

“THIS BEING, THAT BECOMES:”
RECONSIDERING THE ROLE OF THE *IMASMIM SATI*
FORMULA IN EARLY BUDDHISM

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ABSTRACT

This article investigates the original meaning of dependent arising in the Buddha’s teaching, by focussing on the *imasmim sati* formula. Modern scholars such as the Rhys Davidses, K.N. Jayatilleke and Paul Williams have interpreted it as a principle of causation, comparable to a scientific conception of causation. I argue instead that this formula implies that the Buddha held that causation is nothing more than the correlation of causes and effects, and that it commits the Buddha to a Humean regularity thesis about causation. I draw a distinction between the Buddhist and scientific concepts of causation, and then summarise an alternative approach made by more recent scholars such as Sue Hamilton, Noa Ronkin and Eviatar Shulman, who present dependent arising in terms of conditionality in the causal structure of subjective experience. I conclude by presenting the argument that the *imasmim sati* formula does not express a principle of causation but is rather a formula for the method of discovering and presenting causation as conditionality in experience.

The problem of dependent arising

In a well-known exchange from the *Mahānidānasutta*, Ānanda tells the Buddha how easy it is for him to understand dependent arising (*paṭicca-samuppāda*), and the Buddha reproves him for complacency:

“It is wonderful, lord, it is marvellous, how deep and profound is this dependent arising though to me it seems quite plain.”

“Do not say that, Ānanda, do not say that. This dependent arising is deep and profound. It is from not understanding and penetrating this dharma that people have become like a tangle of string covered in mould and matted like grass, unable to escape from saṃsāra with its miseries, disasters and bad destinies.”¹

¹ This exchange also occurs in S 12: 60, II 92. The comparison with a “tangle of string” is also found at A 4: 199, II 211, in relation to craving (*taṇhā*). There are parallels

Richard Gombrich has interpreted this remarkable exchange to mean that “those who first formulated the text and recorded the teaching felt unsure whether they understood it themselves” (2009: 133). The Buddha in the *Mahānidānasutta* goes on to teach Ānanda about the dependent arising of ageing-and-death (*jarā-maraṇa*) from birth, birth from existence (*bhava*), and so on, down to the co-arising of consciousness (*viññāṇa*) and name-and-form (*nāma-rūpa*). This presentation of nine causal factors (*nidānas*) of dependent arising is a variation on the standard formula with twelve factors. But as Rupert Gethin has observed, “the earliest texts give very little explanation of how the formula is to be understood” (1998: 149). To understand dependent arising as it has been understood in the Buddhist tradition, we have to turn to later commentarial works, such as Buddhaghosa’s *Visuddhimagga* (ch. 17) and Vasubandhu’s *Abhidharmakośa* (ch. 3), which interpret the twelve causal factors as applying over three lifetimes and the whole formula as explaining the rebirth process.² While there is no doubt that this is what dependent arising came to mean in the Buddhist tradition, a variety of thinkers and scholars have expressed scepticism as to whether this was the original meaning of the formula.³

Such uncertainty about the teaching of dependent arising extends from the meaning of the twelve (or nine, or less) causal factors to the question of what concept of causation the teaching implies. By a “concept of causation,” I mean an account of how the world works, of the nature of cause and effect, and how cause and effect are related. In an introduction to her account of dependent arising in Sarvāstivāda Abhidharma, Collett Cox suggests that the Buddhist tradition actively modified the meaning of

preserved in Chinese translation in DĀ 13 (T I 60b) and MĀ 97 (T I 578b). The translation of DĀ 13 by Ichimura (2016: 23) is misleading: see the translation of MĀ 97 by Anālayo and Bucknell (2020: 205) and Anālayo (2020: 162).

² The situation is in fact more complex than this, as the Abhidharma traditions which these commentarial works exemplify had also developed an interpretation of dependent arising as applying to *dharmas*, both instantaneously in terms of the different kinds of causes and conditions, and successively in terms of momentary existences.

³ Some of these are reviewed in Jones 2009. I would add that the eighteenth-century Japanese theorist of religion, Tominaga Nakamoto, independent of modern western scholarship, expressed similar doubts about whether the three-life interpretation of the twelve causal factors should be interpreted as explaining rebirth (1990: 128–130).

the doctrine through layers of interpretation, and therefore a sensitivity to context is required in saying what dependent arising means (1993: 120). She goes on to argue that, despite the theories of causation developed by Abhidharma traditions (such as the twenty-four conditions of the Theravāda, and the four causes and six conditions of the Sarvāstivāda), “we cannot assume that the early theory of dependent origination functions as an abstract causal principle or is even initially or intrinsically related to causal functioning. Instead, we must allow for the possibility that causation and dependent origination have quite different origins and different contexts of development” (1993: 121). With this methodological scepticism in mind, she goes on to observe that scholarly investigations of the meaning of dependent arising in the early discourse literature tend to assume either “the role of dependent origination as a generalized and logical principle of abstract conditionality applicable to all phenomena, or its role as the descriptive model for the operation of action (*karman*) and the process of rebirth” (1993: 121–122). Both assumptions find support in early Buddhist texts. Dependent arising has posed a problem to scholars because it is unclear what the Buddha meant by it – even whether the Buddha meant it as an account of causation.

Uncertainty about the meaning of dependent arising does not, however, mean that we know nothing about it. Firstly, its importance in early Buddhist texts is not in doubt, and the Buddha’s teaching of dependent arising may be counted as the most significant conceptual formulation of the truth (*dhamma*) that he is said to have discovered. Dependent arising is identified with the Dharma itself, since the Buddha is reported to have said, “Who sees dependent arising sees the Dharma; who sees the Dharma sees dependent arising.”⁴ In some sources, dependent arising is presented as the intellectual content of the Buddha’s awakening

⁴ Spoken by Śāriputta in M 28, I 191, who attributes the saying to the Buddha: *yo dhammaṃ passati so paṭiccasamuppādaṃ passati*. A parallel at MĀ 30 is preserved in Chinese translation at T I 467 (discussed in Anālayo 2011: 198 and trans. in Bingenheimer, Anālayo, and Bucknell 2013: 232). I use the Sanskrit “Dharma” for convenience, and to avoid any impression that I am only discussing Pāli Buddhism. The identification of *pratītya-samutpāda* with the Dharma is also made by Śāriputra in the *Śālistambasūtra* (Reat 1993: 27), a Mahāyāna *sūtra* concerned with *pratītya-samutpāda*, and in the *Bodhisattvapiṭaka* (Schoeningh 1991: 5).

experience.⁵ Secondly, dependent arising is most often presented in a standard formula consisting of twelve causal factors (*nidānas*), from ignorance (*avijjā*) to ageing-and-death (*jarā-marāṇa*), in their natural (*anuloma*) order of arising and their contrary (*paṭiloma*) order of ceasing.⁶ In many, though not all, cases in the Pāli discourses,⁷ this standard formula is preceded by a formula beginning *imasmiṃ sati*, as follows:

imasmiṃ sati idaṃ hoti imass'uppādā idaṃ uppajjati
*imasmiṃ asati idaṃ na hoti imassa nirodhā idaṃ nirujjhati*⁸
 This being, that becomes;⁹ from the arising of this, that arises;
 This not being, that does not become; from the cessation of this, that ceases.

Thirdly, the teaching of dependent arising, which is of central importance in early Buddhist discourses, and is summed up in a standard formula, is always said to be an account of the arising and ceasing of *dukkha*, or unsatisfactoriness.¹⁰ This is especially evident in early presentations

⁵ Ud 1: 1–3, pp. 1–3; Vin I 1–2. However, not only are there also other accounts of content of the Buddha's awakening, but early sources differ as to exactly when the Buddha discovered dependent arising: see Lamotte 1980 for a review.

