

BUDDHIST MEDITATIVE PRAXIS

**TRADITIONAL TEACHINGS
&
MODERN APPLICATIONS**

HKU: CBS Publication Series

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Bhikkhu KL Dhammajoti

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&
MODERN APPLICATIONS**

EDITOR

KL DHAMMAJOTI 法光

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Jitāri on Backward Causation (*bhāvikāraṇavāda*)

ELI FRANCO

It has been known for some time that a large number of rare Sanskrit manuscripts are preserved in Lhasa. In 1961 a collection of 250 manuscripts was sent to the library of the Palace of National Minorities, Beijing. Most of the manuscripts were returned to Lhasa in 1993, but photocopies and microfilms of them were made in 1987 and are kept now in the China Tibetology Research Center (CTRC), Beijing.¹ Recent agreement between the CTRC and the Austrian Academy of Sciences has already enabled some major publications in the area of Buddhist philosophy, notably, Jinendrabuddhi's *Pramāṇasamuccayaṭīkā* (so far chapters 1 and 2),² the only known Indian commentary on Dignāga's *Pramāṇasamuccaya*, and Dharmakīrti's masterpiece *Pramāṇaviniścaya*.³ Further publications on the basis of these precious materials are now under preparation. However, access to these rare documents remains highly restricted. One of the largest (218 leafs) and most important manuscripts whose photocopies are kept in the library of the CTRC contains several works, some hitherto completely unknown, of the renowned Buddhist philosopher and Tāntrika Jitāri (ca. A.D. 940-980). This manuscript has been the subject of a research project at the Institute of Indology and Central Asian Studies, Leipzig University. A generous fund by the German Research Council (DFG) has allowed my colleague Dr. Junjie Chu to work full time for two years on this and a related manuscript, and we hope to publish soon some results of this endeavor.⁴

As could be expected, we know little or nothing about Jitāri's life. The Tibetan historiographic tradition distinguishes between the senior and the junior Jitāris, and the Jitāri we are concerned with is the senior. Tārānātha, in the *History of Buddhism in India*,⁵ devotes a couple pages to this Jitāri's life, but, as is usually the case, facts and legends cannot be taken apart. According to Tārānātha, Jitāri's parents had a mixed-caste marriage, his father being a brāhmaṇa who married a śūdra queen, a

present given to him by King Sanātana for an *abhiṣeka* according to the *Guyasamājatantra*. As a result, Jitāri was scorned by his brāhmaṇa fellow students at school and completed his education at home instructed by his father and helped by an *abhiṣeka* of Mañjughoṣa (indeed we find several *maṅgala* verses in Jitāri work dedicated to Mañjughoṣa). Jitāri made quick progress both in learning and meditation, and mastered the *śuddhaparibhāsasamādhi* as well as fine arts and several sciences such as prodody and grammar. He remained Upāsaka throughout his life. Tārānātha says that he composed about 100 treatises and short commentaries on various subjects. His remaining works in the Sanskrit original or in Tibetan translation cover mainly the areas of *tantra* and *pramāṇa*; one doxographic work, the *Sugatamatavibhaṅga* which consists of verses (*kārikā*) and auto-commentary (*bhāṣya*) follows the pattern of Āryadeva's *Jñānasārasamuccaya*, explaining the four Buddhist philosophical systems, namely, the Sarvāstivāda, Sautrāntika, Madhyamaka and Yogācāra (*bDe bar gshegs pa gzhung rnam par 'byed pa'i tshig le'ur byas pa* [Derge 3899] and *bDe bar gshegs pa gzhung rnam par 'byed pa'i bshad pa* [Derge 3990]).

In the beginning of the above mentioned manuscript, after a salutation to the Buddha and a somewhat Tantric *maṅgala*-verse, Jitāri prefaces his work as follows:

suhṛdām⁶ anurodhena yathāśakti⁷ yathāsmṛti⁸ |
hriyam vihāya likhyante vādashthānāni kāṇicit ||

In compliance of the wish of friends, putting my shyness aside, some topics of debate [between Buddhists, Brahmins and Jains] are written [here] according to my ability, according to my recollection.

It thus seems that *Vādashthānāni* was the title of the collection as a whole. However, titles of philosophical works in Sanskrit do not usually appear in plural form, and the term could have been used merely as a description for the content of the work, not as its title. Since no colophon in the end of the manuscript is available, certainty on this matter cannot be reached, but for lack of anything better, we use *Vādashthānāni* as the title of the work.

According to a transcription of the manuscript prepared by Dr. Chu, it contains some twenty short treatises, or better chapters, each ending with a short colophon providing a title and attributing the work to Jitāri. These are:

1. *Sāmānyanirākṛti* (1b1-5b6)
2. *Sāmānyanirākṛti*⁹ (6a1-8a5)
3. *Īśvaranirākaraṇa* (8a5-11b3)
4. *Nairātmyasiddhi* (11b3-12a3)
5. *Vedaprāmāṇyanirākṛti* (12a3-14b4)
6. *Vijñaptimātratāsasiddhi* (14b4-20a6)
7. *Avayavinirākaraṇa* (20a6-24b6)
8. *Apohasiddhi* (24b6-32b1)
9. *Kṣaṇabhaṅgaprakaraṇa* (32b1-46a1)
10. *Dvijātidūṣaṇa* (46a1-57b4)
11. *Kṣaṇabhaṅgasiddhi* (57b4-62b)
12. *Sarvajñasiddhi* (62b2-64a4)
13. *Bhāvikāraṇavāda* (64a4-69b3)
14. *Jātivāda*¹⁰ (69b3-70b3)
15. *Śrutikarṭṛsiddhi* (70b3-77b4)
16. *Śabdāprāmaṇya* (77b5-85b4)
17. *Sāmagrībhaṅga* (85b5-87b1)
18. *Kṣaṇabhaṅgasiddhi* (87bb1-93b4)
19. *Digambaramataparīkṣā*¹¹ (93b4-97b5)¹⁴
20. *Dvijātidūṣaṇa* (97b5-112b2)

The library of the CTRC contains photocopies of another manuscript of the *Vādashānāni*, unfortunately much shorter and of an inferior quality. A transcription of this manuscript by Dr. Chu revealed the following works:

1. *Sāmānyanirākṛti* (1b1-6b3)
2. *Sāmānyanirākṛti* (6b3-10a1)
3. *Nairātmyasiddhi* (10a1-103)
4. *Sarvajñasiddhi* (11b1-17b3)
5. *Kṣaṇabhaṅgasiddhi* (18a-22b)
6. *Digambaramataparīkṣā* (23a1-25b3)
7. *Śrutikarṭṛsiddhi* (26b1-31b3)
8. *Apohasiddhi* (32a1-40b3)
9. *Avayavinirākaraṇam* (41a1-46b1)

10. *Apaśabdanirākṛti* (47a1-48b5)

11. *Vijñaptimātratāsiddhi* (49a1-55b2)

All works of the second manuscript are included in the first manuscript, but they provide, of course, important variant readings for the forthcoming critical edition of Jitāri's work.

