately, no further information is provided on this theory of the Vaiśeṣikas and we cannot be certain about what Yamāri has in mind. I assume that

⁹⁴ PVATS 106a4-5: *yad āha — nāto 'rthaḥ svadhiyā sahe ti.*

⁹⁵ PVATS106a5: *prāgbhāvaḥ sarvahetūnām iti tūpalakṣaṇam asahabhāvasya.*

⁹⁶ PVATS 106a5: *nanu bhede sati vyāpyavyāpakabhāva eva kāryakāraṇabhāva iti raso 'pi rūpasya kāryam. tat katham sahabhūhetuniṣedhaḥ?*

⁹⁷ PVATS 106a5-6: *satsamvṛtyāśrayo hi kāryakāraṇabhāvo lokavyavahārāpekṣaḥ. na ca sahabhāvinī savyetaraviśāṇavat tathā vyavahāraḥ kvacid asti lokasya, bhāvinī tu darśita eva.*

⁹⁸ PVATS106a6-7: *vaiśeṣikāṇām punaḥ sahabhuvāṃ hetuphalabhāva āgamam āśrītya, na lokam iti.*

he refers to things that stand in *samavāya* relation to each other. For instance, a substance like a pot arises together with its qualities like color, and yet the pot is the *samavāyi-kāraṇa* of the color. It is interesting to note that in order to avoid this difficulty, certain Vaiśeṣikas assumed that an arisen substance exists for one moment (i.e., the first moment of its existence) without any qualities.⁹⁹

Jitāri on future cause

Concerning the later literature, we cannot say that the *bhāvikāraṇavāda* was a resounding success. Mostly it was not even discussed,¹⁰⁰ let alone accepted. However, one important exception has to be noted here. The tenth century Buddhist scholar Jitāri has written an extensive work called *Vādashānāni* (the title is uncertain) in which he discusses points of dispute between Buddhist, Brahmin and Jaina philosophers. No complete manuscript of this generally little-known work seems to have survived. The largest known manuscript, photocopies of which are also kept at the China Tibetology Research Center, Beijing, contains twenty chapters discussing central philosophical topics such as the existence of universals, substances (or wholes), the validity of the Veda, philosophy of language (*apoha*), momentariness, idealism (*viññaptimātratā*) and so on. The work is modular, and each chapter can be read as an independent short treatise. One such treatise is dedicated to proving the doctrine of backward causation (*bhāvikāraṇavāda*). My colleague Junjie Chu plans a diplomatic edition of the entire manuscript in the next few years. For my part, I presented Jitāri's work in Franco 2015 and hope to edit and translate this work quite soon for John Taber's felicitation volume. For the time being, I can only present briefly the main points of the Jitāri's treatise.

⁹⁹ See Shastri 1976: 290.

¹⁰⁰ For a fairly detailed criticism, see NBhū, pp. 501-503.

The treatise begins (folio 64a4) with dedicatory verse to Mañjuḥṣa followed by a formal inference (*parārthānumāna*) proving that all necessary effects (*avaśyambhāvikārya*) have positive and negative entailments (*anvaya* and *vyatireka*) followed or complied by their causes. While the former is unusual and shows perhaps the particular importance of this topic—most of the chapters in the *Vādashtānāni* do not begin with a *maṅgala* verse—the latter is common. All chapters begin with a formal inference, which forms the main argument of the chapter. These inferences follow the form adduced by Dharmakīrti, namely, a statement of the concomitance (*vyāpti*) and of the fact that the reason is a property of subject of inference (*pakṣadharmatā*). In the present case, the concomitance is: that which has positive and negative entailments that are followed by something else is the cause of that thing, for instance, fire of smoke.¹⁰¹ And all necessary effects have positive and negative entailments followed by their cause. The inference thus employs a reason based on own nature.¹⁰² The implication is reversible. An effect (in general) is a sufficient condition for its cause and a cause is a sufficient condition for its necessary effect (i.e., for an effect that arises necessarily from it). Therefore, each can be considered as a cause of the other and each be used in an inference as an effect of the other.

The opponent objects that the reason is not established because an effect, which does not exist at the time of its cause, for it is a future entity in relation to its cause, cannot have positive and negative entailments followed by its cause.¹⁰³ Positive entailment is characterized by existence, and the effect does not exist when the cause arises.¹⁰⁴ The cause also cannot follow a negative entailment.

¹⁰¹ VS 64a4-5: *iha yad yenānuvīhitānvayavyatirekam, tat tasya kāraṇam, yathā dahano dhūmasya.*

¹⁰² VS 64a5: *svahetunānuvīhitānvayavyatirekaṃ cāvaśyambhāvikāryaṃ sarvaṃ iti svabhāvahetuḥ.*

¹⁰³ VS 64a5-6: *nanv ayam asiddho hetuḥ kāryasya bhāvitvenāsato^a 'nvayavyatirekānuvidhānāyogāt.* ^a*bhāvitvena- : bhāvatvena-* Ms.

¹⁰⁴ VS 64a6-b1: *bhāvalakṣaṇo^a hy anvayo na cedam kāraṇodayasamaye samastīti katham tadīyam anvayam anvīyād dhetuḥ?* ^a*bhāvalakṣaṇo : bhāvilakṣaṇo* Ms.

For if the cause would comply with the absence of the effect,¹⁰⁵ it will never arise because the effect never exists at the time of the cause.¹⁰⁶

In his reply, Jitāri distinguishes between two possible positions of the opponent; he could make the above objections while being a *kṣaṇikavādin*, i.e., while endorsing the Buddhist theory of momentariness, or by being *akṣaṇikavādin*, i.e., by rejecting it.¹⁰⁷ This distinction does not play a role in the PVABh; as we saw, Prajñākara-gupta conducts the discussion on the level of everyday practice and the doctrine of momentariness plays no role in it. Now, if the opponent subscribes to the theory of momentariness, then just as the complying with positive and negative entailments is admitted for a past moment, the same should be accepted for a future moment. As Jitāri mischievously puts it, the future moment has not committed any offence (*aparādha*) that one should forbid it to have such compliance.¹⁰⁸

The opponent may object that even though a past thing does not exist at the time of its effect, nevertheless it existed in the past and thus it is not impossible for a present effect to comply with its existence. Jitāri answers that one could say the same thing for a future cause: even though a future thing does not exist at the time of its effect, nevertheless it will exist in the future and thus it is not impossible for a present (or past) object to comply with its existence. Both past and future causes exist in their own time and both do not exist at another time, namely, the time of their effect. In this respect, there is no difference whatsoever between them. And when there is no difference, it is not appropriate to approve only one of the two.¹⁰⁹

¹⁰⁵ The *vyatireka* means: if the necessary effect is absent, the cause is absent.

¹⁰⁶ VS 64b1-2: *vyatirekam apy asya na hetur anuvidhatte. yadi hy eṣa tadīyam abhāvam anukuryāt, na kadācid utpattim ātmasātkuryāt. na hy asya kadācid api kāraṇodayakāle sattā sambhavati.*

¹⁰⁷ VS 64b2: *tatredan nirūpyate — anāgatabhāvābhānuvidhānābhāvaḥ kṣaṇika-vādinā^a vā bhavatābhīdhyetākṣaṇikavādinā vā.* ^a *kṣaṇikavādinā : kṣaṇamkāvādinā* Ms.

¹⁰⁸ VS 64b2-3: *prathame pakṣe yathā bhavān atītasya kāraṇakṣaṇasyānvayavyatirekānuvidhānam icchati, tathānāgatasya^api kiṃ necchati? na hy anāgatenāparāddham nāma kiñcīt.*

¹⁰⁹ VS 64b4-5: *atha manyase — yady apy atītasya sattā kāryakāle nāsti, tathāpi abhūt. tataḥ tadbhāvā<bhāvā?>nuvidhānaṃ varttamānasya nāyuktam. evaṃ^a tarhi*

If the opponent opts for the position that things are not momentary, this would seem at first sight to allow an important distinction between past and future causes, for a past cause may continue to exist at the time of the effect. Jitāri, however rejects this position. Even though the cause may continue to exist, it is useless when the effect already exists¹¹⁰ and nothing remains to be done for it. Thus, even if a past thing continues to exist, its nature of a cause no longer exists when the effect is there. Thus, the parity between the past and future cause remains.¹¹¹

The opponent, presumably returning to the theory of momentariness, claims that the perishing of the cause and the arising of the effect happen at the same time. Thus, the two existences of the cause and the effect are not separated by non-existence, and therefore, the complying with the positive entailment is indeed established for a past cause, but not for a future cause because it is separated in time from its effect by non-existence. For if the effect would arise when the cause has already perished (or is not yet existent), it would arise even when the cause is non-existent.¹¹²

bhāviny api samānam^b etat. tathā hi yady api kāryakāle sattā nāsti bhaviṣyati,^c tathāpi bhaviṣyati tatas tasyāpi bhāvābhāvānuvidhānam varttamānasya nāyuktam. na hy atītajātayoḥ svakāle sattāṃ kālāntare vāsattāṃ prati kaścīd viśeṣaḥ. na cāsati viśeṣe 'nyataraparigraho jyāyān.

^a Ms. *eva*. ^b *samānam* : [kra]mānam Ms. ^c Read as loc. sing.

¹¹⁰ See also PV III 26 in Franco and Notake 2014: 83:

*niṣpatter aparādhūnam api kāryaṃ svahetunā |
sambadhyate kalpanayā ...*

“Even an effect is related to its cause [only] by conceptual construction because, since it has [already] arisen, it does not depend on something else.”