⁶ The standard formula of dependent arising is particularly associated with the *Nidāna-saṃyutta* of the *Saṃyuttanikāya* (and parallels), but even this collection contains many variations; while in the *Dīghanikāya* the standard formula does not occur at all, replaced by a 9-link formula in the *Mahānidānasutta* (D 15, II 55–64) and a 10-link chain in the *Mahāpadānasutta* (D 14, II 31–35).

⁷ The standard formula preceded by the *imasmiṃ sati* formula is found at S 12: 21, 22, 37, 41, 49, 50, 61, 62; also at S 55: 28; M 38; M 115; A 10: 92; and Ud 1: 3. In addition, at Ud 1: 1 we find the *anuloma* side of the formula; at Ud 1: 2 the *paṭiloma*. A shortened form of *paṭicca-samuppāda*, consisting only of the twelve *nidānas* in natural and contrary order, is found at Vin 4: 1; M 38; S 12: 1–3, 11, 15, 17, 18, 27, 35–37, 46–48, 90.

⁸ In Sanskrit parallels, the first and second lines of the formula are separated and placed before their corresponding *anuloma* and *pratiloma* rehearsals of the *nidānas*: *asmim sati idaṃ bhavati asyotpādād idaṃ utpadyate... asmim asati idaṃ na bhavati asya nirodhād idaṃ nirudhyate* (as in fact also in M 38); see e.g. the *Sanghabhedavastu* (Gnoli 1977: 127). The formula is similarly preserved in parallels in Chinese translation (Choong 2000: 156–157).

⁹ The construction involving a locative absolute, *imasmiṃ sati idaṃ hoti*, might also be translated, “when this exists, that comes to be;” but the English construction with a nominative absolute phrase, “this being, that becomes,” offers at least a little poetic dignity.

¹⁰ On the claims that *dukkha* means “unsatisfactoriness” rather than “suffering” see Cone 2010: 410, Anālayo 2019, Jones 2019.

of what became the teaching of dependent arising found in the *Sutta-nipāta*, not yet standardised into the twelve-link formula.¹¹

In the present article I seek to contribute to an investigation of the original meaning of dependent arising, by focussing on the *imasmim sati* formula. I begin by noting how modern scholars such as the Rhys Davids, K.N. Jayatilleke and Paul Williams have interpreted it as a principle of causation, comparable to a scientific conception of causation, at least as found in late-nineteenth-century science. Such an attempt to put the Buddha’s teaching into dialogue with science relates to the Buddhist modernist attempt to relate Buddhism and science. I criticize this interpretation by observing that, by implying that the Buddha held that causation is nothing more than the correlation of causes and effects, it commits the Buddha to a Humean regularity thesis about causation. I go on to draw a distinction between the Buddhist and scientific concepts of causation, and then summarise the approach made by some other modern scholars, such as Sue Hamilton, Noa Ronkin and Eviatar Shulman, who present dependent arising in terms of the causal structure of subjective experience. While this approach better accounts for the twelve *nidānas*, as exemplifying causation as conditionality, it leaves open the meaning of the *imasmim sati* formula. I conclude by presenting the argument that this formula does not express a principle of causation but is rather a formula which expresses a method of discovering and presenting causation as conditionality in experience.

The modernist interpretation of the *imasmim sati* formula

While the *imasmim sati* formula often occurs in the standard formula of dependent arising, followed by an exposition of the twelve causal links, no explanation of its meaning is recorded in the early discourses. This has not stopped many modern scholars of early Buddhism from calling the *imasmim sati* formula a “principle” of dependent arising,¹²

¹¹ See Nakamura 1980; overview in Cox 1993: 124–125, citing the *Kalahavivādasutta* (Sn 4: 11, pp. 168–171) and *Dvayatānupassanāsutta* (Sn 3: 12, pp. 139–149).

¹² Gethin (1998: 141) describes it as a “succinct formula [that] describes the principle of causality;” Bodhi (2000: 517) calls it “the abstract structural principle of conditionality;” I described the formula as the “principle of conditionality” in Jones 2011: 20f.

with the implication that the formula expresses the abstract logic of dependent arising.¹³ The impression that the formula expresses a principle may have gained support from a Pāli discourse in which the Buddha teaches the *imasmiṃ sati* formula by itself as the Dharma, while neither calling it *paṭicca-samuppāda*, nor co-ordinating it with the twelve *nidānas*. This is in the *Cūlasakuludāyisutta*, in which the Buddha says to the wanderer Udāyi:

But, Udāyi, let the past be, let the future be; I will teach you the Dharma: this being, that becomes, from the arising of this, that arises; this not being, that does not become, from the cessation of this, that ceases.¹⁴

Such a presentation of the Dharma might be understood to suggest that the *imasmiṃ sati* formula is indeed a formulation of the principle of *paṭicca-samuppāda*, which elsewhere the Buddha identifies with the Dharma itself.¹⁵ I would argue, however, that the very idea of an abstract principle of dependent arising, summed up in a logical formula, is the result of the modernist reading of dependent arising as a concept of causation comparable to a scientific principle of causation.

Such a modernist reading can be traced back to nineteenth-century Buddhist scholarship. To T.W. Rhys Davids, the founder of the Pali Text Society and translator of Pali texts, and his wife Caroline, it seemed obvious and desirable that the *imasmiṃ sati* formula was comparable to

though I would revise this now; Anālayo (2013: 610) describes it as the “succinct expression” of the “principle” of conditionality; Harvey (2013: 47) calls it “the principle of conditionality,” and an “abstract principle.”

¹³ OED s.v. “principle” 3.a.: “A fundamental truth or proposition on which others depend; a general statement or tenet forming the (or a) basis of a system of belief, etc.; a primary assumption forming the basis of a chain of reasoning.”

¹⁴ M 79, II 32: *api ca udāyi tiṭṭhatu pubbanto tiṭṭhatu aparanto dhammaṃ te desessāmi. imasmiṃ sati idaṃ hoti imassuppādā idaṃ uppajjati. imasmiṃ asati idaṃ na hoti imassa nirodhā idaṃ nirujjhati.* There is one other Pāli discourse in which the general formula (called “dependent arising”) is stated without the twelve, at S 12: 62, II 96, where it is followed by a detailed exposition of the causal relationship between contact (*phassa*) and feeling (*vedanā*), but without discussing any other *nidānas* (see n. 58 below for an interpretation).

¹⁵ See n. 3 above for discussion of this identification. The presentation of the formula alone in the *Cūlasakuludāyisutta* is not found in a parallel version of the discourse in Chinese translation (Anālayo 2011: 433), meaning that we should perhaps not attach too much importance to this one occurrence in Pāli.

a law of causation. In their introduction to the translation of the *Mahānidānasutta* (“The Great Discourse on Causation,” D 16, II 55–71), they remark that the *imasmiṃ sati* formula (which is in fact missing from this discourse):

is the schematized, or abstract formula of the whole sequence [of the *nidānas*], showing the logic of it without the contents – “That being thus, this comes to be, from the coming to be of that, this arises. That being absent, this does not happen, from the cessation of that, this ceases.”

The Rhys Davidses identify the formula with the underlying causal logic of the *nidānas*, which is one of the themes of the *Mahānidānasutta*. They go on to remark of the *imasmiṃ sati* formula, understood in this way, that:

It is on all fours with the modern formulation of the law of causation – “that every event is the result or sequel of some previous event, or events, without which it could not have happened, and which, being present, it must take place” (Rhys Davids and Rhys Davids 1910: 42).