The different arrangement of works in the two manuscripts probably indicates the way Jitāri's work has been used, no doubt primarily by Buddhist monks wishing to study Buddhist philosophy. To our knowledge, Jitāri was not an original philosopher; in fact we are not aware of any philosophical doctrine associated with his name, nor could we find so far anything in his extensive work that would revise or go decisively beyond the ideas of Dharmakīrti and his great successors Dharmotta and Prajñākaragupta.¹² It seems rather that he was a gifted and sought after teacher and that he composed his *Vādashānāni* primarily for the use of students. This can explain the vast disparity in the manuscripts, which some times contain a single chapter, sometime two, and sometime, as in the manuscript of the CTRC, as many as twenty.¹³ It is probable that this disparity reflects the various needs of the students who used Jitāri's work; some were interested in and working on a single chapter, others, more diligent, had a wider interest.

It is not possible give an account here on each of the twenty chapters. I will confine myself to a short report on a single work, the *Bhāvikāraṇavāda* (nr. 13 above), not because it is more important than the others, but because its subject is completely unknown outside a very small circle of specialists. Before entering the subject, let me briefly outline the background and context of the discussion.¹⁴

One of the most important tasks for the Buddhist logicians was to provide a rational justification of the Buddhist religion, and an important part of this justification were proofs of rebirth. 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 (*ātman*) 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.¹⁵ 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.¹⁶

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.¹⁷

By showing that consciousness, especially in the form of mental awareness in contradistinction to sense perception, is independent of factors such as the body, breath and the senses, 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. 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.

However, the Buddhist logicians want to prove not only past lives, but also future lives; otherwise, all religious striving would be futile. At this point there arises a serious problem in connection with the Buddhist doctrine of inference: By means of an inference based on causal relations, one can infer only past lives 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.

How then can future lives be proved? 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-nature of things, that is, on an essential property. The common example for that type of inference is: This is a tree, because it is a Śiṃśapā tree. In this inference one infers from one essential property, such as being a Śiṃśapā 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.

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 and Jitāri, who goes in his footsteps, stand alone in claiming that one should infer future lives with an inference based on effect.¹⁸ 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?

Let me take a closer look at this highly original, fascinating and counterintuitive thesis of Prajñākaragupta. Traditional definitions of cause, such as those proposed by Vasubandhu or Dharmakīrti do not address the temporal direction of the causal relationship (which was surely taken for granted). 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. In doing so, Prajñākaragupta does not rely on traditional Abhidharma scholastics of the Sarvāstivāda. Rather, he 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 at the present. For 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 (see PVA 67.28-68.2).

It may be objected that 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 (PVA 68.3-5). What is the difference between inexistence because something has already perished and inexistence because something has not yet arisen? None! This point, as we shall see below, is also strongly emphasized by Jitāri.

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 separated from the effect by some time interval. Prajñākaragupta uses here the example of two awarenesses occurring before and after deep sleep without dreams; Jitāri adds the states of swoon and the suppression of consciousness in meditation (*nirodhasamāpatti*).

The opponent further points out a possible contradiction with the Buddha's word. The general formulation of Dependent Origination (*pratītyasamutpāda*) 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 the object referred to by "*asmin*" exists before the object referred to by "*idam*." According to the opponent, the locative and ablative case-endings in the formulation of *pratītyasamutpāda* indicate a time prior to the one conveyed by the nominative case-ending. Prajñākaragupta replies in the negative; the locative and ablative case-endings refer to a cause, not to a specific time (PVA 68.21-22).

Prajñākaragupta repeats the example of omens, this time referring to bad omens (*ariṣṭa*).¹⁹ 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.²⁰

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 time periods. 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 *Brhatsaṃhitā*²¹) in the grammatical literature (already with Pāṇini, e.g., AA 1.4.39), in philosophical works such as the *Yogasūtra*,²² 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.²³ Studies on omens, although not numerous, stretch over the entire field of South Asian studies, from Vedic studies, e.g., on the *Atharvavedapariśiṣṭa*,²⁴ 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 very much the same as those of the early centuries B.C.E.²⁵

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 future thing can be a cause.²⁶ According to this theory, the case-endings, with the exception of the genitive ending,²⁷ 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 the verb "cuts." Now, consider a simple sentence such as "The sprout arises."²⁸ 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*).

The tenet that the referents of words exist in the mind as well as the example “The sprout arises” (*aṅkuro jāyate*)²⁹ indicate that Prajñākaragupta has Bhartṛhari and his theory of “metonymical existence” (*upacārikī sattā*) in mind. This doctrine is developed by him in *Sambandhasamuddeśa* 39-51.³⁰ 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 mode of existence is different from the one of the external objects and is superimposed by the mind.³¹ 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.³²

Although the doctrine of “metonymical existence” agrees well with the Yogācāra point of view,³³ 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 eat that, he adds, referring to the popular belief that crows eat everything, even the most bitter and poisonous Kimpāka cucumbers.³⁴ Interestingly, Prajñākaragupta’s extensive discussion of the *kāraṇa* theory has no correspondence at all in Jitāri’s treatise.

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.³⁵ When seeing something, one only apprehends that it exists, not that it is a cause or effect. The same argument is repeated by Jitāri in an abridged manner.

Prajñākaragupta concludes, therefore, that there is no fault in defining the relationship between cause and effect in terms of an atemporal concomitance 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.³⁶ 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.

Is there any use to define the relation between cause and effect as a temporal relation? 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. 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. Prajñākaragupta responds that this is not the case 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 (PVA 69.17-18).