¹¹¹ VS 65a1-2: *dvitīyapakṣāśrayo 'pi na śreyān. akṣaṇikapakṣe 'pi hi yad eva kāryāt prāgbhāvīkāraṇasya svarūpam, tad eva tadutpattau nimittaṃ. akṣaṇike 'py rthe^a tad anupayujyamānam api kāryakālam anuvarttate. na hi labdhātmanaḥ kāryasya kāryaṃ kiñcid asti, yena tadātanaḥ kāraṇātmaupayogam āsādayet. sa ca prāgbhāvī svabhāvo bhāvī ca kāryakāle nāsti. tato yathaitasyānvayavyatirekānuvidhānam^b tathānāgatasyāpīti katham asiddhir hetoḥ?*

^a *akṣaṇike 'py arthe* : *akṣaṇikatvārthe* Ms. ^b *-ānvaya-* : *-ārthaya-* Ms.

¹¹² VS 65a3-4: *nanu nāśotpādaḥ samaṃ dvayam iti. kāraṇavyayakāryodayayoḥ samānakālatvāt, kāryakāraṇasattayor asttāyā vyavadhānābhāvād, atītānvayānuvidhānam upapadyata eva, na tv anāgatasya, tasyāsattāyā vyavadhānāt. yadi hi kāraṇe naṣṭe kāryotpattiḥ syād, asaty eva kāraṇe syāt.*

Jitāri retorts that the same two alternatives are possible for the future cause. It can be one that immediately follows the effect or be separated in time from the effect. If the opponent insists that separation in time between cause and effect is not acceptable, a future cause can also immediately follow the effect.¹¹³

The opponent attempts to establish a difference between the two types of causes by having recourse to different types of non-existence (*abhāva*). As is well known, the Nyāya philosophical tradition distinguishes between four types non-existence, two of which are previous absence (*prāgabhāva*) and absence after destruction (*pradhvaṃsābhāva*) or posterior absence (Jitāri uses *paścādasattva*). However, Jitāri refuses to accept the difference between various kinds of non-existence;¹¹⁴ this point was repeatedly made in the PVABh.¹¹⁵

The opponent point out (65b2) the obvious fact that something non-existing cannot produce; thus, there is indeed a difference between past and so-called future causes, but here too, Jitāri refuses to acknowledge a difference. If the opponent claims that because something non-existing cannot produce, the previous non-existence of the cause in relation to the effect obstructs (i.e., makes impossible the production of the effect), then one should question the notion of being a producer (*janakatva*). If a producer is something, the existence of which is necessary in the production of the effect, the fact that a future thing is a producer is not contradicted because it too is necessary in the production of the effect. If one claims that the necessary existence of a future thing did not exist in the past, one could equally say that the necessary existence of a past thing will not exist in the future. Thus, the same rule applies to both cases. However, the non-existence of the future cause at the time of the effect should not be adduced as an argument against it because at that time the past cause too does not exist. If it is maintained that a remote future thing is not existing, a remote past thing also does not exist at

¹¹³ VS 65a6-b1: *tatreḍaṃ cintyate — kasyānāgatasyāsattvam ucyate? kim anantara-sya kim vā viprakṛṣṭasya? tatrānantarasyānāgatasyāsattvavyavadhānāśūṇyatvād āsannasyevātītasya katham asattvam?*

¹¹⁴ VS 65b1: *kāryāt prāgasattvam iti cet, atītasyāpi paścādasattvam iti na viśeṣaṃ paśyāmaḥ.*

¹¹⁵ Cf. the summary above.

the time of the effect. Therefore the opponent's objections are nonsensical.¹¹⁶

The discussion then continues with the alternative that a past cause is separated in time from the effect. Against the opponent who refuses to admit this possibility, Jitāri claims that he would not be able to account for the arising of consciousness after one faints and so on, given that the possibility of the body being the cause of consciousness after the state of swoon and so forth has been rejected by the reasoning employed in the proof of the other world (i.e., the proof of rebirth, or more precisely, of previous lives).¹¹⁷ If the remote past cognition is also not a cause, then how could the arising cognition after swoon and so forth be without a cause?¹¹⁸

The opponent, here obviously not a Buddhist, opines that the Self (*ātman*) is the cause of the re-emergence of consciousness after swoon and therefore the first cognition after swoon is not without a cause.¹¹⁹ Jitāri retorts with the usual arguments that the *ātman* cannot be a cause inasmuch as it is permanent. If the opponent argues that an eternal thing is a cause, then there should be a cognition also in swoon and so forth. Further, it would be futile to say that because the auxiliary causes are incomplete, the cognition is absent at the time of swoon. For even in association with other things, the *ātman* is not an

¹¹⁶ VS 65b2-5: *asato janakatvāyogāt^a prāgasatvam bādhakam iti cet, kim idaṃ janakatvaṃ nāma? kāryotpattāḥ avasāyambhāvaḥ. yady evaṃ anāgatasyāpi^b janakatvam aviruddham, tasyāpy avasāyambhāvāt. anāgatasyāvasāyambhāvo nābhūd iti cet, atītasyāpi na bhavaiṣyatīti samāno^c nyāyaḥ. kāryakāle tv anāgatasyāsattvam anupanyāsanīyam atītasyāpi tadānīm^d asattvāt. atha viprakṛṣṭam^e anāgatam asad ity ucyate. viprakṛṣṭam atītam apy asad eveti na kiñcid etat.*

^a *janakatvāyogāt* : *janakatvāt yogāt* Ms. ^b *anāgata-* : *anāgagata-* Ms. ^c *samāno* : *sāmāno* Ms. ^d *tadānīm* : *tadanīm* Ms. ^e *viprakṛṣṭam* : *viprakraṣṭam* Ms.

¹¹⁷ This could be a reference to a chapter that is not included in the available manuscript. The same is proved at length in the *Pramāṇasiddhi* chapter of the *Pramāṇavārttika*; cf. chapter 3 above.

¹¹⁸ VS 65b5-6: *tasyājanakatvād asattve py adoṣa iti cet, na tarhi mūrccādivyapagame vijñānena bhavitavyam, śarīrasya kāraṇatve paralokasāadhanoktena nyāyena niṣiddhe, vijñāne ca tadānīm nirudde.*

¹¹⁹ VS 65b6: *yadi cirātītam api vijñānaṃ na hetuḥ, tadā katham ahetukā vijñānotpattir yujyate. ātmahetukatvān nāhetuketi cet.*

agent of production.¹²⁰ The own nature of a permanent thing is exactly the same at all times. Thus, how could its action of producing cognitions stop in a state of swoon? By this, the complete cessation of cognition in a state of swoon is contradicted. Since the *ātman* depends on its own form alone, it cannot act only sometimes.¹²¹

Another opponent—this one seems to be a Buddhist¹²²—suggests that consciousness actually exists even in a state of swoon, but if so, the opponent should also accept that there is consciousness in the attainment of suppression (*nirodhasamāpatti*) and the attainment of consciousnesslessness (*asañjñīsamāpatti*).¹²³

Yet another alternative would be to claim that consciousness indeed exists in all these states, i.e., also during the attainment of suppression etc., because the universal concomitance is established between cognitions. Therefore, every cognition is preceded by another cognition which is its immediately preceding homogenous cause (*samanantarapratyaya*). Thus, the first cognition when one awakes from swoon, *nirodhasamāpatti*, *asañjñīsamāpatti* and so forth is established to arise from the immediately preceding cognition. However, this is not a tenable position, Jitāri says, because every cognition is pervaded by the precedence with a cognition as such, not with a precedence by a cognition which immediately precedes it.¹²⁴

¹²⁰ VS 65b6-66a1: *nityatvād dhetor mūrcchādāv api tarhi vijñānena bhavitavyam. saḥakāripratyayasya vaikalāyāt tadā tasyābhāva ity api vārttam. na hi sa sāhitye 'pi pararūpeṇa kartā.*

¹²¹ VS 66a1-2: *svarūpaṃ cānyadāpi tad eveti katham kadācit kriyāvīramah? etena pariśāmah pratyuktaḥ. tasyāpi svarūpamātrādhīnatvā^a kadācitkatvāyogāt.*

^a -dhīna- : -dhīna-

¹²² There is no indication in the text to a change in the identity of the opponent; my assumption is based on the opinion that *nirodhasamāpatti* and *asañjñīsamāpatti* are typically Buddhist meditations and that Jitāri would not use them when arguing with a Brāhmaṇa who accepts the existence of a permanent *ātman*.

¹²³ VS 66a2-3: *atha mūrcchādāv api jñānam abhyupagamyate, nirodhāsañjñīsamāpattyor api kiṃ nābhyupagamyate?*

¹²⁴ Jitāri must be referring here to a previous cognition as a *samanantarapratyaya*. The position that the last cognition before entering *nirodhasamāpatti* and *asañjñīsamāpatti* produces the first cognition coming out of these states (*vyutthānacitta*) is clearly expressed Yaśomitra, AKV, vol. 1, p. 347.13-14: *samāpattivyutthānacittaṃ samāpattipraveśacittajanitaṃ. ataś cittasamanantaraṃ na cittanirantaraṃ samāpattikṣaṇavyavahitatvāt.* “The cognition of coming out of the

And the immediate precedence is not observed in the example of swoon, *nirodhasamāpatti* and so on. Thus, the previous arguments are to be applied to all these cases.¹²⁵ Therefore, from the cognition in the state of awakening, which is an effect, its cause is being established, and consequently a remote past cause must be established.