It was of tremendous significance for these Victorian pioneers of the study of Buddhism that a formulation of the Dharma attributed to the Buddha should be comparable to the law of causation, as that was understood in late nineteenth-century science. It meant that the teaching of the Buddha could be presented as a rational alternative to familiar religions of belief.¹⁶

K.N. Jayatilleke, whose *Early Buddhist Theory of Knowledge* is a modernist reading of the Dharma as a form of empiricism, also compared dependent arising to a scientific formulation of causation.¹⁷ He sets out his view of the significance of the *imasmiṃ sati* formula like this:

Those occurrences which are causally connected are considered to have the following relation, namely that (1) “whenever A is present, B is present” (*imasmiṃ sati idam hoti...*), and (2) “when ever A is absent, B is absent”

¹⁶ Richard Gombrich (1971: 52) discusses the rationalist character of T.W. Rhys Davids’ thought. The analysis of the Rhys Davids’ interpretation of Buddhism as an orientalist construction is taken up by Hallisey (1995) and Snodgrass (2007); the latter, as well as McMahan (2009: 52), discusses how the Rhys Davids’ rational and psychologizing approach became the standard interpretation of early Buddhism.

¹⁷ Jayatilleke’s work gets some discussion in McMahan 2009: 206. Jayatilleke’s modernism is reviewed in Gombrich 1988: 196 and Gombrich and Obeyesekere 1988: 222–223.

(*imasmim asati idam na hoti...*). This means that B does not occur unless A is present and occurs only when A is present. Thus a one-one correlation is established between the conditions constituting the cause and their effect. *This is a scientific view of causation as opposed to the practical common-sense view* (Jayatilleke 1963: 149).¹⁸

Jayatilleke's account shares with the Rhys Davids the claim that dependent arising involves a concept of causation comparable to the scientific view of causation, and that the *imasmim sati* formula summarises the logical relation of causally connected occurrences.¹⁹ In sum, this account of dependent arising is that the ancient Buddhist teaching involves an empiricist concept of causation like that of modern science, and that the *imasmim sati* formula expresses the logic of this concept.²⁰

The logic of the *imasmim sati* formula

However, a consideration of the undesirable consequences of the claim that the *imasmim sati* formula expresses the logic of causation leads to some difficulties for this interpretation of dependent arising. One would not usually describe Paul Williams as a Buddhist modernist, but his account of causation in early Buddhism may have been influenced by the modernist interpretation of dependent arising. He explains how the

¹⁸ Emphasis mine. Jayatilleke goes on to distinguish the first part of the *imasmim sati* formula ("whenever A is present, B is present," and its contrary) from the second part ("from the arising of A, B arises," and its contrary), characterising the latter as a "concrete formula, which has reference to the world of change" (Jayatilleke 1963: 149). Below, I will argue, against Jayatilleke, that the second part of the *imasmim sati* formula merely uses a different grammatical form to indicate different ways to express a causal association of phenomena.

¹⁹ Kalupahana (1975: 97) follows Jayatilleke's interpretation of the *imasmim sati* formula, taking it as a statement of causation.

²⁰ Kalansuriya (1979) criticises the modernist interpretation of dependent arising, but from a different perspective to the one I will take. Hoffman more broadly takes the "Buddhist empiricism" thesis of Jayatilleke et al. to task, arguing (1982: 152): "Aligning early Buddhism with empiricism may be seen from the point of view of Buddhist apologetics to offer some advantages. Both the prestige of science and the popularity in the West of empiricism might be harnessed in support of an ancient way of life. But from the viewpoint of philosophy of religion and of accuracy to the Pali texts, this sort of view is *prima facie* open to suspicion."

Buddha’s teaching of dependent arising indicates the impersonal, lawlike nature of causation, especially in relation to the unsatisfactoriness of human existence and the way to liberation (Williams, Tribe, and Wynne 2011: 46–48). He goes on:

This impersonal lawlike nature of causation is well demonstrated in its standard formula [here meaning the *imasmim sati* formula] found in early Buddhist sources: “This existing, that exists; this arising, that arises; this not existing, that does not exist; this ceasing, that ceases” (Gethin 1998: 141). This is what causation *is* for early Buddhist thought. It is a relationship between events, and is what we call it when if *X* occurs *Y* follows, and when *X* does not occur *Y* does not follow (in Pāli: *imasmim sati idam hoti; imasmim asati idam na hoti*). There is nothing more to causation than that (Williams, Tribe, and Wynne 2011: 48).²¹

Williams’ account of causation in early Buddhism echoes that of Jayatilleke. But some reflection on the logic of causation shows that this way of explaining the Buddhist concept of causation is untenable.

In writing that “there is nothing more to causation than that,” namely, that “if *X* occurs *Y* follows, and when *X* does not occur *Y* does not follow,” Williams presents causation in Buddhism as the correlation or co-variance of events. That is to say, he makes the claim that causation, for Buddhism, amounts to the correlation of *X* and *Y*, when these are events. But logically it does not actually follow that the correlation of events implies causation. A correlation between two events or occurrences may logically imply any one of the four following possibilities:

1. *X* is the cause of *Y*. For instance (from early Buddhist teachings), if there is ethical conduct (*sīla*), then there is freedom from remorse (*avippaṭisāra*). Ethical conduct is the cause of freedom from remorse.²²

²¹ The embedded translation of the *imasmim sati* formula by Gethin (1998: 141) presents the second part of the formula, *imassuppādā idam uppajjati*, as “this arising, that arises,” which more exactly would be “from the arising of this, that arises;” likewise *imassa nirodhā idam nirujjhati* could be translated “from the ceasing of this, that ceases.”

²² A 11: 3, V 313 (and elsewhere in early Buddhist literature): “for one of virtuous conduct and perfect in virtue, the precondition of freedom from remorse is perfected” (*sīlavato bhikkhave sīlasampannessa upanisasampanno hoti avippaṭisāro*).

2. *Y* is the cause of *X*. For instance (from modern medicine), if there is the symptom or sign, then there is the disease. The disease is the cause of the symptom or sign.²³
3. Both *X* and *Y* are caused by another factor *Z*. For instance (also from early Buddhist teachings), if there is feeling (*vedanā*), then there is perception (*saññā*). But both feeling and perception are caused by contact (*phassa*).²⁴
4. There is no causal relationship between *X* and *Y*, only a chance correlation. For instance, the per capita consumption of margarine in the US is almost perfectly (99.26%) correlated with the divorce rate in the US state of Maine.²⁵

These four possibilities show that the statement, “if *X* occurs *Y* follows, and when *X* does not occur *Y* does not follow,” cannot state the logic of causation. Rather, it is an abstract statement about the kind of link between *X* and *Y* that shows there *could be* or *probably is* a causal relationship between them. There is only a probability of a causal link because, logically, there are other possibilities of understanding the relation of *X* and *Y*. Hence it is logically mistaken to infer causation from correlation. To know that *X* causes *Y*, we would need to know more than that when *X* occurs, *Y* occurs, and when *X* does not occur, *Y* does not occur: we would need to know that, in addition to the correlation or co-variance of *X* and *Y*, that they are causally connected.

Given that the *imasmiṃ sati* formula only expresses correlation or co-variance, it would not be accurate to describe this as a principle of *causation*, as does Paul Williams as discussed above. However, although

²³ This is of course to drastically simplify the inferential processes connecting symptoms and signs to the diagnosis of disease (King 1982).

²⁴ At M 18, I 111 Mahākaccāna explains that “with contact as condition there is feeling. One perceives what one feels” (*phassapaccayā vedanā yaṃ vedeti taṃ sañjānāti*). This seems to imply that feeling is the causal condition of perception, but we should rather think that both feeling and perception have contact as their causal conditions, for at M 43, I 293, Sāriputta says “Feeling, perception and consciousness are co-created, not non-co-created” (*yā... vedanā yā ca saññā yaṃ ca viññāṇaṃ ime dhammā saṃsaṭṭhā no visamsaṭṭhā*).