Bearing the discussion of future cause in the PVA in mind, Jitāri's arguments in the *Bhāvikāraṇavāda* are largely understandable, even though his treatise exists only in a single, sometimes faulty and illegible photocopy of an inaccessible manuscript.³⁷ The treatise begins (folio 64a4) with dedicatory verse to Mañjuḥśa followed by a formal inference (*parārthānumāna*) proving that all things (i.e., future things also) are causes because they are necessary effects that have a positive and negative concomitance regulated by their causes.³⁸ 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 (*parārthānumāna*), which forms the main argument of the chapter. However, these inferences do not follow the common form of thesis, reason and example, but 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 whatever has a positive and negative concomitance complied by something is the cause of that thing, just like fire of smoke.³⁹ And everything is a necessary effect which has positive and negative concomitance complied by its cause. The inference thus employs a reason based on own nature.⁴⁰ The conclusion “everything is a cause” (**sarvaṃ kāraṇam* or *kāraṇam sarvaṃ*) is not explicitly stated, but is only implied.

The opponent objects that the reason is not established as a property of the subject of the inference because a future effect, inasmuch as it does not (yet) exists, cannot comply with positive and negative concomitance.⁴¹ For positive concomitance is characterized by existence, and the effect does not exist when the cause arises. Thus, the cause cannot have a positive concomitance.⁴² The cause also does not comply with a negative concomitance. For if the cause would follow the absence of the effect, it will never arise because the effect never exists at the time of the cause.⁴³

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.⁴⁴ This distinction does not play a role in the PVA; as we saw, Prajñākaraḡupta 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 position of momentariness, then just as compliance to positive and negative concomitance for a past moment is admitted, the same should be accepted for a future moment. As Jitāri mischievously puts it, the future moment has not committed any offence or sin (*aparādha*) that one should forbid it to have such compliance.⁴⁵ 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 it to regulate a present effect. 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 it to regulate positive and negative concomitance with a present effect. 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.⁴⁶

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 exists⁴⁷ 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.⁴⁸

The opponent, presumably returning to the theory of monentarieness, 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 compliance with the positive concomitance is indeed established for the past cause, but not for the future cause because it is separated 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.⁴⁹

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.⁵⁰

The opponent attempt 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 posterior absence (*paścādasattva*) or absence after destruction (*pradhvaṃsābhāva*). However, Jitāri refuses to accept the difference between various kinds of non-existence;⁵¹ this point was already made in the PVA.⁵²

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. Here is a translation of a short passage to better render the flavour of the discussion:

“[Opponent:] 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).

[Proponent:] What is this thing called production/being producer (*janakatva*)?

[Opponent:] Necessary existence in the production of the effect.

[Proponent:] If so, the fact that a future [thing] is a producer is not contradicted because it also is necessary in the production of the effect.

[Opponent:] The necessary existence of a future thing did not exist [in the past].

[Proponent: The necessary existence] of past thing also 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 not at all exist [at the time of the effect]. Therefore this [objection of yours] is nonsense.”⁵³

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 reason stated in the proof of the other world (i.e., of life after death).⁵⁴ 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?⁵⁵

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.⁵⁶ 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. And 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 agent of production.⁵⁷ 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. For that *ātman*, since it depends on its own form alone, cannot act only sometimes.⁵⁸

Another opponent—this one seems to be Buddhist⁵⁹—suggests that consciousness actually exists even in a state of swoon, but if so the opponent should also accept that there is consciousness also in the attainment of suppression (*nirodhasamāpatti*) and the attainment of consciousnesslessness (*asaṃjñīsamāpatti*).⁶⁰

Yet another alternative would be to claim that consciousness indeed exists in all these states, i.e., also in 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* and so forth is established to arise from the immediately preceding cognition. However, this is not a tenable position because every cognition is pervaded by the precedence with a cognition as such, not with a precedence by a cognition which immediately precedes it. 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.⁶¹ 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. The opponent now introduces a distinction, which is not entirely clear, between existence alone (for the immediately preceding cause) and non-existence alone (for the remote cause). I assume that “existence alone” (*kevalam sattvam, sattvam eva*) means that as soon as the cause exists, the effect arises. In any case, this alternative too is rejected by Jitāri. Therefore, one cannot infer that there is consciousness in the state of swoon.⁶²

However, how is the non-existence of cognition in a state of swoon etc., determined?⁶³ (66b2) 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., Prajñākaragupta) that: “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.”⁶⁴ 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.⁶⁵ 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.”⁶⁶ One may object: This determination, namely, that one did not cognize anything during a certain 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” is in not enough in itself for a proof that there is no awareness in a state of swoon and so forth.⁶⁷ 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. For it is indeed possible to state the following: The person whose mind is strongly connected to another object and the one overcome by drowsiness has no immediate cognition of an object connected to his/her senses.⁶⁸

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 contradicts 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 compliance in positive and negative concomitance between a remote past cause and a present cognition, in the same manner, there is also compliance in positive and negative concomitance with a remote future cause. Therefore, the reason in the inference at the beginning of this treatise is not non-established.⁶⁹

One may object: An effect which arises necessarily may well establish that a subject of the inference (*dharmīn*) is a cause by the fact that (as an effect) it has positive and negative concomitance caused by its cause. But the so-called necessary arising of the effect is future (and therefore uncertain) because there is no necessity that the causes will undertake the production of the effect. As Prajñākaragupta said: “Causes do not necessarily have effects.”⁷⁰ Consequently, because the property (i.e., being a necessary effect, which serves as the reason of the inference) is not established, the reason is not established in the support (i.e., in the subject of inference, namely all things). 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*). 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.⁷¹ 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 non-conclusive. 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 misfortune/death,⁷² even remote effects can be definitive.⁷³

How could a remote effect arise necessarily? Precisely because it 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 time. Further, it is not the case that because something is a cause, the other causes are not established as causes.⁷⁴ Therefore, the reason in the above inference is well established. As for the determination of the reason as being contradictory, it should not be maintained, for the intelligent persons / specialists define a contradictory reason as what exists awry (lit., “differently”) in the *sapakṣa* and *vipakṣa*.⁷⁵ And the existence of the reason of the inference above in the *sapakṣa* (i.e., all things that are causes)⁷⁶ is observed. Thus, no learned person assumes that it is contradictory.⁷⁷

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.⁷⁸ In respect to these, the first alternative should not be assumed because there is no determination of the existence of the reason in the *vipakṣa*. And had it been inconclusive, there will not be in the end(?) positive and negative concomitance with it (i.e., between the effect and it).⁷⁹ Nor should one adhere to the second alternative. For, first of all, the everyday practice of that [future] cause is not without basis/foundation because it is impossible⁸⁰ to restrict the objects accordingly. And in relation to the effect as well, one does not assume another cause in proximity for it, which goes beyond compliance to existence and non-existence (i.e., beyond positive and negative concomitance). Because in the case of fire too, it is said to be a cause only because of the compliance to existence and non-existence in relation to smoke.⁸¹