Further, if one claims that the remote past cause does not exist at the time of the effect and for this reason cannot be a cause, then the immediately preceding cognition also does not exist at the time of the arising of the effect and would also not be a cause. Both exist before the effect and both do not exist at the time of the effect. The property of being a cause is not affected by the fact that the cause is in the remote past or in the immediately preceding moment.¹²⁶

The opponent now introduces a distinction between only existence or existence alone (for the immediately preceding cause) and not only existence but also non-existence (for the remote cause). “Existence alone” (*kevalam sattvam, sattvam eva*) means that as soon as the cause exists, the effect arises, and thus there is no interval of non-existence between the cause and the effect. This alternative too is rejected by Jitāri because each cause is limited to its own time and causes cannot

[two] *samāpattis* is produced by the cognition of entering the *samāpattis*. Therefore, [this cognition of exiting the *samāpattis*] has a cognition as a *samanatnara*, but not cognition without an interval, because it is separated [from its *samanantarapratyaya*] by the moments of the *samāpattis*.” See also La Vallée Poussin, *La Siddhi*, pp. 248-249: “Le Manovijñāna est interrompu dans les états exempts de pensée (*acittāvasthā*) ; lorsqu’il reprend, il a pour *krānta-āśraya* le moment antérieur de sa sorte, c’est-à-dire le dernier moment précédent de Manovijñāna. – De même pour les cinq Vijñānas : ce qu’on nomme *samanantarapratyaya*, « antécédent pareil et immédiat », n’est pas le moment précédent immédiatement et d’une autre sorte (*cittanirantara*), c’est le dernier moment de même sorte : le moment qui n’est pas séparé par un moment de même sorte. (Comparer Kośa, ii, 306).”

¹²⁵ VS 66a3-4: *atha sarvatra itad iṣyate, jñānasya samantarapratyayapūrvakatvena siddhāyām vyāptau mūrcchādīprabodhaprathamabhāvino vijñānasya tathāsiddheḥ tad asat. jñānam hi jñānamātrapūrvakatvena vyāptam, na tv anantarajñānapūrvakatvena^a. na cānantaryam dṛṣṭāntena dṛṣṭam iti sarvatra tad anuvarttanīyam.*

^a *anantara-* : *anutara-* Ms.

¹²⁶ VS 66a5-b2: *cirātītyāsattvād akāraṇatvam iti cet, anantarasyāpi tarhy asattvād akāraṇatvaprasaṅgaḥ. kāryakāle hy asattvam prāk tu sattvam anayor dvayor apy aviśiṣṭam. na hy anantarasyāpi prāgbhāvād anyad eva hetutvam, tac cānantaravato^a ’pi samānam.* ^a *cāntaravato* : *cānantaravato* Ms.

be limited to immediately preceding causes. Precedence could count at most for being an auxiliary cause (*sattvopayoga*). Therefore, one cannot infer that there is consciousness in the state of swoon.¹²⁷

However, how is the non-existence of cognition in a state of swoon etc., determined?¹²⁸ The problem is clear, for to determine that there is no cognition, one needs a cognition, in which case there would be no non-cognition. Jitāri says that it is determined simply because there is no awareness. He quotes the Bhāṣyakāra (i.e., Prajñākara-gupta): “Indeed the form of non-awareness is not accepted as awareness. If nevertheless (i.e., in spite of having the form of non-awareness) it [would] be [accepted as awareness], there would be awareness in a dead body too.”¹²⁹

However, this assertion seems indeed problematic. To begin with, there is no determination of the absence of awareness when one is in a state of swoon because this is impossible when one is in this state.¹³⁰ Therefore, it has to be determined in a later time. How does this happen? For the one who awakes from swoon and so forth, the following determination indeed arises: “During all this time, I did not cognize anything.”¹³¹ One may object: This determination, namely, that one did not cognize anything for some time, is indeed possible because the experiences one had at the time of swoon etc., although they were cognized by themselves, are simply not remembered later. Thus, the later determination “during all this time, I did not cognize anything” cannot in itself be a proof that there is no awareness in a

¹²⁷ VS 66a5-b1: *cirātītasya kāryāt prāg asattvam^a api na kevalam satvam, anantarasya tu sattvam eveti ayam anayor bheda ity api nihsāram, tasyāpi niyatakalatvāt svarūpalābhasya tataḥ prāgbhāvāt, kevalam sattvopayogāt. tasmān naiva mūrccchādyavasthāsu jñānam anumātuḥ śakyam.*

¹²⁸ VS 66b1-2: *asattvam api^a katham niścīyata iti cet. ^aapi : ami Ms.*

¹²⁹ PVABh 75.10:

*asaṃvedanaṃ rūpaṃ hi na saṃvedanam iṣyati |
tathāpi yadi tadbhāvo mṛtasyāpy astu vedanam || 466 ||*

¹³⁰ VS 66b3-4: *nanu na^a tāvat mūrccchādīkāle saṃvedanābhāvaniścayo 'sti, tathātve tadayogāt. ^ananu na : na nanu Ms.*

¹³¹ VS 66b4-5: *utpadyata eva tāvaṃ mūrccchādivibuddhasyāyaṃ niścayo nāham iyantam kalam kim apy ajñāsiṣam iti.*

state of swoon and so forth.¹³² It is possible to have an experience and not to remember it.

Jitāri retorts that if this position is accepted, the consequence would be that the absence of cognition is never established. For instance, when one concentrates on another object or one is absent-minded, the non-determination of an object connected to one's senses would not be established. However, it is indeed possible to state the following: The person whose mind is strongly connected to another object or the one overcome by drowsiness has no immediate cognition of an object connected to his/her senses.¹³³

If one accepts that cognitions arise in a state of drowsiness and so forth, one may also accept that there are cognitions in a state of swoon. But it is preferable to accept that there are no cognitions in such states because this would contradict the immediate experience. Therefore, in a state where a cognition is not perceived, it simply does not exist. And when this is the case, just as there is complying with positive and negative entailments by a present cognition to a remote past cause, in the same manner, there is also complying with positive and negative entailments to a remote future cause. Therefore, the reason in the inference at the beginning of this treatise (namely, the compliance with positive and negative entailments by the cause) is not unestablished.¹³⁴

One may object: The proponent wants to establish a property-possessor that is a necessary effect as a cause here by having positive and negative entailments that are complied to its own cause. But the necessity of the effect is future, and therefore uncertain, because there is no necessity that the causes will undertake

¹³² VS 66b5-6: *tadātanānām anubhavanām svasaṃviditānām^a api svaviśayasmarāṇa-karaṇaghaṭanābhāvād ayam adhyavasāyo ghaṭata eva. tad ayam na saṃvedanavirahasāadhanāya paryāpnoti.*

^a *svasaṃviditānām* : .. *saṃviditānām* Ms. ^b *-ghaṭanābhāvād* : *-ghaṭa{vā}bhāvād* Ms.; { } enclose deletions by the scribe.

¹³³ VS 66b6-67a2: *na tarhīdānīm kadācid api jñānābhāvaḥ. sidhyati viśayāntarāvadhānādivaiguṇyayor api योग्यदेशपरिच्छेदसिद्धिप्रसाङ्गत. śakyam eva hītham abhidhātum viśayāntarātyantāsaktamanaso nidropadrūtasya nāsty eva sannikṛṣṭārthasākṣātkāri jñānam.*

¹³⁴ VS 67a5-6: *yathā cirātītakāraṇānvayavyatirekānuvidhānam adhunātanasya, tathā cirabhāvyānvayavyatirekānuvidhānam apīti na tad apekṣayāpy siddhir hetoḥ.*

the production of the effect. As Prajñākaragupta said: “Causes do not necessarily have effects.”¹³⁵ Consequently, the reason is not established in the support, that is, in the subject of the inference.

However, the objection is unfounded. It cannot be assumed that an effect that follows immediately upon the cause is uncertain because there is no lapse of time and therefore no obstacle (*pratibandha*) is possible. Jitāri quotes here PV I 8, which states that one cannot infer the effect from the cause because there may be an obstacle to the transformation of the capable causes.¹³⁶ This may seem surprising, but the reason for the quote is probably its negative implication, namely, that if there is no obstacle, or if the obstacle is not possible, then one may well infer the arising of the effect, at least of a necessary effect. Therefore, the reason is not inconclusive. If it is assumed that even when there is no obstacle, the cause does not produce the effect, why not assume that the mother is also barren? Not every effect is uncertain, even if it is remote in time, simply because some effects are observed to be certain. As in the example of omens of death,¹³⁷ even remote effects can be definitive.¹³⁸

How could a remote effect arise necessarily? Precisely because one makes one infer its cause. For the necessary existence of something cannot be denied. And it is not correct to consider that it is without a cause. And if something future is established as a cause, other causes need not be assumed just because the cause is remote in

¹³⁵ PVABh 175.1: *nāvaśyaṃ kāraṇāni kāryavanti bhavantīti*.

¹³⁶ For an annotated translation of this verse see Steinkellner 2013: 18.

¹³⁷ On the example of *ariṣṭa* in PVABh above pp. 405-406.