²⁵ This and other spurious correlations are presented by Tyler Vigen at <https://www.tylervigen.com/spurious-correlations>.

the correlation or co-variance of events does not necessarily imply causation, we can in fact infer the correlation of events from their being causally connected. The *imasmiṇ sati* formula could certainly represent an inference from a knowledge of causation. It could represent a generalisation about the empirical relation of two events given that they are causally related. Indeed, this is the most reasonable way to understand Jayatilleke’s view that the *imasmiṇ sati* formula summarises the empirical logic of causation. However, this view of causation as a relationship between causally connected events, known through observation and experience, is a particularly modern view about the nature of causation, which can be traced back to the philosophy of David Hume.

The modern view of causation

I suggest that to some degree Williams, as well as Jayatilleke and the Rhys Davidses, have taken a modern scientific view of causation for granted, and tried to read the Buddha’s teaching of dependent arising in its terms. If it were true that “but this is what causation *is* for early Buddhist thought... there is nothing more to causation than that,” as Williams has claimed, then it would mean that causation for early Buddhist thought is no more than the correlation or constant conjunction of events. This would be to read the early Buddhist account of causation in terms of Hume’s regularity theory of causation.

Hume’s regularity theory of causation is the single most important and influential theory about the nature of causation in modern philosophy.²⁶ Hume asks what we can know about causation, and his answer is that we can know that one event is regularly followed by another event. As for the metaphysical question of how the universe works, his answer is the skeptical one that causation is fundamentally an idea in our minds, an idea that is based on our experience of the correlation, or, as he put it, the constant conjunction, of events; and such an idea may or may not

²⁶ Among contemporary philosophers of causation, Mackie (1974: 3) comments that “The most significant and influential single contribution to the theory of causation is that which Hume developed in [the *Treatise* etc.];” likewise Sosa and Tooley (1993: 1) write of “Hume’s profound and extremely influential discussion.”

have any purchase on the mind-independent reality of causation. Hence Hume defines a cause as follows:

we may define a cause to be *an object, followed by another, and where all the objects similar to the first are followed by objects similar to the second.* Or in other words *where, if the first object had not been, the second never had existed.* The appearance of a cause always conveys the mind, by a customary transition, to the idea of the effect... We may, therefore, suitably to this experience, form another definition of cause, and call it, *an object followed by another, and whose appearance always conveys the thought to that other.*²⁷

But, as Hume goes on to explain, this constant conjunction of objects and events gives us no idea of the necessary connection between them, the force or power, which is what we mean by speaking of a cause.²⁸ We do not *know* causation, we just *believe* in it, by habit.

When the Rhys Davidses wrote that the *imasmiṃ sati* formula was “on all fours” with the law of causation, what they evidently had in mind was a late nineteenth-century version of Hume’s empiricist conception of causation as constant conjunction. The Rhys Davidses do not attribute their formulation of the law of causation to anyone in particular, no doubt because they considered it a general truth. But it would appear to be a modified version of the law as it is found stated in J.S. Mill’s *Logic*:

For every event there exists some combination of objects or events, some given concurrence of circumstances, positive and negative, the occurrence of which is always followed by that phenomenon.²⁹

Mill, along with other late nineteenth-century philosophers, regarded our knowledge of the laws of nature to be inductive generalisations from experience, and causation to be the regular conjunction of events from which laws of nature can be induced. The Rhys Davidses, taking this

²⁷ Hume, *Enquiry Concerning Human Understanding*, sect. 7 part II (ed. Selby-Bigge and Nidditch 1975b: 76–77); the same argument is made both in the *Treatise* Bk. 1 Part III Sect. VI (ed. Selby-Bigge and Nidditch 1975a), and in the *Abstract* (ed. Millican 2007: 133ff.).

²⁸ This philosophical position does not commit Hume to the metaphysical conclusion that there is no causal power at work in the world, but only to the skeptical conclusion that our knowledge is limited to our ideas based on experience.

²⁹ *System of Logic*, Bk.III ch.V §2 (Mill 1882: 237).

conception of science and reality for granted, naturally recognised a similar spirit of rational empiricism in early Buddhist thought. Likewise, Jayatilleke, seeing parallels between the Buddha’s formulation of causation and Mill’s philosophy, drew the conclusion that the Buddhist teaching was a form of empiricism (Jayatilleke 1963: 146).

Scholars characterising the *imasmiṃ sati* formula as the principle of conditionality have, perhaps unwittingly, followed the Rhys Davidses and others in thinking that the *imasmiṃ sati* formula is a statement of the law of causation. Paul Williams has made this explicit in saying that the constant conjunction of events is what causation is for early Buddhism. This is a modernist reading of the *imasmiṃ sati* formula, recognizing in it an empiricist understanding of causation.³⁰ It is intelligible, but has the implication of committing early Buddhism to a Humean skepticism about causation.³¹

Dependent arising as a concept of causation

But it is untenable to understand the early Buddhist concept of causation in these Humean terms. I have already shown that doing so leads to the undesirable consequence of presenting the *imasmiṃ sati* formula as a logically faulty principle of causation. A second *a priori* reason not to interpret the Buddhist concept of causation according to that of Hume is that dependent arising does not concern relationships between events. For the modern scientific view of causation, based on Hume, causation means that one kind of object or event is regularly followed by another. The image Hume uses to illustrate causation in this mechanical sense is that of a moving billiard ball colliding with another and causing it to move.

³⁰ Fundamental advances in twentieth-century science led to much less consensus about the nature of causation. Russell (1913), for instance, argued that the notion of a cause was “a relic of a bygone age,” in the context of fundamental developments in science, and in the understanding of scientific laws. Likewise, few metaphysicians today are satisfied with an empiricist understanding of causation.

³¹ Kalupahana (1975: 107) tries to avoid the skeptical implications of taking causation as an empirical principle by distinguishing the Buddha’s teaching of *causation* (part of experience, and completely certain) from *causality* or causal uniformity, which is an inductive inference (therefore uncertain); this is criticised by Siderits (1980) as being not very intelligible.

But in the early Buddhist view, causation concerns the existential dependence of various experiential phenomena (*dhammas*), as exemplified in the list of twelve *nidānas*, on other phenomena. Elsewhere I argue that the images used in early Buddhism to illustrate causation include that of organic growth, especially a seed sprouting when the appropriate conditions are present.³² This is a concept of causation as conditionality. The concept is summarised in the term *paṭicca-samuppāda* itself, which is only approximately rendered by an English translation such as “dependent arising.” The term as a whole is a syntactical compound, which when unpacked as a sentence, expresses a concept of causation: “(a phenomenon’s) arising (is) dependent on (a condition).”³³ Let us call this the principle of conditionality. Likewise, the term *idappaccayatā*, a synonym of *paṭicca-samuppāda*,³⁴ although usually translated “conditionality” or “specific conditionality,” may be rendered in a more literal way as “the state (-*tā*) of having this (*idaṃ*) as condition (*paccaya*).” Putting this into an English conceptual idiom, we might say that *idappaccayatā* means “the state of (a phenomenon’s) having this (other phenomenon) as its condition.” This too is a statement of the principle of conditionality.