Now, the opponent proposes a different approach to causal relation. It should not be defined in terms of positive and negative concomitance; rather, to be a cause is to have an operation/action (*vyāpāra*) in relation to the effect.⁸² Jitāri rejects this alternative by pointing out that it would lead to an infinite regress. This operation, because it arises sometimes (*kadācitka*), is itself an effect. Therefore, it also must have a cause, which has an operation.⁸³ 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 concomitance, that should

hold good in other cases as well. Therefore, enough with this false assumption of an operation.⁸⁴

The opponent who seems to be now at the end of his wits suggests that the cause be what is perceived before the effect.⁸⁵ We saw this suggestion raised in the PVA 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.”⁸⁶ Further, if a cause is something that exists and is perceived before the effect, all previous things would be causes for all effects.⁸⁷

The opponent now suggests to restrict or limit positive and negative concomitance by the previous existence of the cause.⁸⁸ That is, positive and negative concomitance 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?”⁸⁹

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 committed, due to which it should not be accept as a cause?⁹⁰ He also points out the advantage of the doctrine of future cause for the proof of life after death.⁹¹ People in everyday practice perceive the relation of cause and effect only as arising if that exists.⁹² 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 exists and does not exist is the cause; the other is the effect. In this way the philosophers explain the characteristic of cause and effect.”⁹³ Jitāri quotes also Dharmakīrti’s definition of causal relation in terms of positive and negative concomitance.⁹⁴ Therefore, to

be a cause is not related to the concept of activity, but only to positive and negative concomitance.

If one considers that to be a cause means to have an activity, and not to have positive and negative concomitance, 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.⁹⁵ Jitāri concludes that the excellence of the relation of between cause and effect is well proved by/with the ornament of future cause which can be inferred. Further (although the text is partly illegible here), that things in everyday practice can be enjoyed without philosophical deliberation and one should (not?) be attached to them. Let there be merit (*puṇya*) to the victorious Buddha (*jina*). 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.⁹⁶

Although Jitāri's work basically restates Prajñākara Gupta's theory,⁹⁷ we notice some differences. The most conspicuous one is, of course, the 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 arranged around this inference, notably, in relation to the validity of its reason (*hetu*). It is interesting that this inference uses *svabhāva* *hetu*, whereas Prajñākara Gupta advocates an inference of a future cause by *kārya* *hetu*. However, this difference can be explained by the fact that Jitāri aims at a general proof of future causes, while Prajñākara Gupta argues that a specific future cause can be inferred. Thus, the scope of the inferences is different. We find in Jitāri's work further elements that are absent in the PVA, notably, the rejection of the activity (*vyāpāra*) as a necessary characteristic of a cause by an argument of infinite regress. On the other hand the argument from omens is barely mentioned by Jitāri and the discussion of the *kāraṇas* is entirely absent in his treatise. The explicit connection to the doctrine of *pratītyasamutpāda*, which was the starting point for the discussion in the PVA is equally absent. Perhaps for this reason, it seems that Prajñākara Gupta thinks primarily of a cause as a single entity, which is a necessary (but not sufficient) condition for its effect. Jitāri, on the other hand, puts strong emphasis

on a causal complex and consider a cause as a sufficient condition for a necessary effect. Of course, these two notions do not contradict each other and are both somehow anchored in Dharmakīrti's theory of causation.⁹⁸

More difficult is the question whether the future cause is conceived to act 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 upon a past or present object or is it merely a necessary and/or sufficient condition? As noted above, the rejection of activity (*vyāpāra*) as a necessary characteristic of a cause is absent in the PVA. Furthermore, in a different context Prajñākaragupta uses the perception of yogis (*yogipratyakṣa*) as an argument for future cause (cf. Franco 2005). Indeed if the Yogi perceives a future object directly, then the object must be counted among the factors that actually produce his cognition. This suggests that for Prajñākaragupta the future cause is not only a necessary condition, but can also, to use the modern terminology, fulfill the past (on the difference between fulfilling the past and changing the past, cf. below). In Jitāri's work, on the other hand, I fail to see that he considers the cause to be anything other than necessary and/or sufficient condition.

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.⁹⁹ 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 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.¹⁰⁰ 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.¹⁰¹

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 pray 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 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.

Dummett's 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.¹⁰² 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 in the future and thus cannot send the message.¹⁰³ 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.¹⁰⁴

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."¹⁰⁵ 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 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 classic 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.¹⁰⁶ 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.

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, Briane Greene suggested a solution as to how time travel and free will can be compatible.¹⁰⁷ 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.

I do not intend to summarize and discuss any further the modern theories and speculations on backward causation and time travel, nor do I wish to argue in favour of one position or another. And I certainly do not want to suggest, as is fashionable in certain circles, that the ancient Buddhist authors somehow prefigured the latest developments in quantum mechanics or theory of relativity; Prajñākaragupta and Jitāri's world has nothing to do with the latest developments in physics.

How are we then to understand the doctrine of future cause? The crucial point is, I think, to understand the definition of a cause as equating a cause with a necessary condition (and for Jitāri also sufficient condition). If one accepts this interpretation of the definition, then it *does* follow that one can speak of a later event causing an earlier one, without pronouncing an absurdity. There is a price to be paid for such a definition of a cause: if it is accepted, the common distinction between effects and signs, such as omens, is obliterated. However, Prajñākaragupta and Jitāri are willing to pay this price. Let me give another example. Suppose we were to live in a world, quite similar to ours, where falling barometers were a sure sign for rain. The fall of the barometer would then be a sufficient condition for rain, and according to the definition of a cause as a necessary condition it could certainly be said to be caused by the future rain.