¹³⁸ VS 67a6-b5: *syād etat — avaśyambhāvinaḥ kāryasya dharmiṇaḥ svahetvanukṛtānvayavyatirekatayā kāraṇatvam iha sisādhayiṣyata eva. kāryasyāvaśyambhāvītā bhāvīkī kāraṇānāṃ tadārambhaniyamābhāvāt. yathāha. nāvaśyaṃ kāraṇāni kāryavanti bhavantīti. tad ayaṃ dharmāsiddher āśrayāsiddho hetur iti. tad etad asat. na hi tāvad anantarakāryam anavaśyaṃbhāvīti śakyam vibhāvayitum, tatra kālakṣayābhāvena pratibandhābhāvāt. tathā hi*

*sāmagrīphalaśaktīnāṃ pariṇāmānubandhini |
anaikāntikatā kārye pratibandhasya sambhavāt || PV I 8 ||*

hetusattāsannidhānamātrādhīne tu kārye, pratibandhakākiñcitkaratvāt, kuto 'naikāntikata? athāsaty api pratibandhe samarthasyāpi kāryākaraṇaṃ sambhavyate, mātur api vandhyātvaṃ kiṃ na sambhavyate? viprakṛṣṭasyāpi na sarvasya kāryasyāvaśyakābhāvaḥ kasyacid āvaśyakasyāpi darśanāt, ariṣṭād viprakṛṣṭasyāpi drṣṭāntasya drṣṭaikāntatvāt.

time.¹³⁹ Therefore, the reason in the above inference is well established.

As for the determination of the reason as being contradictory, this should not be maintained, for those who understand define a contradictory reason as what exists awry (lit., “differently”) in the *sapakṣa* and *vipakṣa*.¹⁴⁰ And the existence of the reason of the inference (having positive and negative entailments complied to by causes) in the *sapakṣa* (i.e., in causes that have necessary effects) is observed. Thus, no learned person assumes that it is contradictory.¹⁴¹

Inconclusiveness (*anaikāntikatā*) is also not possible for this reason. For if this inconclusiveness existed, it could be either because the deviation is being determined or because the deviation is assumed, for any other alternative is included precisely in these two.¹⁴² In respect to these, the first alternative is not tenable because there is no determination of the existence of the reason in the *vipakṣa*.¹⁴³ Nor should one adhere to the second alternative. First of all, the speaking in everyday practice about a cause is not without a reason, for otherwise one would not be able to allocate the content of cognitions to their corresponding objects. And in relation to the effect as well, one does not assume another cause in proximity for it, which goes beyond compliance of existence and non-existence (i.e., beyond positive and negative entailments). In the case of fire too, it is said to

¹³⁹ This is stated very tentatively. The text is slightly corrupt.

¹⁴⁰ I.e., is absent in the *sapakṣa* and present in the *vipakṣa*.

¹⁴¹ VS 67b5-68a1: *vyavahitasya kāryasya katham avaśyambhāva iti cet, ata eva hetutvam anumāpyate. na hi bhāvasyāvaśyambhāvo nihnotuṣ śakyah. sa cānimittako na yujyate. na ca nimittatvād anyanimitta<tvam adhyava>syate. tad evaṃ na kathamcid asiddho hetur iti. viruddhatvādhyavasāyo 'piha na nidheyah. yo hi sapakṣavipakṣe param asti sa viruddha iti buddhir buddhimatām. asya ca hetoḥ sapakṣe sambhavadrṣṭa iti na viruddhatām sambhāvayati vipaścīt kaścīt.*

¹⁴² VS 68a1-2: *anaikāntikāntikatāpy^a asya na sambhāvīyā. sā hi sambhavantī niścīyamānā vyabhicāratayā vā syāt sambhāvyamānavyabhicāratayā vā, prakārāntara-syātraivāntarbhāvāt.* ^a *anaikāntikāntika-* : *anaikāntikāntika-* Ms.

¹⁴³ VS 68a2-3: *atra na tāvad ādyo vikalpaḥ kalpanām^a arhati. niścīte vipakṣe vṛttiniścayābhāvāt, tasyān (a lacuna here?) tenānuvīhitānvayavyatirekatā ca bhaviṣyati.*

^a *kalpanām* : *kalapānām* Ms.

be a cause only because of the smoke's complying with its existence and non-existence.¹⁴⁴

Now, the opponent proposes a different approach to causal relation. It should not be defined in terms of positive and negative entailments; rather, to be a cause is to have an operation/action (*vyāpāra*) in relation to the effect.¹⁴⁵ Jitāri rejects this alternative by pointing out that it would lead to an infinite regress. This operation, because it arises sometimes (*kādācitka*), is itself an effect. Therefore, it also must have a cause, which has another operation and so on. Thus, when a series of operations is assumed, there would be an infinite regress. On the other hand, when something is a cause only by positive and negative entailments, that should hold good in other cases as well. Therefore, enough with this false assumption of an operation.¹⁴⁶

The opponent who seems to be now at the end of his wits suggests that the cause be what is perceived before the effect.¹⁴⁷ We saw this suggestion raised in the PVABh and Jitāri quotes Prajñākaragupta in reply. The proposition is unacceptable because things that are not perceived would not be causes. As Prajñākaragupta said: "If perceiving first [is the condition that] one thing is the cause of another, the [invisible] seed inside the earth would not be the cause of the sprout."¹⁴⁸ Further, if a cause is something that exists and is perceived before the effect, all previous things would be causes for all effects.¹⁴⁹

¹⁴⁴ VS 68a3-6: *na ca dvitīyaprakāraparigrahaḥ^a kāryaḥ. na cāsau yujyate. na hi tāvad ayaṃ anibandhana eva tatkāraṇavyavahāro viśayapratiniyamāyogāt. na ca kārye 'py anuvihitabhāvābhāvatātiriktaṃ asya gocaracārinimittāntaraṃ sambhāvayati. dahanāder api hi dhūmādikāraṇatāvyavahāro dhūmādibhāvābhāvānuvidhānādhīna^b eva.*

^a *dvitīya-* : *tadvettateti dvitīya-* Ms. ^b *-bhāvānuvidhā-* : *-bhāvān na vidhā-* Ms.

¹⁴⁵ VS 68a6: *na^a kṛtānvayavyatirekatāsyā nimittam, api tu kārye vyāpāra iti cet.*

^a *na* : *na{r}* *kāryān na*; presumably after making a mistake, the scribe started this sentence again.

¹⁴⁶ VS 68a6b-2: *nanv asāv api vyāpāro 'sya kādācitkatvāt kāryam eva. tatas tatrāpi kāraṇatāvyāpāravatteti vyāpāraparamparāparikalpanāyām anavasthā syāt. anvaya-vyatirekamātreṇa tatkāraṇatve tad anyatrāpi tathāivāstām alam. alikavyāpāra-kalpanayā.*

¹⁴⁷ VS 68b2: *kāryāt prāḡ upalabhyate tarhi nimitta astv iti cet.*

¹⁴⁸ VS 68b2-3 quoting PVABh v. 439 (on 49cd); cf. above.

¹⁴⁹ VS 68b3-4: *upalambhopalakṣitaṃ prāḡbhāvamātraṃ nimittam iti cet, sarvasya tarhi prāḡbhāvinaḥ sarvatra kārye kāraṇatā syāt.*

The opponent now suggests restricting or limiting positive and negative entailments by the previous existence of the cause.¹⁵⁰ That is, positive and negative entailments alone or as such are not enough to establish causal relation, but only when causes exist before the effects. Jitāri claims that the addition of precedence of the cause to the definition of causality is superfluous. Again he quotes Prajñākara in his support: “What is the contradiction if the relationship between cause and effect is due only to arising of the effect if that cause exists? [None!] Then what purpose does previous and posterior existence serve?”¹⁵¹

The opponent maintains that there is a purpose. If there is no qualification that the cause exists before the effect is admitted, an inadmissible consequence would arise that there will be a future cause. Jitāri repeats his previous ironic question: what offence has the future thing done to you, due to which it should not be accepted as a cause?¹⁵² He also points out the advantage of the doctrine of future cause for the proof of life after death.¹⁵³ People in everyday practice perceive the relation of cause and effect only as arising if something else exists.¹⁵⁴ In this occasion Jitāri seems to quote Dignāga’s definition of the relationship between cause and effect, which also does not contain any indication that the cause must exist before the effect: “That by whose existence and non-existence another thing exists and does not exist is the cause; the other is the effect. In this way the logicians explain the characteristic of cause and effect.”¹⁵⁵

¹⁵⁰ VS 68b4: *niyamavataḥ prāghbhāvasya nimittatvād ayam aprasaṅga iti cet.*

¹⁵¹ VS 68b6 quoting PVABh v. 440 (on PV II 49cd).

¹⁵² VS 69a1: *asati viśeṣaṇe bhaviṣyati bhaviṣyakāraṇatvaprasaṅga^a iti cet, kiṃ punar atra bhavato 'nāgatenāparāddham yenaṣya hetutvaṇ necchatī. ^a bhaviṣya- : bhāviṣya-Ms.*

¹⁵³ VS 69a1-2: *anāgatakāraṇavāde ca bhāvīparalokānumānam anavadyaṃ syād iti guṇam eva yāvat paśyāmaḥ.*

¹⁵⁴ VS 69a2-3: *tadbhāve bhāvitāmātram eva ca kāryakāraṇabhāvaṃ lokaḥ pratipadyate.*

¹⁵⁵ VS 69a3-4: *tathāhur ācāryapādāḥ. yasya bhāvābhāvābhyāṃ yasya bhāvābhāvau sa hehur itaro hetumān iti hetuhetumator lakṣaṇam ācakṣete hetukā (read haitukā) iti. Cf. ĀP on 7a: 'di ltar gtan tshigs pa dag ni yod pa dañ med pa dag gi de dañ ldan pa ñid ni rgyu dañ rgyu dañ ldan pa rim gyis skye ba dag gi yañ mtshan ñid yin par smra'o. This statement of Dignāga seems to have been taken directly from the*

Jitāri also quotes Dharmakīrti's definition of causal relation in terms of positive and negative entailments.¹⁵⁶ Therefore, to be a cause is not related to the concept of activity, but only to the complying with positive and negative entailments. If one considers that to be a cause means to have an activity, and not to have positive and negative entailments, then the pervasion between the reason and the property to be proved could not be established.