There are also two *a posteriori* reasons for distinguishing the early Buddhist concept of causation from the modern scientific concept. The first is that the Buddha, unlike Hume, was not a sceptic about our knowledge of causation. Had the Buddha intended to teach a regularity theory of causation, expressing the idea that causation is a correlation or constant conjunction of events in our experience, he might naturally have been sceptical about whether dependent arising is a metaphysical truth; he might have taught that dependent arising is just a pragmatic way of seeing things for the sake of liberation. But this is not what the Buddha is reported to have said about dependent arising. Rather, it is said that he

³² See Jones 2021: 253–257 for a more detailed account of the images used to illustrate dependent arising.

³³ Also see Jones 2021 for a more detailed analysis of the term *paṭicca-samuppāda*.

³⁴ The two terms appear in apposition at D 14, II 36: *idappaccatā paṭiccasamuppādo*. This same passage also appears at M 26, I 167 and S 6: 1, I 136 (and identically elsewhere). A Sanskrit parallel in the *Mahāvastu* (Senart 1897: 314) adds *hetu* (“causation”) as another synonym: *idaṃhetu idaṃpratyayaḥ pratīyasamutpādaḥ* (but see Marciniak 2019: 399).

“clearly knows the nature of causation,”³⁵ and, understanding it himself, teaches others, such that “this dependent arising and these dependently arisen phenomena have been well seen with perfect insight as is actually the case by the noble disciple.”³⁶ Likewise, “the person who is perfected in view has clearly seen both causation and causally arisen phenomena.”³⁷ There is not much room in a reasonable exegesis of the Buddha’s teaching for attributing to him a Humean skepticism about causation. I doubt, however, that Buddhist scholars actually mean to imply that the Buddha was a skeptic about causation. Rather, the fact that they unwittingly do so shows how powerful an influence Hume’s regularity theory of causation has had on western thought, such that Buddhist scholars have mistaken the *imasmiṃ sati* formula of dependent arising for a principle of conditionality, by taking it to express the correlation of events, and by thinking that such a principle of constant conjunction was sufficient to identify causation.

The second *a posteriori* reason to distinguish dependent arising from a scientific account of causation is concerned with determinism. To say that event *X* causes event *Y* is to say that if *X* occurs then *Y* must necessarily occur. We can say that a billiard ball is the *cause* of the movement of another ball to move only when that movement is necessitated or

³⁵ Ud 1.1, p. 1: *pajānāti sahetudhammaṃ*. This is part of the concluding *pāda* of an “inspired utterance” (*udāna*) attributed to the Buddha after paying attention to dependent arising in its natural course (*anuloma*). This has also been rendered “[one] understands each thing along with its cause” (Ireland 1990: 14), “understands (the nature of) a thing and its cause” (Ānandajoti 2011), and “understands the thing to have root-cause” (Masefield 1994a: 1); the latter translation follows the commentary, which ties *sahetudhammaṃ* to an understanding of the twelve *nidānas* in the preceding prose portion of the discourse. But the stanza appears also in the Sanskrit *Udānavarga* (33.77; Ānandajoti 2005), and hence probably had an independent existence before the Pāli version became associated with the prose as in Ud 1.1.

³⁶ S 12: 20, II 27: *ariyasāvakaṣa ayaṅca paṭiccasamuppādo ime ca paṭiccasamuppannā dhammā yathābhūtaṃ sammappaññāya sudiṭṭhā*. A parallel preserved in Sanskrit (Tripāṭhi 1962: 147–152) likewise states that “therefore dependent arising and dependently-arisen phenomena have been well seen, well practised, well known, well penetrated with perfect insight as is actually the case by the informed noble disciple:” *tathā hi śrutavātāryasāvakeṇa pratīyasamutpādaś ca pratīyasamutpannāś ca dharmā yathābhūtaṃ samyakprajñayā sudṛṣṭāḥ sujuṣṭāḥ suviditāḥ supratividdhāḥ*.

³⁷ A 6: 95, III 440: *diṭṭhisampannassa puggalassa hetu ca sudiṭṭho hetusamuppannā ca dhammā*.

determined by the striking of balls. In contrast, if a billiard ball hitting another billiard ball sometimes results in a crowd cheering, but not always, then we ought not say that one event is the cause of the other, in a strict scientific sense. But in the Buddha's teaching, dependent arising is clearly contrasted with determinism. In discussions with fellow ascetics (*samaṇas*), the Buddha explains that pleasure (*sukha*) and pain (*dukkha*) are not caused by oneself, or by another, or by both oneself and another, but neither are pleasure and pain uncaused. Rather, the Buddha teaches dependent arising as a middle way between the eternalism of believing the self persists, and the annihilationism of believing that there is no continuity of actions and results.³⁸ That this implies the rejection of determinism is shown by comparison with another discourse, in which the Buddha distinguishes his teaching from three rival religious beliefs:³⁹ (1) that whatever is experienced is entirely caused by what was done in the past (*pubbakatahetu*);⁴⁰ (2) that whatever is experienced is entirely caused by a creator god (*issaranimānahetu*);⁴¹ (3) that whatever is experienced is entirely without a cause, without a condition (*ahetu-appaccayā*).⁴² Dependent arising is a non-deterministic concept of causation.

I have argued that the modernist interpretation of the *imasmiṃ sati* formula captures only the logic of the co-variance or correlation of events. This is an account of causation only if one assumes a Humean regularity theory of causation. But the early Buddhist teaching of dependent arising does not concern events and is non-deterministic. Moreover, the Buddha is said to have had gained direct knowledge of the workings of dependent arising, rather than expressing scepticism about our knowledge of causation. I conclude that we ought to distinguish the early Buddhist concept of causation from that of modern science. What then is

³⁸ This discussion is found at S 2: 17–18, II 18–23, with parallels preserved in Sanskrit (Tripāthi 1962: 170–179).

³⁹ This discourse is at A 3: 63, I 173–177, with a parallel at MĀ 13 preserved in Chinese translation in T I 425a24.

⁴⁰ The reference here is to a form of karmic determinism, taught by other ascetic teachers including Mahāvīra, a teacher in the Jain tradition.

⁴¹ The reference here is to a deterministic form of theism, such as belief in Brahmā as creator god.

⁴² The reference here is to religious thinkers such as Makkhali Gosāla who deny causation. The Buddha strongly rebuts Makkhali in A 1: 319, I 33, and A 3: 137, I 286–287.

the meaning of the *imasmiṃ sati* formula? I will develop an answer to this question after having surveyed some more adequate modern interpretations of dependent arising as a concept of causation, in terms of the conditionality of experience.

Conditionality and experience

While the British philosopher John Stuart Mill was content to agree with Hume’s constant conjunction theory of causation, he contributed to a new account of what should be considered a “cause,” arguing for his own conception of causation as conditionality:

The cause, then, philosophically speaking, is the sum total of the conditions, positive and negative taken together; the whole of the contingencies of every description, which being realized, the consequent invariably follows.⁴³

In this conception, the cause of any event is the whole web of conditions necessary for it, and what we often call a “cause” is simply that condition that for one reason or another we think of as the most important or relevant. Although the Buddhist concept of causation as conditionality does not concern events, but rather phenomena in experience, I suggest that it often implies identifying the most important condition upon which some phenomenon arises. Later analytic philosophers developed the useful distinction of “necessary” and “sufficient” conditions, necessary conditions being those which have to be present for a given effect to occur, and sufficient conditions those which, when they are present, the effect does occur.