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Notes

1. On this precious collection see Steinkellner 2004, see also Franco 2006.
2. See Steinkellner *et al.* 2005 and Lasić *et al.*, 2013.
3. See Steinkellner 2007 and Hugon and Tomabechei 2011.
4. For a preliminary description of the manuscript see Chu and Franco 2012.
5. Taranatha 1990: 290-292.
6. Iyengar 1952: 72.2 reads *buddhānām*.
7. Bühnemann 1985: 30.7 reads *yathāmati*.
8. Iyengar 1952: 72.2 reads *śrutismṛti*.
9. These two chapters, bearing identical titles, consist of two different refutations of the universal. The first chapter appears as *jātinirākṛti* in Tucci 1930 and Bühnemann 1985: 30-38, and is published with the title *vādashānāni* in Iyengar 1952: 72-80. A further chapter refuting the existence of universals appears in the manuscript as *Jātivāda*; cf. no. 14.
10. Presumably the title is incomplete or defective; one expects *Jātivādanirākaraṇa* or similar.
11. The title is attested in the second manuscript. This text was published with the title *Anekāntavādanirāsa* in Iyengar 1952: 80-85.
12. One has to add, though, that our work in this respect is still preliminary.
13. On the other manuscripts of Jitāri's works (i.e., other than the two in the CTRC), see Bühnemann 1985.
14. I repeat and summarize here parts of Franco 2007.
15. On Dharmakīrti's response cf. Franco 1997, ch. 5.
16. Cf. Franco 1997, ch. 4.
17. Cf. Taber 2003.
18. Of course this opinion is also endorsed by Prajñākaragupta's commentators Yamāri and Jayanta. The original Sanskrit of Yamāri's commentary on the PVA, *Pramāṇasiddhi* chapter, is now being edited by Junjie Chu, Xuezhong Li and myself within the framework of another research project funded by the German Research Council.
19. 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*).
20. Cf. PVA 68.29-30 (Ms. 27a2-3): *mṛtyuprayuktam ariṣṭam iti loke vyavahārah. yadi mṛtyur nābhaviṣyan* na bhaved evaṃbhūtam ariṣṭam iti.*
* S.: *na bhaviṣyan*.
21. In the *Brhatsaṃhitā*, 11 chapters deal with various omens (ch. 86-96).
22. 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.
23. Cf. *Indriyasthāna* 1.22: *puṣpāṇi nakhadanteṣu*. The reason for the prominent treatment of death omens in the *Carakaśaṃhitā* is clear. The physician should avoid treating patients who display death omens because their inevitable death will reflect badly on him and his professional skills.

24. Kohlbrugge 1938: 10-17, provides a short survey of omens in various works.
25. Cf. Kohlbrugge 1938: 11.
26. For the *kāraka* theory see the notes of Joshi and Roodbergen to their translation of the *Vibhaktiyāhnika*.
27. One has to note, though, that some verbs do govern the genitive, e.g., *smṛ*, when one remembers with sadness or regret. Cf. Speijer, *Sanskrit Syntax*, §§ 118-123.
28. Cf. PVA 68.32-33 (Ms. 27a3): *kāratvatvam evāsataḥ katham iti cet, katham aṅkuro jāyate, ghaṭam karotīti* kartṛkarmabhāvaḥ*. * Ms: *karokatīti*.
29. This example appears in Helārāja's *Vṛtti* on VP III.1, pp. 154.13, 155.9-10, 155.15-16, etc. Cf. also Houben's discussion in *The Sambandha-Samuddeśa*, p. 265. For Bhartṛhari the same problem arises even when the object referred to by a word already exists; cf. Houben *ibid.*, p. 267. The example of the pot was also used by Suṇeśa. According to Suṇeśa, 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.
30. Cf. Houben 1995: 257ff. Cf. also Subrahmanya Iyer's translation, VP, pp. 98ff., and Subramania Iyer 1969: 209-212, 312-313.
31. Cf. Helārāja's commentary in VP III.1, p. 150.11-13 commenting on v. 39ab (*vyapadeśe padārthānām anyā sattaupacārikī*): *vyapadeśe vyapadeśanimittam śabdena pratyāyane, padapratyāyānām arthānām bāhyānām vastūnām bāhyavilakṣaṇā sattā buddhyupacāritā. bāhyārthasattāyā hi anyā buddhisamārūḍhārthākārarūpā sattā. ata evaupacārikīyam. upacāro 'dhyāropaḥ*.
32. Cf. VP III.1, p. 150.17: *abhāvaviśayaṇām śaśaviśāṇādiśabdānām apy ākārolekhiṇī*. Cf. also 150.20f.: *alātacakraśaśaviśāṇādinām api śabdānām nityam arthair aviyogāt sambandhanīyatāsiddhiḥ*.
33. This is pointed out by Houben 1995: 246. Cf. Helārāja's *Vṛtti*, p. 150.18-19: *buddhiś ca bahir asaty apy arthe svabījāvāsanāparipākavaśād ākāravagraharūpopajāyate 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]."
34. Cf. PVA 68.33 (Ms. 27a3-4): *buddhisthatayā kāratatve nātra tasya kākair bhakṣaṇam*.
Cf. Boehthlingk 1870-73: 754 (276):
*asadbhir asatām eva bhujyante dhanasampadaḥ |
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?“