Thus, the reason of the inference is free from the three faults of being non-established, doubtful and contradictory.¹⁵⁷

Jitāri concludes that the relation of between cause and effect has been well proved by the Ornament (viz., PVABh) in relation to the future cause. Further, when things in everyday practice are well penetrated, they can be enjoyed without philosophical deliberation and one should not be strongly attached to false conceptualisations. Whatever merit has been gained by the author, he says, let it make people victorious. A short colophon mentions the title of the work or the chapter, attributes it to Jitāri and mentions the name of the scribe or the commissioner of the manuscript as Jambhaladhara.¹⁵⁸

Abhidharmakośabhāṣya. In the context of the controversy of Vaibhāṣikas and Sautrāntika on *sahabhūhetu*, the cause which arises together with its effect. The Vaibhāṣika defends his position by referring to the following definition (AKBh 84.24-25 on 2.51d): *etad dhi hetuhetumato(r) lakṣaṇam ācakṣate haitukāḥ. yasya bhāvābhāvayor yasya bhāvābhāvau niyamataḥ sa hetur itaro hetumān iti*. “For the logicians say: The mark of cause and effect is this: Cause is that from the absence and presence of which the absence and presence of the [other] is determined; the other is the effect.”

¹⁵⁶ VS 69a4: *kīrtipādāś ca na hy anvayavyatirekābhyām anyo hetuphalayos tadbhāva ity āhuḥ*. Cf. PVin I 3.12f.

¹⁵⁷ VS 69b1: *tad evam amunāsiddhādidoṣatrayaviyoginā hetunā yat [siddham sattvāt] tad upādeyam*. (Words in [] are barely legible.)

¹⁵⁸ VS 69b1-3: *anāgataṃ^a sādhaṃtāpy^b alaṃkāreṇa kāraṇam | kāryakāraṇabhāvasya viṣṭatātvaṃ prasādhitam ||*

vicāraviraheṇaiva ramaṇīyeṣu viṣṭeṣu te nābhīniveṣṭavyam ity eva sūcayaty ayam || śamayitvā yathānyāyam avamānaṃ manīṣiṇi, yan mayādhigataṃ puṇyaṃ tenāstv eṣa jano jinaḥ. bhāvikāraṇavādas sāmāpto mahāpaṇḍitaśrīnāṃ jītāripādānām. likhitam idaṃ jambhaladharasya. ^a *anāgataṃ* : *anāgata* Ms. ^b *-tāpy* : *-tādy* Ms.

One expects Jambhaladhara to be the name of the scribe, but normally it would have appeared in the instrumental. Thus, perhaps the name refers to owner or the person who commissioned the manuscript.

Although Jitāri's work basically restates Prajñākaragupta's theory,¹⁵⁹ we notice some differences in emphasis and structure. The most conspicuous one is, of course, the systematic arrangement of the material as an independent treatise. Further, as is typical for all chapters of the *Vādashānāni*, the doctrine of the future cause is presented as a formal inference and the entire discussion is structured around this inference, or more precisely, around the validity of its reason (*hetu*). The inference is: All necessary effects are causes (of their own causes) because they have positive and negative entailments are complied with by their own causes.

Jitāri's thesis which identifies a necessary effect with a future cause can be found in the PBABh, but interestingly, not in the context of the main discussions of backward causation, but appears as an alternative suggestion in the discussion of efficient action (*arthakriyā*) PVA(o) 70.10-13: "Or a necessary effect is nothing but a cause because [its] cause is pervaded by it. And a pervader that is different [from the pervaded is nothing but a cause, because without it the [effect] does not exist/arise. [If one object:] How could something non-arisen be a cause? [We answer] How could something already arisen be a cause? Thus, the fault is common."¹⁶⁰ The argument is clear: Given that a necessary effect fulfils the condition of being a cause (namely being a necessary condition) in respect to its cause, necessary effects are the causes of their own causes; in other words, necessary effects and their causes are causes of each other. Further, given that causes and effects are separated in time, in each pair of two mutual causes, one cause must exist before the effect, the other after it, and thus be a future cause.

¹⁵⁹ We do not know anything on the doctrine of future cause in the time that separates Jitāri from Prajñākaragupta. As far as I can see, Jitāri uses the PVABh directly and does not seem to rely on any other source (the quotations from Dignāga and Dharmakīrti do not indicate, of course, that they were concerned with backward causation).

¹⁶⁰ PVA(o) 70.10-13: *atha vā tad avaśyaṃbhāvīkāryaṃ kāraṇam eva, tena vyāptatvāt kāraṇasya. yac ca vyatīrīktaṃ vyāpakaṃ, tat kāraṇam eva, tena vinā tadabhāvāt. anutpannam katham kāraṇam? utpannam api katham iti samānaḥ doṣaḥ.* also 71.10-11:

However, we find in Jitāri's work some arguments that are absent in the PVABh and vice versa. For instance, the rejection of the activity (*vyāpāra*) as a necessary characteristic of a cause is discussed by Jitāri in some detail, but as far as I can see, it is absent in the PVABh. On the other hand, the discussion of the *kāraṅkas* is entirely absent in Jitāri's treatise. We also note difference in emphasis; the argument from omens that played an important role in the PVBh is barely mentioned by Jitāri and the explicit connection of the doctrine of the future cause to the doctrine of *pratītyasamutpāda*, which was the starting point for the discussion in the PVABh on PV II 49, is equally absent. Jitāri may have found that reading the doctrine of the future cause into the general formulation of *pratītyasamutpāda* to be a bit far-fetched.

More difficult and important is the question whether the future cause is conceived to produce by the two authors. To be sure, the main idea that *anvaya* and *vyatireka* suffice for the determination of causal relations is common to both authors. However, the crucial question remains: Does a future cause actually act in some way upon a past or present object or is it merely a necessary and/or sufficient condition? Perhaps the clearest statement that the future cause actually acts backwards in time can be found in Prajñākaragupta's treatment of omens. In PVABh 68.1-2 he says (my punctuation differs from Sāṅkṛtyāyana's): *ayam vikāra eva na syāt, yady abhudayena na bhavitavyam. tatkrto 'yam vikāra iti lokavyavahārah*. "This transformation [of consciousness (*cetanā*) at present] would not have taken place, if the [future] good fortune would not necessarily arise. People say: 'This transformation is caused/made (*krta*) by it.'" One has to note, however, that Prajñākaragupta attributes and substantiates¹⁶¹ this opinion by "everyday practice of (common or ordinary) people" (*lokavyavahāra*). He does not endorse it as being entirely or absolutely correct. In a different context Prajñākaragupta

¹⁶¹ The interpretation of Prajñākaragupta's may vary according to one's understanding of the scope of the particle *iti*, namely, whether it stops with *tatkrto* or includes also sentence *ayam vikāra eva na syāt, yady abhudayena na bhavitavyam*. In my understanding, he both attributes and substantiates the theory in relation to everyday practice.

uses the perception of yogis (*yogipratyakṣa*) as an argument for future cause. Indeed if the yogi perceives a future object directly, then the object must be counted among the factors that produce his cognition. This too may suggest that for Prajñākaragupta the future cause is not only a necessary condition, but can also, to use the modern terminology, fulfil the past (on the difference between fulfilling the past and changing the past, cf. below). However, this statement has to be interpreted in relation to Prajñākaragupta's notion of time as sketched above, which states that the past and future objects seen by the yogi are actually present and merely cannot be seen by ordinary people. Thus, in the final analysis, the actual operation of a future cause on a past entity remains unexplained, nevertheless we see in the PVABh a conscious effort to find convincing examples for backward causation. In Jitāri's work, on the other hand, I fail to see that he considers the future cause to be anything other than necessary (and in some cases sufficient) condition. His rejection of the notion of activity of causes seems to point in this direction.

Backward causation in Western philosophy and science

The doctrine of future cause seems absurd at first sight, but it may be reminded that there exists voluminous literature outside the Indian philosophical context on the question as to whether effects can precede their causes. Various viewpoints, often accompanied by highly imaginative examples, have been discussed by such doyens of philosophy as A.J. Ayer, Antony Flew, Michael Dummett, Roderick Chisholm and many others.¹⁶² The examples involve constructed beliefs of African ritual dancers, orthodox Jewish rabbis and pious Calvinists, as well as magical powers of Houdini and other magicians, and, of course, imaginary adventures of time travellers.