Mill’s conception of causation as conditionality as well as the distinction of necessary and sufficient conditions have been taken up by scholars trying to understand the exact significance of the formula of the twelve *nidānas* (Gupta 1977, Watts 1982). To understand them as a causal sequence, whereby ignorance (*avijjā*) is the cause of the inherited conditioning factors (*saṅkhārā*), feeling (*vedanā*) is the cause of craving (*taṇhā*), birth (*jāti*) is the cause of ageing and death (*jarā-maraṇa*), and so on, leads to obscurity and contradiction. But to understand each of

⁴³ *System of Logic*, Bk.III ch.V §3 (Mill 1882: 241).

these conditionally-arisen phenomena as necessary and sometimes sufficient conditions for the arising of the next in the sequence allows for interpretations that are truer to the teachings. The distinction is especially helpful in understanding how feeling (*vedanā*) is said to be the condition for craving (*tañhā*), and yet it is possible for the awakened person to experience feeling without the arising of craving.⁴⁴ That is to say, while feeling is a *necessary* condition for the arising of craving, it is a *sufficient* condition only for an unawakened person, through a lack of mindfulness and insight. Understanding the twelve *nidānas* in terms of necessary and sufficient conditions implies that the statements about the relationships involved, such as that feeling is the condition for craving, intend to pick out particularly important conditions within a causal nexus.

Noa Ronkin (2005: 204–206) discusses how early Buddhist accounts of causation more generally, not just of the twelve *nidānas*, can be understood in terms of necessary and sufficient conditions. Her account systematically follows Collet Cox’s call for a context-sensitive interpretation of how the Buddha’s concept of causation is formulated in the context of the concepts of causation current among his interlocutors (2005: 193–198). The non-deterministic character of dependent arising discussed above is due to the Buddha’s rejection of a substance ontology and of the conception of causation as a relation between existing things. Instead, dependent arising concerns the conditionality of processes, and more specifically the processes of action (*karma*) and result (*phala*) that characterise the workings of the mind (2005: 199–200). In this way, the Buddha’s theory of causation is quite different than Mill’s, even though the Buddha’s concept of a cause can be usefully presented in Millian terms, as involving necessary and sufficient conditions. Dependent arising must still be understood in the two senses implied by the standard formula:

a distinction should be made between *paṭiccasamuppāda* as an abstract principle of causation – a metaphysical account of the true nature of things – and the articulation of this principle for the sake of specifying the actual patterned operation of causal conditioning (Ronkin 2005: 200).

⁴⁴ For instance, at S 12: 45, II 74–75, the Buddha teaches that while *vedanā* is the *paccaya* (condition) of *tañhā*, with the ceasing of *tañhā* there is the ceasing of unsatisfactoriness (*dukkha*). He recommends this teaching of the essential ambiguity of the dependence of craving on feeling as “a valuable starting-point for the spiritual life” (*atthasāṃhito ayaṃ bhikkhu dhammapariyāyo ādibrahmacariyako*).

But Ronkin distinguishes the Buddha’s “abstract principle of causation” (which I have called the principle of conditionality) from what in western thought is called the law of causation, which is universal and applicable to the whole of objective reality. The field of application of dependent arising is by contrast limited to the human being’s experience in *saṃsāra*.⁴⁵

Although Ronkin’s discussion is framed as a historical enquiry, its account of early Buddhist doctrine as being concerned with subjective experience may be said to participate in an alternative form of Buddhist modernism. David McMahan (2009: 188–192) traces how some western views of Buddhism, especially of meditation, take for granted an orientation towards individual experience, a subjective turn influenced by post-Romantic developments in religion and spirituality in western culture. Such a subjective turn nicely coincides with the early Buddhist emphasis on unsatisfactoriness (*dukkha*) and its ending, and from this perspective it produces a more accurate exegesis of early Buddhism than that of the Rhys Davidses, Jayatilleke, and others, who claim that dependent arising is compatible with modern scientific modes of explanation. Sue Hamilton (1996) has made a particular study of the Buddha’s analysis of the five constituents (*khandhas*) as constituents of human experience rather than as an objective analysis of the human being. Drawing on Hamilton’s exegesis, Ronkin (2005: 202) argues that this turn towards experience as the locus of Buddhist teachings implies that *saṃsāra* is the world of unawakened human experience, and that dependent arising concerns the arising and ceasing of *dhammas* as the cognitive and affective phenomena of experience. In this conception of dependent arising, the twelve *nidānas* depict the structure of *saṃsāra* as a series of conditionally-arisen features of unawakened personal experience. Dependent arising concerns how experience works.

Eviatar Shulman presses this reconsideration of dependent arising, as being concerned with experience, to the extreme, arguing that the earliest

⁴⁵ This is not to deny that the Buddha’s teaching everywhere shows an awareness of universal causation, such as the uniformity of nature (on which see Jayatilleke 1963: §759, pp. 443ff.), but rather to delimit the meaning of *paṭicca-samuppāda* to the sphere of experience, against the modernist interpretation that *paṭicca-samuppāda* is a Buddhist version of the law of causation. This means, as Ronkin argues, keeping dependent arising somewhat distinct from a statement of universal causation.

formulations of *paṭicca-samuppāda* concern only mental conditioning: “this is all that dependent-origination was initially – an explanation of the way the mind conditions its own experience in *saṃsāra*” (2008: 311). He argues that the teaching of the twelve *nidānas* represents the rejection of a substance ontology about experience involving a self (*ātman*); the Buddha’s teaching shows that subjective experience is non-deterministic process, and the *nidānas* “express the way the mind functions in *saṃsāra*, the processes of mental conditioning that transmigration consists of” (2008: 303).

However, Shulman’s argument does not take into account how the *nidānas* also depict the conditionality of experience in terms of objective phenomena such as the body (*rūpa* in *nāma-rūpa*) and its ageing and death (*jarā-maraṇa*). While the twelve *nidānas* clearly do concern subjective mental phenomena such as ignorance (*avijjā*), consciousness (*viññāṇa*) and craving (*taṇhā*), the presence of objective phenomena in the formula show that for the early Buddhists, at least, dependent arising concerned the integral manifold of subjective and objective experience that constitutes *saṃsāra*, and not just subjective mental conditioning. I suggest that Shulman’s argument implicitly shows both the strength and the weakness of the alternative Buddhist modernist concern with subjectivity. It also implicitly shows us that early Buddhist teachings cannot always be so easily squeezed into modern interpretations.⁴⁶

If dependent arising is a concept of causation as conditionality, and can be interpreted in terms of necessary and sufficient conditions, then what is the meaning of the *imasmiṃ sati* formula? I have argued that it should not be understood to be a summary formula describing event causation, as in “if *X* occurs *Y* follows, and when *X* does not occur *Y* does not follow” (Williams, Tribe, and Wynne 2011: 48), where *X* and *Y* stand for events or processes. Dependent arising is not about event causation; rather it concerns conditionality (Hamilton 2000: 214; Ronkin 2005: 205–206). We may then take the formula to mean what it says, which is

⁴⁶ The account of dependent arising in Karunadasa 2013: ch. 3 is nicely attuned to this reluctance, and no doubt represents a more exact account of the meaning of *paṭicca-samuppāda* in its original context. An extreme form of the way Buddhist teachings resist a modernist interpretation may be seen in early Buddhist embryology, a quasi-objective account of the dependent arising of the embryo, that illustrates the absence of a Self (*ātman*) (Giustarini 2021).

that, “when *X* exists, then *Y* exists; from the arising of *X*, *Y* arises; when *X* does not exist, then *Y* does not exist; from the ceasing of *X*, *Y* ceases,” where the relationships between *X* and *Y* can be understood in terms of necessary conditionality. Although this much has been argued by scholars such as Hamilton (1996: 69) and Shulman (2008: 298), there remains the question of what precise significance the formula has for early Buddhist thought.