35. Cf. PVA 69.4 (Ms 27a4):
yasyopalabdhiḥ prathamam tat tasya yadi kāraṇam |
na khalāntargataṃ bījaṃ hetuḥ syād ankurodaye || 439 ||
36. Cf. PVA 69.9 (Ms. 27a5): *avyabhicāraṇīyatve tad eva kāraṇatvam*. The Tibetan translators may have read *kāraṇam* instead of *kāraṇatvam* Cf. Peking 72b1 = Derge 60b5: *de ṅid rgyu yin no*. However, NBhū 502.22-23: *tad eva kāraṇatvam*.
37. The following is based on a reliable transcription prepared by Junjie Chu. I would like to thank Professors Motoi Ono and Shinya Moriyama for some of the corrections and identifications below, as well as for their keen interest in this project. Needless to say, the conjectures we suggest are still preliminary.
38. If I understand correctly, 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 used in an inference as an effect of the other.
39. 64a4-5: *iha yad yenānuvīhitānvayavyatirekan tat tasya kāraṇam | yathā dahano dhūmasya*.
40. Ibid: *svahetunānuvīhitānvayavyatirekañ cāvaśyambhāvīkārya[m] sarvvaṃ iti svabhāvahetuḥ*.
41. 64a5-6: *nanv ayaṃ asiddho hetuḥ kāryasya bhāvatvenāsato* (read *bhāvitvenāsato*) *'nvayavatirekānuvidhānāyogāt*.
42. 64a6-b1: *bhāvilakṣaṇo* (read *bhāvalakṣaṇo*) *hy anvayo na cedam kāraṇodayasamaye samastīti katham tadīyam anvayam anvīyād dhetuḥ?*
43. 64b1-2: *vyatirekam apy asya na hetur anuvidhatte | yadi hy eṣa tadīyam abhāvaṃ anukuryān na kadācid utpattim ātmasātkuryāt | na hy asya kadācid api kāraṇodayakāle sattā sambhavati |*
44. 64b2: *tatredan nirūpyate | anāgatabhāvavyaparā[nuvi]dhānābhāvaḥ* | kṣaṇaṃkāvaḍīnā* (read *kṣaṇīkavāḍīnā*) *vā bhavātābhīdhiyētākṣaṇīkavāḍīnā vā |*
**Read perhaps -bhāvavyāpārā<d a>[nuvi]dhānābhāvaḥ?*
45. 64b2-3: *prathame pakṣe yathā bhavān atītasya kāraṇakṣaṇasyānvayavyatirekānuvidhānam icchatī tathānāgatasyāpi kiṃ necchatī | na hy anāgatenāparāddhan nāma kiñcit*.
46. 64b4-5: *atha manyase | yady apy atītasya sattā kāryakāle nāsti tathāpi [a]bhūt. tataḥ tadbhāvānuvidhānam varttamānasya nāyuktaṃ | eva* (read *evaṃ*) *tarhi bhāvīny api [kra]mānam* (read *samānam*) *etat | tathā hi yady api kāryakāle sattā nāsti [bha]viśyati |* (delete *[bha]viśyati*) *| tathāpi bhaviśyati tata[s ta]-syāpi bhāvābhāvānuvidhānam varttamānasya nāyuktaṃ | na hy atītājātaayoḥ svakāle sattā[m] kālāntare vāsattam prati kaścid viśeṣaḥ | na cāsati viśeṣe 'nyataraparigraho jyāyān*.
47. See also PV III 26 (transl. Franco and Notake forthcoming, p. 83):
niṣpatter aparādhīnam 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.”
48. 65a1-2: *dvītiyapakṣāśrayo pi na śreyān | akṣaṇīkapakṣe 'pi hi yad eva kāryāt prāgbhāvīkāraṇasya svarūpaṃ tad eva tadutpattau nimittam | akṣaṇīkatvārthe* (read *akṣaṇīkatve rthe*) *tad anupayujyamānam api kāryakālam*

- anuvarttate | na hi labdhātmanah kārasya kāryaṃ kiñcid ast[i] yena tadātanaḥ kāraṇātmaupayogam āśādayet | sa ca prāgbhāvī svabhāvo bhāvī ca kārakāle nāsti | tato yathaitasyārthaya vyatirekānuvidhānan tathānāgatasypīti katham asiddhi (read asiddhir) hetoḥ |*
49. 65a3-4: *nanu nāśotpādaḥ samaṃ dvayam iti | kāraṇavyayakāryodayayoḥ samānakālatvāt kārakāraṇasattayor asttayā vyavadhānābhāvād atītānvayānuvidhānam upapadyata eva | na tv anāgatasya | tasyāsattayā vyavadhānāt | yadi hi kāraṇe naṣṭe kār্যotpattih syād asaty eva kāraṇe syāt |*
50. 65a6-b1: *tatredaṃ cintyate | kasyānāgatasypāsattvam ucyate | kim anaṃtarasya kim vā viprakṛṣṭasya | tatrānantarasyānāgatasypāsattvavyavadhānāśūṇyātvād āsannasyevātītasya (read –tītasya) katham asattvam |*
51. 65b1: *kār्याt prāgasattvam iti cet | atītasyāpi paścādasattvam iti na viśeṣaṃ paśyāmaḥ |*
52. Cf. the summary above.
53. 65b2-5: *asato janakatvāyogāt prāgasattvam bādhakam iti cet | kim idaṃ janakatvan nāma | kār্যotpattāv avaśyambhāvaḥ <|> yady evam anāgatasypī (delete -ga-) janakatvam aviruddhaṃ | tasyāpy avaśyambhāvāt | anāgatasypāśyambhāvo nābhūd iti cet, atītasyāpi na bhavaiṣyati | iti sāmāno (read samāno) nyāyaḥ | kārakāle tv anāgatasypāsattvam anupanyāsanīyam atītasyāp[i] tadanīm (read tadānīm) asatvāt | atha viprakṛṣṭam (read viprakṛṣṭam) anāgatam asat ity ucyate | viprakṛṣṭam atītam apy asat eveti na kiñcid etat |*
54. This could be a reference to a chapter that is not included in the present manuscript. The same is proved at length in the *Pramāṇasiddhi* chapter of the *Pramāṇavārttika*; cf. Franco 1997, chapters 3 and 4.
55. 65b5-6: *tasyājanakatvād asattve py adōṣa iti cet | na tarhi mūrcchādivyapagame vijñānena bhavitavyam | śarīrasya kāraṇatve paralokasāadhanoktena nyāyena niśiddhe vijñāne ca tadānīm nirudde <|>.*
56. 65b6: *yadi cirātītam api vijñānan na hetus tadā katha[m ahe]tukā vijñānotpattir (read vijñāno-) yujyate | ātmahetukatvān nāhetuketi cet |*
57. 65b6-66a1: *nityātvād dhetoṃ mūrcchādāv api tarhi vijñānena bhavitavyam | saha-kāripratyayasya vaikalpāt tadā tasyābhāva ity api vārttam | na hi sa sāhitye pi pararūpeṇa karttā |*
58. 66a1-2: *svarūpaṃ cānyadāpi tad eveti kathaṃ kadācit [|] kriyāvirāmaḥ <|> etena pariśāmaḥ pratyuktaḥ | tasyāpi svarūpamātrādhinatvāt (read -dhīna-) kādācitkatvāyogāt |* Cf. for instance HB 14.5f.
59. There is no indication in the text to a change in the identity of the opponent; my assumption is based on the opinion that *nīrodhasamāpatti* and *asaṃjñīsamāpatti* are typically Buddhist meditations and that Jitāri would not use them when arguing with a Brāhmaṇa who accepts the existence of a permanent *ātman*.
60. 66a2-3: *atha mūrcchādāv api jñānam abhyupagamyate nīrodhasaṃjñīsamāp[ati]r api kin nābhyupagamyate |*
On *asaṃjñīsamāpatti*, see AKBh, LVP, II, p. 200 n.
61. 66a3-4: *atha sarvvatraitad iṣyate | jñānasya samantarapratyayapūrvvakatvena siddhāyāṃ vyāptau mūrcchādīprabodhaprathamabhāvīno vijñānasya tathāsiddheḥ | tad asat <|> jñānaṃ hi jñānamātrapūrvvakatvena vyāptam na tv anutarajñānapūrvvakatvena (read ananātra-) | na cānantarayaṃ drṣṭāntena*