Although the vast majority of philosophers deny the existence of backward causation, there is no general agreement as to why this is not the case. Certainly we usually associate causality with a particular

¹⁶² The literature on this subject is vast; I mention here only a handful of papers that I have found the most interesting (no doubt a purely subjective criterion): next to Dummett's papers referred to below cf. also Lewis 1976, Putnam 1975, Gasking 1955, Chisholm and Taylor 1959-60, and Dray, 1959-60.

temporal relation, but is this association a logical necessity? Can we conceive of a world in which a notion of causality associated with the opposite direction is more appropriate? Michael Dummett, for instance, sees no conceptual difficulty in backward causation, especially in areas where we are mere observers and not agents, like the realm of movement of heavenly bodies.¹⁶³ However, even where we are agents, i.e., where we can perform intentional acts, we can conceive of special cases where the future affects the past. In this connection Dummett argues against the attitude of orthodox Jewish theologians who forbid retrospective prayer. Their attitude is that even God can only affect the future, not the past. One cannot affect the past, because once a thing has happened or not happened, one cannot make it not to have happened or to have happened. Thus, it is blasphemous, these theologians say, to pray that something should have happened, for although God is omnipotent he cannot do what is logically impossible, and to utter a retrospective prayer is to mock God by asking him to perform a logical impossibility.¹⁶⁴

Dummett contradicts this position with the following example. Suppose I hear on the radio that a ship has gone down in the Atlantic some days ago and that there are only a few survivors. My son was on that ship, and I immediately utter a prayer that he should be among the survivors. This is, of course, a most natural reaction, but in fact my prayer seems pointless. Either my son is already among the survivors, in which case the prayer is not necessary, or he has already drowned, in which case my prayer cannot be answered any longer. Thus, if I pray in such a manner, and if – unknown to me – my son has already drowned, I am in fact asking God that he should make him not to have drowned. However, there is a way to construe a rationale for this type of prayer, namely, to assume that God is omniscient, that is, that he also knows the future. In this case my retrospective prayer makes sense because God knew that I would be going to pray later on and may therefore have answered my prayer even before it was actually uttered. Thus, the problem with the assumption of backward causation is not that it is logically impossible, but that it is incompatible with

¹⁶³ Cf. Dummett 1978b: 334.

¹⁶⁴ Dummett 1978b: 335ff.

our knowledge of the past once it has been attained without doubt. Could we know the future in the same way that we know the past, the assumption of forward causation would also be impossible in certain cases.

However, Dummet oversimplifies the Jewish orthodox attitude towards the unchangeability of the past. The opinion that the past cannot be changed was not shared by most Jewish theologians and Rabbis. A fascinating case is the Talmudic interpretation of the story of David and Bat-Sheba (2 Samuel 11).

The biblical story is well-known. Israel and Amon are fighting again. David sends Joab and the Israeli army and they destroy the children of Amon and besiege the city of Rabbah, today the capital of Jordan. David, however, remains in Jerusalem. One evening he arose from his bed and walked upon the roof of his palace. We are not told why he got up so late, but I think the biblical author insinuates that while sons of Israel are fighting David is partying all night. Whatever the case may be, David walks on the roof, and from his roof he sees a woman washing herself, and the woman was very beautiful to look upon. David inquired about the woman and was told: This is Bath-Sheba, the daughter of Eliam, the wife of Uriah the Hittite. David sends for her, sleeps with her and she becomes pregnant. David tries to conceal his act and the simplest way would have been to let Uriah believe that the child is his. So David sends for Uriah, asks him for news about the war and then sends him home. But Uriah, who may have got wind of what happened, refuses to go home, and sleeps at the door of the king's house together with the other servants. Although David keeps him for another day in Jerusalem and asks him to go home, Uriah refuses to do so, saying that he is not going to sleep at home as long as his comrades in arms sleep in tents in the battle field. Then David makes him drunk, but even drunk, Uriah does not go home. According to the Talmudic interpretation, this refusal of Uriah is punishable by death because he disobeys the king's orders. Finally David sends Uriah back to the war with a letter to Joab, saying "Set Uriah in the forefront of the hottest battle, and retire from him that he may be smitten and die." And this came to pass. After the mourning period David and Bat-Sheba got married.

The Biblical story is not sparing of David. It clearly describes him as an adulterer and murderer, and the parable of the ewe lamb that is pronounced by Nathan the prophet on this occasion is one of the most upsetting in the Bible. David is severely punished by God. His son from this adultery has to die and his other beloved son, Absalom, commits adultery with the king's own wives in public. And yet it is said in the Talmud: Whoever says that David has sinned is mistaken.

How could David's story be understood in such manner? Let's have a closer look at the Talmudic interpretation.¹⁶⁵ First something has to be interpreted away. In the Bible it is said that David did something evil (2 Samuel 12.9). Without entering into the intricacies of Hebrew grammar, let me just say that this statement is ingeniously (and wrongly) interpreted to say that David had the *intention* of doing something evil. Further, Uriah deserves to die because he refuses to obey the king's orders. But if Uriah deserves to die, why is David being admonished and punished? Well, he committed a procedural error. Uriah should have been brought to trial before being killed. And what about the adultery? There was no adultery. This is explained as follows. At that time when the sons of Israel went war they got divorced first, so Bath-Sheba was a divorced woman when she slept with David. But this sound improbable because anyone who goes to war would destroy his family first. Therefore, Rashi, the great Talmudic commentators of the 10th c. says that the divorce was conditional. If one returned from war, the divorce was invalid; if one died at war the divorce took place retroactively at the moment it was given. In other words, when David slept with Bath-Sheba she was still married, but as soon as Uriah died, it turned out that she was already divorced. So David did not commit adultery because he caused the

¹⁶⁵ *Talmud Bavli*, Shabat, 56, 61. A lively discussion by Admiel Kosman, David hamelech al hagagot [King David on the roofs], Haaeretz 24.4.98 and 8.5.98. According to the Talmud, Bath-Sheba was destined for David since the six days of creation (Sanhedrin 107a). In the Cabalistic literature David and Bath-Sheba are two halves of a single androgynous soul. On the cosmological level, Bath Sheba represent Sefirat Malkhut and it was almost completely purified; it only had to spend a short time in the prison of the Serpent Uriah, but because of David's premature act, it could not be completely purified, and thus his reign could not become the reign of Messiah. Cf. Gikatila 1994 : 10ff., 38ff., and passim. I owe this reference to my friend Saralev Hollander. Cf. also *The Zohar*, Mishpatim 2, 107.

husband to be killed at war, and as we now know this killing was a just punishment because Uriah disobeyed David's command. So now we understand why the Talmudic commentators say that David did not sin. He only had the intention of doing something wrong because when he slept with Bath-Sheba he did not know yet that she was a divorced woman.

The case of David and Bath Sheba is not unique. There are other cases where a backward causation is assumed not only in legendary province but also in modern life. Here is an example of each. Can the wife of Elija the prophet marry again? Elija did not die but went to heaven alive in chariot of fire. Consequently his wife is not a widow. She can nevertheless remarry because Elija's trip to heaven makes him an angel; this changes his marriage retroactively into an angelic marriage, and there is nothing in the Bible to prohibit the wife of an angel to marry another man. An example from modern life: What happens when a woman changes her sex? Can her husband divorce her? He cannot because only a woman can receive a divorce. The solution is to annul the original marriage contract.¹⁶⁶

¹⁶⁶ An example of backward causation in Christianity would be the Immaculate Conception. Mary's own birth is free from the original sin by virtue of the merits of her son.



Jean-Léon Gérôme, *Bethsabée* (ca. 1889)

Returning to Dummett, one may observe that the pattern of his analysis is typical for other examinations of backward causation. According to these analyses backward causation is not logically impossible or self-contradictory, but only problematic in conjunction with additional assumptions. Thus, Bryson Brown, who argues in favour of backward causation and the possibility of time travel, concedes that backward causation is incompatible with a certain freedom of action assumed by Libertarians.¹⁶⁷ Consequently, he says, the arguments usually raised against backward causation are nothing but arguments against specific types of determinism. But determinism is not a logical impossibility. In this way he solves some of the well-known paradoxes that were construed against the possibility of backward causation and time travel. For instance, what happens if one travels back in time and shoots one's own previous younger self? Another version of this paradox adduces the imaginary construction of a self-detonating machine, which is programmed to send a signal to itself in the past that causes its own explosion. But if the machine succeeds to send the message and responds to it, then it cannot exist

¹⁶⁷ Cf. Brown 1992.

in the future and thus cannot send the message.¹⁶⁸ Brown replies that the combination of backward causation with the exercise of certain capacities may indeed lead to trouble, but that there is no need to assume that such capacities *are* exercised or even possible. If the machine exists in the future, then it does not and cannot detonate itself in the past. What happens or does not happen must be consistent with other facts. In other words, if time travel is permitted, the laws of physics should be augmented by a principle of self-consistency.¹⁶⁹

While the majority of philosophers remains sceptical about backward causation, its possibility has been seriously discussed and elaborated by physicists ever since Kurt Gödel has found a disturbing solution to Einstein's equations of general relativity in 1949, which showed that a certain forms of time travel were permitted. If one followed the path of a particle, it could eventually come back to meet itself in the past. "By making a round trip on a rocket ship in a sufficiently wide curve," wrote Gödel, "it is possible in these worlds to travel into any region of the past, present and future, and back again."¹⁷⁰ In more recent times, one attempted to account for the possibility of time travel with black holes and wormholes. If spacetime is curved, as generally assumed, there could also exist passages, called wormholes, which link regions of spacetime removed from each other and allow shortcuts, that is, rapid or immediate transition between different points in spacetime.

The theoreticians of time travel distinguish between changing the past, which is contradictory and therefore impossible, and *fulfilling* the past which is self-consistent and therefore possible. An entertaining example of the first kind of time travel occurs in *Back to the Future*. The hero goes back to a time before his mother falls in love with his father, and to his dismay he finds out that he prevented

¹⁶⁸ This often discussed example comes from Davies 1997.

¹⁶⁹ Brown relies on several studies in theoretical physics such as Friedman *et al.* 1990, Deutsch 1991, and Echeverria *et al.* 1991. The principle of self-consistency is formulated clearly by Friedman *et al.* 1990: 1915. Cf. also pp. 1916-1917: "... a principle of self-consistency, which states that the only solutions to the laws of physics that can occur locally in the real Universe are those which are globally self-consistent.