The *imasmim̐ sati* formula and the phenomena of experience

Ronkin (2005: 207) suggests that the *imasmim̐ sati* formula is pragmatic, as it has to deal with the workings of the mind. My argument builds on this suggestion. If dependent arising is a principle of conditionality, and it applies to experience, then for any phenomenon of experience, such as feeling (*vedanā*) or continued existence (*bhava*), as described in the standard list of twelve *nidānas* or in some other such formula, there will be a complex network of necessary conditions which together are sufficient for that phenomenon to arise. But, for the practical task of understanding how unawakened experience works, it is possible to pick out some particularly important necessary condition for any phenomenon, the removal of which will be sufficient for that phenomenon to cease. Given this account of dependent arising, the *imasmim̐ sati* formula implies a practical account of a cause – that the cause of something is just that necessary condition which it is most relevant for our purpose and useful for us to identify. Mill identifies this common-sense idea of a cause in his discussion of causation in relation to necessary and sufficient conditions:

it is very common to single out one only of the antecedents under the denomination of Cause, calling the others merely Conditions. Thus, if a person eats of a particular dish, and dies in consequence, that is, would not have died if he had not eaten of it, people would be apt to say that eating of that dish was the cause of his death.⁴⁷

⁴⁷ Mill (1882: 237). The philosopher R.G. Collingwood likewise usefully discusses the contrast between a practical conception of a cause as that factor “by producing or preventing which we can produce or prevent that whose cause it is said to be,” and a theoretical conception of a cause, such as Mill’s totality of conditions (Collingwood 1940: 285–286).

I therefore understand the *imasmiṃ sati* formula to be making a general statement about how experience works. “When *X* arises then *Y* arises” is to say that “*X* is the condition for *Y*,” picking out one particular necessary condition, *X*, within all the conditions upon which some phenomenon of experience, *Y*, arises. *X* is the cause of *Y* in a *pragmatic* sense, such that investigating and discovering the causal structure (in this sense) of human experience allows for the cessation of all those conditions that give rise to ageing and death and this whole mass of unsatisfactoriness. I therefore argue that the formula represents a summary statement about the early Buddhist method of enquiry into dependent arising, a statement which then became useful for presenting the results of that enquiry in an easily remembered form.⁴⁸

The *imasmiṃ sati* formula as a method of discovery

Although no explanation of the *imasmiṃ sati* formula appears to survive in early Buddhist literature, there are some discourses that suggest that the *imasmiṃ sati* formula originally represented a method of enquiry into how human experience works, that is, a sort of template for a personal investigation into the arising and ceasing of the phenomena of experience, and hence of *dukkha*. For instance, the *Nāgarasūtra* (“Discourse on the City”) and parallels relate the Bodhisattva’s discovery of the origin of unsatisfactoriness (*dukkha*) prior to his awakening in a process of enquiry through paying wise attention (*yoniso manasikāra*):

⁴⁸ I follow Ronkin (2005) in distinguishing the account of dependent arising in early Buddhism from that of later Buddhist philosophy, in which the conception of causation underwent considerable analytic development. The words *paccaya* and *hetu*, synonymous in canonical Buddhism, became distinguished as “condition” and “cause” respectively, corresponding to the distinction just described of a general condition for some phenomenon (*paccaya*), and the “cause” in the sense of a particular condition for some phenomenon picked out as important (*hetu*). Hence, Nett (p. 78) glosses *paccaya* as *sādhāraṇa* (“universal,” “shared in common”), and *hetu* as *asādhāraṇa* (“particular,” “not shared in common”). This distinction is expanded in the Sarvāstivāda tradition in a four-fold analysis of *paccaya* and a six-fold analysis of *hetu* (see Dhammajoti 2015: ch. 6, and presented in *Abhidharmakośa* and *bhāṣya*, ch. 2), and in the Theravādin tradition in an analysis of 24 *hetus* (first recorded in the *Paṭṭhāna*, also presented in Vism pp. 532–541) (see also the overview in Kalupahana 1975: 59–65 and references in Skorupski 2016).

It occurred to me: “When there is what, does ageing and death exist? From what as condition is there ageing and death?” Through paying wise attention there arose for me a breakthrough to what is actually the case in this way – when there is birth, ageing and death exist; with birth as condition there is ageing and death.⁴⁹

This process of asking, “When there is what *X*, does *Y* exist?” continues through the course of the discourse,⁵⁰ in each case identifying one particularly important necessary condition for *Y*. The Bodhisattva’s investigation continues with his asking the contrary question:

It occurred to me: “When there is no what, does ageing and death does not exist? From the cessation of what is there the cessation of ageing and death?” Through paying wise attention there arose for me a breakthrough to what is actually the case in this way – when there is no birth, ageing and death do not exist; from the cessation of birth there is the cessation of ageing and death.⁵¹

Here, the process of asking, “When there is no causal factor *X*, does *Y* not exist?,” continues through the course of all the *nidānas*.

The Bodhisattva’s process of discovery of the cessation of the *nidānas* turns out to be his discovery of the path to awakening (*maggo bodhyāya*),⁵²

⁴⁹ This is a translation from the Sanskrit *Nidānasamṣyukta* (NS) Sūtra 5 (Tripāṭhi 1962: 95): *tasya mamaitad abhavat / kasmīn nu sati jarāmaraṇaṃ bhavati / kiṃpratyayaṃ ca punar jarāmaraṇam / tasya mama yoniśo manasikurvata evaṃ yathābhūtasyaābhisamaya udapādi / jātyāṃ satyāṃ jarāmaraṇaṃ bhavati / jātipratyayaṃ ca punar jāmaraṇam*. The Pāli parallel is S 12: 65, II 104, and there is a version preserved in Chinese translation, SĀ 287 (T II 80b24).

⁵⁰ In the Pāli *Nāgarasutta* this investigation concludes with the discovery of the mutual conditionality of consciousness (*viññāṇa*) and name and form (*nāmarūpa*); likewise the parallel preserved in Chinese ends with consciousness, though its mutual conditionality with name and form is not mentioned; but both versions inexplicably begin the discovery of the contrary order of cessation with ignorance (*avijjā*) (Choong 2000: 177). The Sanskrit version, however, traces unsatisfactoriness back to *avidyā*.

⁵¹ NS 5 (Tripāṭhi 1962: 98): *tasya mamaitad abhavat / kasmīn nv asati jarāmaraṇaṃ na bhavati / kasya nirodhāj jarāmaraṇanirodhaḥ / tasya mama yoniśo manasi kurvata evaṃ yathābhūtasyaābhisamaya udapādi / jātyāṃ asatyāṃ jarāmaraṇaṃ na bhavati / jātinirodhāj jarāmaraṇanirodhaḥ*.

⁵² S 12: 65, II 105; NS 5 (Tripāṭhi 1962: 103) has: *tasya mamaitad abhavat / adhiḡato me paurāṇo mārgaḥ paurāṇaṃ vartma paurāṇi puṭā pūrvakair ṛṣibhir yatānuyātā*: “It occurred to me: ‘I have discovered an ancient way, an ancient track, an ancient road [reading *pathā* for *puṭā*], travelled and followed by the ancient seers’.”

which he compares to an ancient path leading to a ruined city. Other discourses report that six previous Buddhas as well as Buddha Gotama investigated the path to awakening in exactly the same way.⁵³ But not only is this process of investigation the way to awakening for past and present Buddhas. In other discourses, the Buddha is reported as recommending it to his disciples as a mode of investigation for the ending of unsatisfactoriness:

Here, monks, a practitioner engages in investigation: “There arise many and various kinds of unsatisfactoriness in the world, not least ageing and death. But this unsatisfactoriness – what is its source (*nidāna*), what is its origin (*samudaya*), what is its genesis (*jātika*), what is its origination (*pabhava*)? When there is what, does ageing and death exist? When there is not what, does ageing and death not exist?”⁵⁴

The discovery of the conditions upon which unsatisfactoriness arises, not least ageing and death, becomes a method for putting an end to it.⁵⁵

Another discourse records how the informed noble disciple no longer asks the questions, “When there is what *X*, does *Y* exist? When there is no causal factor *X*, does *Y* not exist?,” for the reason that such a practitioner has gained independent knowledge that “This being, that becomes; from the arising of this, that arises,” namely, the *nidānas* in their natural order of arising; and likewise the practitioner has already gained independent knowledge that “This not being, that does not become; from the ceasing of this, that ceases,” namely, the *nidānas* in the contrary order

⁵³ S 12: 4–10, II 5–11 for Buddhas from Vipassī to Gotama; Vipassī repeats the same words at D 14, II 30–35; there are Sanskrit parallels in NS 3 and 4 (Tripāṭhi 1962, 89–94), and parallels in Chinese translation at SĀ 285 (T II 79c27) and SĀ 366 (T II 101a16).