- dr̥ṣṭam iti sarvatra tad anuvarttanīyam* |.
62. 66a5-b2: *cirātītasyāsattvād akāraṇatvam iti cet* | *anantarasyāpi tarhy asatvād akāraṇatvaprasaṅgaḥ* | *kāryakāle hy asatvam prāk tu sattvam anayor dvaṃyor apy aviśiṣṭam* | *na hy anantarasyāpi prāgbhāvād anyad eva hetutvam, ta[c] [cā] nantaravato 'pi samānaṃ, cirātītasya kāryāt prāg asattvam api na kevalam satvam, anantarasya tu satvam eveti* | *ayam anayor bhedaḥ* | *ity api niḥsāram* | *tasyāpi nyatakālatvāt svarūpalābhasya tataḥ prāgbhāvāt kevalam sattvopayogāt* | *tasmān naiva mūcchādyavasthāsu jñānam anumātuṃ śakyam* |.
63. 66b2: *asatvam ami* (read *api*) *kathan niścīyata iti cet* |.
64. PVA 75.10, v. 466: *asaṃvedanaṃ rūpaṃ hi na saṃvedanam iṣyati* | *tathāpi yadi tadbhāvo mṛtasyāpy astu vedanam* ||.
65. 66b3-4: *na nanu* (read *khalu*) *tāvat mūrccchādīkāle saṃvedanābhāvaniścayo 'sti* | *tathāve tadayogāt* |.
66. 66b4-5: *utpadyata eva tāvan mūrccchādivibuddhasyāyam niścayo nāham iyantam kalam kim apy ajñāsiṣam iti*.
67. 66b5-6: *tadātānānām anubhavanām* [a] *samviditānām* (read *svasamviditānām*) *api svaviśayasmaraṇakaraṇaghaṭa{vā}bhāvād* (read *-ghaṭanābhāvād*?) *ayam adhyavasāyo ghaṭata eva* | *tad ayaṃ na saṃvedanavirahasādhanāya paryāpnoti* <|.
68. 66b6-67a2: *na tarhīdānūṃ kadācid api jñānābhāva[h]* | *sidhyati viśayāntarāvadhānādivaiguṇyayor api yogyadeśāparicchedāsiddhiprasaṅgāt* | *śakyam eva hīṭham abhidhātum vi[śa]yāntarātyantāsaktamanaso nidropadrūtasya nāsty eva sannikṣṭārthasākṣātkāri jñānaṃ*.
69. 67a5-6: *yathā cirātītākāraṇānvayavyatirekānuvidhānam adhunātanasya* | *tathā cirabhāvyānvayavyatirekānuvidhānam apīti na tad apekṣayāpy siddhir hetoḥ* |.
70. PVA 175.1: *nāvaśyaṃ kāraṇāni kāryavanti bhavanīti*.
71. For a recent, richly annotated translation of this verse see Steinkellner 2013: 18.
72. On the example of *ariṣṭa* see PVA above n. 20.
73. 67a6-b5: *syādetat[avaśyambhāvīnaḥ]kāryasya dharmiṇaḥ svahetvanukṛtānvayavyatirekatayā kāraṇatvam iha sisādhaviṣyata* [eva] *kāryasyāvaśyambhāvītā bhāvīkī kāraṇānām tadārambhaniyamābhāvāt* | *yathāha* | *nāvaśyaṃ kāraṇāni kāryavanti bhavanīti tad ayaṃ dharmāsiddher āśrayāsiddho hetur iti* | *tad etad asat* | *na hi tāvad anantarakāryam anavaśyambhāvīti śakyam vibhāvayitum* | *tatra kālakṣayābhāvena pratibandhābhāvāt* | *tathā hi sāmagrīphalaśaktīnām pariṇāmānubandhin[i]* | *anaikāntikatā kārye pratibandhasya sambhavāt* || PV I 8
hetusattāsannidhānamātrādhiṇe tu kārye | *pratibandhakāla* (read *pratibandhakasya*?) *akiñcitkaratvāt* | *kuto 'naikāntikatā athāsaty api pratibandhe samarthasyāpi kāryākaraṇaṃ saṃbhāvīyate mātur api vandhyātvaṃ kin na saṃbhāvīyate* | *viprakṛṣṭasyāpi na sarvasya kāryasyāvaśyakābhāvaḥ kasyacid āvaśyakāsyāpi* (read *āvaśyakasyāpi*) *darśanāt* | *ariṣṭād viprakṛṣṭasyāpi dr̥ṣṭāntasya dr̥ṣṭaikāntatvāt* |.
74. This is stated very tentatively. The text seems slightly corrupt.
75. I.e., is absent in the *sapakṣa* and present in the *vipakṣa*.
76. In this particular inference the subject (“everything”) is co-extensive with the *sapakṣa*, but Jitāri is not concerned here with the special features of such inferences.