¹⁷⁰ Cf. Gödel 1949: 447, quoted in Kaku 1994: 242.

the fateful encounter between his parents. Moreover, his mother becomes enamoured with him, and if he will not be able to divert her affections, he will disappear because his birth will never take place. This scenario is considered impossible.

On the other hand, it would be possible, as in a short story by Robert Heinlein “All You Zombies—” for a person to change his sex, go back in time, meet and fall in love with herself, conceive a baby with her own previous self, take the baby further back in time, deposit it at an orphanage, where she will grow to become that very person. In other words, the baby, the mother and the father are all the same person.¹⁷¹ Thus, in such a world Herclitus would be wrong. One can step into the same river twice, but at the same time, and if one steps into the same river twice, one cannot step into it once.

The distinction is nicely illustrated figure 6 in Friedman *et al.* 1990: 1925, which depicts two possible trajectories of a billiard ball:

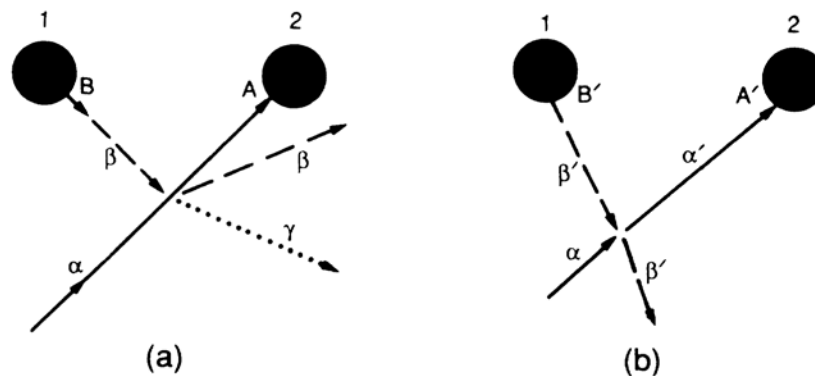


FIG. 6. Spatial trajectories of a billiard ball that travels backward in external time by traversing a wormhole, and then collides with itself. The evolution depicted in (a) violates the principle of self-consistency; that in (b) does not.

¹⁷¹ I simplify here Heinlein's story which involves also a bartender who is the same person as the others. For a graphic presentation of the temporal relations in this story cf. Kaku 1994: 241.

By travelling backwards in time, the ball can collide with itself. Figure 6a presents a version of the paradox of killing one's younger self. The initial position and velocity of the ball are such that the ball enters hole 2 at point A, and comes from hole 1 at point B. It moves along trajectory β , collides with itself coming along trajectory α and changes its own trajectory to γ , thereby preventing itself from entering hole 2. According to the principle of self-consistency this is impossible. In figure 6b, on the other hand, the movement of the ball is self-consistent. The ball come out from hole 1 in a slightly different place B', and moves along trajectory β' . It strikes itself gently, changing its trajectory to α' and enters hole 2 at point A1. This description involves no inconsistencies.

So far we have tacitly assumed with Brown that a world where time travel is possible would be, at least partly, deterministic. In a recent book, Brian Greene suggested a solution as to how time travel and free will can be compatible.¹⁷² The solution is based on the so-called Many Worlds interpretation of quantum mechanics. According to this interpretation, every potential possibility is realized in a separate parallel universe. Our universe is just one of endless others, in which every possible evolution that is permitted by quantum mechanics takes place. Freedom of will, of which we are conscious, consists in our ability to move from one universe to another. Thus, if I go back to 1953 and shoot my own mother before I was born, then she really is dead before I was born, but not in that universe in which I was born, and from which I started my time travel.

Of course I do not wish to argue that Prajñākaragupta and Jitāri have somehow prefigured the latest developments in Quantum mechanics or theory of relativity. That would be even more absurd than the assumption of plastic surgery on Ganesha. However, I do believe that studying backward causation in different cultural contexts thickens its description and deepen our understanding of it.

¹⁷² Cf. Greene 2004: 456-457. His solution is based on Deutsch 1997.

Abbreviations and Bibliography for Addition to the second edition

I. Primary Sources

- AA: *Aṣṭādhyāyī* of Pāṇini. In: Pāṇini's Grammatik. Ed. and trans. Otto Boehtlingk. 2nd ed. Leipzig 1887.
- AKBh: *Abhidharmakośabhāṣya* of Vasubhandu. Ed. P. Pradhan. Rev. 2nd ed. Patna 1975.
- AKV: *Abhidharmakośavyākhyā* in: Dwārikādās Śāstri (ed.) *Abhidharma-kośa & Bhāṣya of Ācārya Vasubandhu*. Varanasi 1981.
- ĀP: *Ālamabanapraikṣā* of Dignāga. Ed. in: E. Frauwallner, "Dignāga, sein Werk und seine Entwicklung" *Wiener Zeitschrift für die Kunde Süd- und Ostasiens* 3, 1959: 83-164.
- KS: *Kāmasūtra of Vātsyāyana*. Ed. with English transl. and notes by Radhavallabh Tripathi. Delhi 2005.
- KV: *Kāśikā, A Commentary on Pāṇini's Grammar by Vāmana and Jayāditya*. Ed. A. Sharma, K. Deshpande and D.G. Padhye. Heyderabad 1969, 1970.
- CS: *The Cāraka Saṃhitā of Agniveśa revised by Caraka and Dṛḍhabala With the Āyurveda-Dīpikā Commentary of Cakrapāṇidatta And with 'Vidyotini' Hindī Commentary By Kāśinātha Śāstrī*. Ed. Gaṅgāsahāya Pandeya. 2 vols. 2nd ed. Varanasi 1983.
- TSP: Dwārikādās Śāstrī (ed.), *The Tattvasaṅgraha of Ācārya Śāntarakṣita with the "Pañjikā" commentary of Ācārya Kamalaśīla*. 3rd ed. Varanasi 1997.
- NBh: *Nyāyabhāṣya* of Vātsyāyana. In: *Nyāyadarśanam with Vātsyāyana's Bhāṣya, Uddyotakara's Vārttika, Vācaspati Miśra's Tātparyatīkā and Viśvanātha's Vṛtti*. Ed. Taranatha Nyayatarkatirtha and Amarendramohan Tarkatirtha. Calcutta 1936, 1944.
- NBhū: *Nyāyabhūṣaṇa* of Bhāsarvajña. Ed. Yogīndrānanda. Varanasi 1968.
- NV: *Nyāyavārttika*. See NBh.
- PKM: *Prameyakamalamārtaṇḍa* of Prabhācandra. Ed. Mahendrakumar Śāstri. Mumbai 1941.
- P: Tibetan translation of PVABh, Derge no. 4221, Te 1b1-308a7, The 1b1-282a7; Peking no. 5719 Vol. 132, Te 1b1-382a7, The 1b1-344a6.
- PV: *Pramāṇavārttika*. See PVABh.

- PVA(o): *Prajñākaraguptas Erklärung der Definition gültiger Erkenntnis (Pramāṇavārttikālaṅkāra zu Pramāṇavārttika II 1-7)*. Ed. Motoi Ono. Wien 2000.
- PVATŚ: *Pramāṇavārttikaṭīkā Supariśuddhā* of Yamāri. A forthcoming edition by Junjie Chu, Eli Franco and Xuezhe Li.
- PVABh: *Pramāṇavārtikabhāṣyam or Vārtikālaṅkāraḥ of Prajñākaragupta*. Ed. Rahula Sāṅkṛityāyana. Patna 1953.
- PVABh (Ms.): *Sanskrit manuscripts of Prajñākaragupta's Pramāṇavārtikabhāṣyam*. Ed. Shigeaki Watanabe. Patna 1998.
- PVin I and II: Ernst Steinkellner (ed.), *Dharmakīrti's Pramāṇaviniścaya: Chapters 1 and 2, Critically edited*. Wien/Beijing 2007.
- PVin III: Pascale Hugon and Toru Tomabeche (eds.), *Dharmakīrti's Pramāṇaviniścaya, Chapter 3*. Wien/Beijing 2011.
- PVṬ: *Pramāṇavārttikaṭīkā* of Śākyabuddhi. Derge 4220
- PVP: *Pramāṇavārttikapañjikā* of Devndrabuddhi. Derge 4217
- Brhatsaṃhitā: Brhatsaṃhitā* of Varāhamihira. Ed. Kṛṣṇacandra Dvivedī. Varanasi 1996.
- MBh: *Vyākaraṇa-Mahābhāṣya of Patañjali*. Ed. F. Kielhorn. 3 vols. Bombay 1980-1985.
- YS: *Patañjali's Yoga Sūtras. With the commentary of Vyāsa and the gloss of Vācaspati Miśra*. Ed. Rāma Prasāda. 2nd ed. Delhi 1978.
- VP III.1: *Vākyapadīya* of Bhartṛhari with the commentary of Helārāja. Kaṇḍa III, part 1. Ed. K.A. Subramania Iyer. Poona 1963.
- VS: *Vādashānani* of Jitāri. Photocopies of an unpublished manuscript kept at the China Tibetology Research Center, Beijing.
- SBhT: *Svāyambhūvatantra* in Filliozat 1991
- SVṬ *Siddhiviniścayaṭīkā* of Anantavīrya. Ed. Mahendrakumar Jain. Kāshī 1959.

II. Secondary Sources

- Boethling 1870-73: Otto Böhtlingk, *Indische Sprüche*. St. Petersburg 1870-1873.
- Brown 1992: Bryson Brown, "Defending Backwards Causation." *Canadian Journal of Philosophy* 22/4. December 1992: 429-444.

- Bühnemann 1985: Gudrun Bühnemann: *Jitāri: Kleine Texte*, zweite, ergänzte Auflage. Wien 1985
- Chakravarti 1930: Prabhat Chandra Chakravarti, *The Philosophy of Sanskrit Grammar*. Calcutta 1930.
- Chisholm and Taylor 1959-60: Roerick Chisholm and Richard Taylor, "Making Things to Have Happened." *Analysis* 20/4, 1959-1960: 73-78.
- Chu and Franco 2012: Junjie Chu and Eli Franco, "Rare Manuscripts of Works by Jitāri." *China Tibetology* 2012: 17-32.
- Davies 1977: P.C.W. Davies, *Space and Time in the Modern Universe*. Cambridge 1977.
- Deutsch 1991: David Deutsch, "Quantum mechanics near closed timelike lines." *Physical Review D*, Third Series, vol. 42/10, 15 November 1991: 3197-3129.
- Deutsch 1997: David Deutsch, *The Fabric of Reality*. New York 1997.
- Dray 1959-60: William Dray, "Taylor and Chisholm on Making Things to Have Happened." *Analysis* 20/4, 1959-1960: 79-82.
- Dummet 1978a: Michael Dummett, "Can an Effect Precede its Cause?" Reprinted in: *Truth and Other Enigma*. London 1978 (originally published 1954): 319-332.
- Dummet 1978b: Michael Dummett, "Bringing About the Past." Reprinted in: *Truth and Other Enigma*. London 1978 (originally published 1964): 333-350.
- Echeverra *et al.*: Echeverria, F., Klinkhammer, G. and Thorne, K.S. "Billiard balls in wormhole spacetimes with closed timelike curves: Classical theory." *Physical Review D*, vol. 44/4 15 August 1991: 1077-1099.
- Filliozat, P.-S. *Le Tantra de Svayaṃbhū. Vidyāpāda avec le commentaire de Sadyajyoti*. Genève 1991.
- Franco 2005: Eli Franco "Perception of Yogis - Some Epistemological and Metaphysical Considerations." In: H. Krasser *et al.* (eds.), *Religion and Logic in buddhist Philosophical Analysis, Proceedings of the 4th International Dharmakīrti Conference, Vienna, August 23-27, 2005*, Wien 2011, pp. 81-98.
- Franco 2007: Eli Franco, "Prajñākaragupta on *pratītyasamutpāda* and reverse causation." In: B. Kellner *et al.* (eds.), *Pramāṇakīrti. Papers Dedicated to Ernst Steinkellner on the Occasion of his 70th Birthday*, Vienna 2007: 163-185.

- Franco 2015: “Jitāri on Backward Causation (*bhāvikāraṇavāda*).” In: K.L. Dhammajoti (ed.), *Buddhist Meditative Praxis: Traditional Teachings and Modern Application*. Hong Kong 2015: 81-116.
- Franco and Notake 2014: Eli Franco and Miyako Notake, *Dharmakīrti on the Duality of the Object*. Berlin 2014.
- Friedman *et al* 1990: J. Friedman, *et al.*, “Cauchy problem in spacetimes with closed timelike curves.” *Physical Review D*, Third Series, vol. 42/6, 15 September 1990: 1915-1930.
- Gikatila 1994 : R. Joseph Gikatila, *David et Bethsabée. Texte hébreu édité, traduit et présenté par Charles Mopsik*. Paris 1994.
- Gödel 1949: Kurt Gödel, “An Example of a New Type of Cosmological Solution of Einstein’s Field of Gravitation” *Reviews of Modern Physics* 21 (1949).
- Greene 2004: Brian Greene, *The Fabric of the Cosmos. Space, Time and the Texture of Reality*. New York 2004.
- Gusking 1955: Douglas Gusking, “Causation and Recipes.” *Mind* 64, 1955: 479-487.
- Hinüber 1994: Hinüber, O. von Untersuchungen zur Mündlichkeit früher mittelindischer Texte der Buddhismus. (Untersuchungen zur Sprachgeschichte und Handschriftenkunde des Pāli III). Stuttgart 1994
- Houben 1995: J.E.M. Houben, *The Saṃbandha-Samuddeśa (Chapter on Relation) and Bhartrhari’s Philosophy of Language*. Groningen 1995.
- Iyengar 1952: H. R. Rangaswami Iyengar (ed.), *Tarkabhāṣa and Vādashāna of Mokṣākaragupta and Jitāripāda*. Mysore 1952.
- Joshi and Roodbergen 1980: S.D. Joshi, and J.A.F. Roodbergen, *Patañjali’s Vyākaraṇa-Mahābhāṣya. Vibhaktiāhnika (P. 2.3.18-2.3.45)*. Pune 1980.
- Kaku 1994: Michio Kaku, *Hyperspace. A Scientific Odyssey Through Parallel Universes, Time Wraps, and the 10th Dimension*. New York 1994.
- Kohlbrugge 1938: D.J. Kohlbrugge, *Atharvaveda-Parīṣiṣṭa über Omina*. Wageningen 1938.
- La Vallée Poussin 1928-29 : La Vallée Poussin, *Vijñaptimātratāsiddhi. La Siddhi de Hiuan-Tsang trad. et annotée par Louis de La Vallée Poussin*. Paris 1928-29.

- Lewis 1976: David Lewis, "The Paradoxes of Time Travel." *American Philosophical Quarterly* 13/2, 1976: 145-152.
- Muroji 1993: Yoshihito Muroji, *Vasubandhus Interpretation des Pratītyasamutpāda: eine kritische Bearbeitung der Pratītyasamutpādayākyā (Saṃskāra- und Vijñānavibhaṅga)*. Stuttgart 1993.
- Putnam 1975: Hilary Putnam, "It ain't necessarily so." Reprinted in: *Philosophical Papers*, Volume I. Cambridge 1975: 237-249.
- Rastelli 2008: Marion Rastelli, "Von der Offenbarung Gottes zur vedisch-orthodoxen Tradition: Zur Begründung der Autorität der Tradition des Pāñcarātra." In: Gerhard Oberhammer, Marcus Schmücker (eds.), *Glaubensgewissheit und Wahrheit in religiöser Tradition*. Wien 2008: 273-300.
- Rau 2002: Wilhelm Rau, *Bhartr̥haris Vākyapadīya*. Ed. O. von Hinüber. Stuttgart 2002.
- Renou 1957: Louis Renou, *Terminologie grammaticale du sanskrit*. Paris 1957.
- Shastri 1976: Dharmendra Nath Shastri, *The Philosophy of Nyāya-Vaiśeṣika and its Conflict with the Buddhist Dignāga School*. Repr. New Delhi 1976.
- Steinkellner 2013: Ernst Steinkellner, *Dharmakīrtis frühe Logik*. 2 vols. Tokyo 2013.
- Schmithausen 1987: Lambert Schmithausen, *Ālayavijñāna: On the origin and the early development of a central concept of Yogācāra philosophy*. Tokyo 1987.
- Seyfort Rugg 1995 : David Seyfort Rugg, *Ordre spirituel et ordre temporel dans la pensée bouddhique de l'Inde et du Tibet : quatre conférences au Collège de France*. Paris 1995
- Speijer 1980 : J.S. Speijer, *Sanskrit Syntax*. Repr. Delhi 1980
- Stcherbatsky 1923, Theodor Stcherbatsky, *The Central Conception of Buddhism and the Meaning of the Word "dharma"*. London 1923.
- Steinkellner 2013: Ernst Steinkellner, *Dharmakīrtis frühe Logik*. Tokyo 2013.
- Subramanya Iyer 1969: K.A. Subramanya Iyer, *Bhartr̥hari. A Study of the Vākyapadīya in the light of the Ancient Commentaries*. Poona 1969
- Subramanya Iyer 1971: K.A. Subramanya Iyer (transl), *The Vākyapadīya of Bhartr̥hari*. Chapter III, pt. i. Poona 1971.

- Subramanya Iyer, K.A. Bhartṛhari. *A Study of the Vākyapadīya in the light of the Ancient Commentaries*. Poona 1969
- Taber 2003: John Taber, “Dharmakīrti Against Physicalism.” *Journal of Indian Philosophy* 31/4. 2003: 479-502.
- Taranatha 1990: Taranatha, *History of Buddhism*. Translated from Tibetan by Lama Chimpa and Alaka Chattopadhyaya, repr. Delhi 1990.
- Tillemans 1993: Tom J.F. Tillemans, *Persons of Authority*. Stuttgart 1993.
- Tucci 1930: Giuseppe Tucci, “The Jātinirākṛti of Jitāri,” *Annals of the Bhandarkar Oriental Research Institute*, 11. Poona, 1930, 54-58. Reprinted in *Opera Minora*, part I. Roma 1971.
- Van Bijlert 1989. Vittorio A. Van Bijlert, *Epistemology and spiritual authority. The development of epistemology and logic in the old Nyāya and the Buddhist school of epistemology with an annotated translation of Dharmakīrti’s Pramāṇavarttika II (Pramāṇasiddhi) VV. 1 – 7*. Wien 1989.
- Van Buitenen 1971: J.A.B. Van Buitenen *Yāmuna’s Āgamaprāmāṇyam. Or treatise on the validity of Pāñcarātra*. Madras, 1971.