77. 67b5-68a1: *vyavahitasya kāryasya katham avaśyambhāva iti cet | ata eva hetutvam anumāpyate | na hi bhāvasyāvaśyambhāvo nihnotuṃ śakyah | sa cānimittako na yujyate | na ca nimitta[tvād anyanimitta]syate(?) | tad evaṃ na katham iyam (read ayam) asiddho hetur iti | viruddhatvādhyavasāyo pīha sa (read a) nidhēyah | yo hi sapakṣavipakṣe param asti sa viruddha iti buddhir buddhimatām | asya ca hetoḥ sapakṣe sambhavādṛṣṭa (read sambhavo dṛṣṭa) iti na viruddhatām sambhāvayati vipaścīt kaścīt |*
78. 68a1-2: *anaikāntikāntikatāpy (read anaikāntikatāpy) asya na sambhāvīyā | sā hi sambhavantī niścīyamān[ā] vyabhicāratayā vā syāt saṃbhāvyamānavyabhicāratayā vā | prakārāntarasyātraivāntarbhāvāt |*
79. 68a2-3: *atra na tāvad ādya vikalpah kalapānām (read kalpanām) arhati | niścīte vipakṣe vṛttiniścayābhāvāt, tasyānte nānuvihitānvayavyatirekatā ca bhaviṣyati |*
80. Read perhaps in l. 4 (see the text in next note) –*yogāt* (is possible)?
81. 68a3-6: *na ca tadvetateti(?) dvitīyaprakāraparigraha kāryah | na cāsau yujyate | na hi tāvad ayam anibandhana eva tatkāraṇavyavahāro viśayapratiniyamāyogāt | na ca kārye py anuvihitabhāvābhāvātātiriktaṃ asyagocaracārinimittāntaram sambhāvayati | dahanāder api hi dhūmādikāraṇatā vyavahāro dhūmādhivābhāvān na vidhānādhiṇa read -bhāvānuvidhā-) eva |*
82. 68a6: *na{r} kāryān* na kṛtānvayavyatirekatāsyā nimittam api tu kārye vyāpāra iti cet |* * Delete *na{r} kāryān*? Presumably after making a mistake, the scribe started this sentence again.
83. Since the effect and the activity are different, their causes must be different. The cause of the operation, in its turn, in order to be a cause, must possess another operation and its operation must have another cause, which must have another operation, and so forth.
84. 68a6b-2: *nanv asāv api vyāpāro śya kādācitkatvāt kāryam [e]va | tatas tatrāpi kāraṇatāvyāpāravatteti vyāpāraparamparāparikalpa[nāyām] anavasthā syāt | anvayavyatirekamātreṇa tatkāraṇatve tad anyatrāpi tathāivāstām alam alikavyāpārakalpanayā |*
85. 68b2: *kāryāt prāg upalabhyate tarhi nimitta astv iti cet |*
86. 68b2-3 quoting PVA v. 439 (on 49cd); cf. above.
87. 68b3-4: *upalambhopalakṣitaṃ prāgbhāvamātram nimittam iti cet | sarvvasya tarhi prāgbhāvinah sarvatra kārye kāraṇatā syāt |*
88. 68b4: *niyamavataḥ prāgbhāvasya nimittatvād ayam aprasaṅga iti cet |*
89. 68b6 quoting PVA v. 440 (on 49cd).
90. 69a1: *asati viśeṣaṇe bhaviṣyati | bhāviṣyakāraṇatvaprasaṅga iti cet | k[i]ṃ punar atra bhavato 'nāgaṭenāparāddham yēnāsyā hetutvan necchati |*
91. 69a1-2: *anāgatakāraṇavāde ca bhāvīparalokānumānam anavadyaṃ syād iti guṇam eva yā[vat pa]śyāmah |*
92. 69a2-3: *tadbhāve bhāvītamātram eva ca kāryakāraṇabhāvaṃ | lokaḥ pratipadyate |*
93. 69a3-4: *tathāhur ācāryapādāḥ | yasya bhāvābhāvābhyām yasya bhāvābhāvau sa hehur itaro hetumān iti hetuhetuma[to]r lakṣaṇam ācakṣete hetukā (read haitukā) iti |* Cf. ĀP on 7a: *'di ltar gtan tshigs pa dag ni yod pa dan med pa dag gi de dan ldan pa nīd ni rgyu dan rgyu dan ldan pa rim gyis skye ba dag gi yan mtshan nīd yin par smra'o*. This statement of Dignāga seems to have been taken directly from the *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 nīyamataḥ 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.”

94. 69a4: *kīrttipādās ca na hy anvayavyatirekābhyām anyo hetuphalayos tadbhāva ity āhuḥ* |. Cf. Pvīn I 3.12f.
95. 69b1: *tad evam amunā(ne?) 'siddhādido[ś]atra[ya]viyoginā hetunā [yat siddham] sattvāt tad upā]deyam alam atijalpitena* ||.
96. 69b1-3: *anāgatasādhayātādyalamkāreṇa kāraṇam | kāryakāraṇabhāvasya viṣṭatavṇam prasādhitam || vicāraviraheṇaiva ramaṇīye[śu viṣṭeṣu]te nābhiniṣṭavyam ity eva sūcayaty ayam || śamay[i]tvā yathānyāyam avamānaṃ ma_[īvi] | nīyanmayādhigataṃ puṇyaṃ tenāstv eṣa jano jinaḥ ||bhāvikāraṇavādas sāmāpto mahāpaṇḍitaśrīnām jītarīpādānām || || likhitam idaṃ jambhaladharaṣya ||* ||. 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.
97. We do not know anything on the doctrine of future cause in the time (roughly two centuries) that separates Jitāri from Prajñākaragupta. As far as I can see, Jitāri uses the PVA 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).
98. According to Dharmakīrti, a cause is only a necessary condition, but a causal complex, provided that it is complete and unhindered, can be a sufficient condition for the arising of the effect. These two types of causes are used for different types of reason: the former is used in inferences based on *kāryahetu*, the latter on *svabhāvahetu*; in the former one can only infer the cause from the effect, in the latter one can also infer the effect from the cause, or more precisely the capacity of the causal complex to produce its effect.
99. The literature on this subject is voluminous; 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 David Lewis, “The Paradoxes of Time Travel,” Hilary Putnam, “It ain't necessarily so,” Douglas Gasking, “Causation and Recipes,” Roerick Chisholm and Richard Taylor, “Making Things to Have Happened” and William Dray, “Taylor and Chisholm on Making Things to Have Happened.” See the bibliography for the exact references.
100. Cf. Dummett 1978b: 334.
101. Dummett 1978b: 335ff. However, Dummett oversimplifies the Jewish orthodox attitude towards the unchangeability of the past. In any case, 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 Bathsheba (2 Samuel 11). I hope to return to this on a different occasion.
102. Cf. Brown 1992.

103. This often discussed example comes from Davies 1997.
104. Brown relies on several studies in theoretical physics such as Friedman *et al.*, “Cauchy problem in spacetimes with closed timelike curves”* (Friedman *et al.* 1990), Deutsch, “Quantum mechanics near closed timelike lines” (Deutsch 1991), and Echeverria *et al.*, “Billiard balls in wormhole spacetimes with closed timelike curves: Classical theory” (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.*”
- *Closed timelike curves (CTC) is the common expression for a closed loops of world lines, as in Heinlein’s story summarized below. There is a debate whether CTCs are allowed by general relativity and quantum theory; cf. Kaku, 1994: 240.
105. Cf. K. Gödel, “An Example of a New Type of Cosmological Solution of Einstein’s Field of Gravitation” *Reviews of Modern Physics* 21 (1949): 447 quoted in Kaku 1994: 242.
106. 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.
107. Cf. Greene 2004: 456-457. His solution is based on Deutsch 1997.