⁵⁴ S 12: 51, II 81: *idha bhikkhave bhikkhu parivīmaṃsamāno parivīmaṃsati yaṃ kho idaṃ anekavidhaṃ nānappakāraṇaṃ dukkhaṃ loke uppajjati jarāmaṇaṃ idaṃ nu kho dukkhaṃ kiṃnidānaṃ kiṃsamudayaṃ kiṃjātikaṃ kiṃpabhavaṃ? kismiṃ sati jarāmaṇaṃ hoti kismiṃ asati jarāmaṇaṃ na hoti ’ti*; there is a parallel preserved in Sanskrit at NS 10 (Tripāṭhi 1962: 127–137).

⁵⁵ A related discourse at S 12: 66, II 107–112 includes the same mode of questioning – one “enquires inwardly” (*antaram sammasati*), asking “When there is what, does ageing and death exist? When there is not what, does ageing and death not exist” (*kismiṃ sati jarāmaṇaṃ hoti kismiṃ asati jarāmaṇaṃ na hoti ’ti*) – but what the practitioner discovers is a variation on the *nidānas*; this discourse has parallels preserved in Sanskrit in NS 9 and 10 (Tripāṭhi 1962: 121–137).

of ceasing.⁵⁶ This would suggest that the *imasmiṃ sati* formula represents a template for answers to the questions posed by the Bodhisattva, by past Bodhisattvas, and by disciples of the Buddha, as they investigate and explore the causes and conditions of unsatisfactoriness. I conjecture that this was the original significance of the formula.

There is some evidence in Pāli commentarial literature that later Buddhists retained an understanding of the *imasmiṃ sati* formula as such a template for investigating conditionality. The following story of a Solitary Buddha (*paccekabuddha*), taken from the commentary on the *Khaggavisānasutta* (“Rhinceros Discourse”), presents a picture of a practitioner using the formula as way into a systematic meditative enquiry:

In Varanasi there was a king named “One-Son-Brahmadatta” who had one son, as dear and pleasing to him as life itself; he even carried the boy about as he worked. Then one day he went to the park, leaving his son behind; but the prince that very day became ill and died. The King’s ministers did not tell him, thinking that the King was so fond of his son that his heart would break, but they simply cremated the boy. The King meanwhile was drunk in the park and didn’t even remember his son. Then, after two days, having had a bath, sitting down after his meal and recalling his son, he said, “Bring me my boy,” at which point the ministers tactfully told him what had happened. Then, sitting there overcome with grief, he paid attention deeply like this: “This being, that becomes; with the arising of this, that arises.” Thus, enquiring systematically into dependent arising in natural and contrary order, he realized solitary awakening.⁵⁷

⁵⁶ S 12: 49, II 78: *sutavato ariyasāvakaṃ aparappaccayā nānamevettha hoti imasmiṃ sati idaṃ hoti imassuppādā idaṃ uppajjati... sutavato ariyasāvakaṃ aparappaccayā nānamevettha hoti imasmiṃ asati idaṃ na hoti imassa nirodhā idaṃ nirujjhati*. This discourse has a parallel preserved in Chinese translation at SĀ 350 (T II 98b22).

⁵⁷ Pj II 85–86 on Sn 41: *bārāṇasiyaṃ ekaputtakabrahmadatto nāma rājā ahoṣi. so cassa ekaputtako piyo ahoṣi manāpo pānasamo. so sabbiriyāpathesu puttaṃ gahetvā va vattati. so ekadivasaṃ uyyānaṃ gacchanta taṃ ṭhapetvā gato. kumāropi taṃ divasaṃyeva uppanna byādhinā mato. amaccā puttasiṃhena rañño hadayaṃpi phaleyya ’ti anārocetvāva naṃ jhāpesuṃ. rājā uyyāne surāmadena matto puttaṃ neva sari, tathā dutiyadvasepi nhānabhojanavelāsu. atha bhuttāvī nisinno saritvā puttaṃ me ānethā ’ti āha. tassa anurūpena vidhānena taṃ pavattiṃ ārocesuṃ. tato sokābhibhūto nisinno evaṃ yoniso manasākāsi imasmiṃ sati idaṃ hoti imassuppādā idaṃ uppajjati ’ti. so evaṃ anukkamena anulomapaṭilomaṃ paṭiccasamuppādaṃ sammāsanto paccekabodhiṃ sacchākāsi; alternative translation in Bodhi 2017: 443–444.*

From this story we may infer that the *imasmīṃ sati* formula was also valued by the Buddhists of the commentarial era, who understood that it could be unpacked into a systematic enquiry into the causal factors involved in the arising and ceasing of unsatisfactoriness.

The *imasmīṃ sati* formula as a presentation summary

If my argument is correct, that the *imasmīṃ sati* formula originally represented a summary formula for the discovery of dependent arising as a practitioner investigates the dependent arising of the unsatisfactory features of experience, then it is misleading to describe the formula as expressing the “principle” of dependent arising, let alone as a statement of what causation is for Buddhism. This is not what the *imasmīṃ sati* formula was for early Buddhism. For later Theravādins, likewise, the formula was not a principle or statement of dependent arising. Rather, they interpreted it as summary of how any statement about the dependent arising of phenomena may be presented. The Pāli commentaries interpret the *imasmīṃ sati* formula as a general abstract summary of the conditional relationships between the twelve *nidānas*, and more specifically as a summary of the different grammatical forms by which the relationships described in the formula of the twelve *nidānas* can be expressed.

First, they take the *imasmīṃ sati* formula to be a summary of the twelve *nidānas*. The commentary on the *Cūḷasakuludāyisutta*, in which the formula appears by itself,⁵⁸ calls it *paccayākāra*, “the system of conditions.”⁵⁹ The commentary on the standard formula of dependent arising, as it appears in the *Aṅguttaranikāya*, includes this gloss on the *imasmīṃ sati* formula:

This being, that becomes means that when this cause (*kāraṇa*), beginning with ignorance, exists, the effect (*phala*), beginning with the formations, comes to be. **From the arising of this, that arises** means that that indeed arises from the arising of this, which is its conascent condition. **This not**

⁵⁸ See the discussion and n. 13 above, and below.

⁵⁹ The phrase “system of conditions” (*paccayākāra*) appears in *Vibhaṅga* ch. 6 as a synonym for dependent arising (*paṭicca-samuppāda*); Buddhaghosa uses the same expression, *paccayākāra*, in *Vism* (p. 519) to characterise *paṭicca-samuppāda* as the system of actual causal relations of the twelve *nidānas*.

being, that does not become means that when a cause, beginning with ignorance, does not exist, the effect, beginning with the formations, does not come to be. **From the ceasing of this** means that there is the non-occurrence of the effect from the non-occurrence of the cause.⁶⁰

The commentary here spells out exactly how the four statements of the general formula relate to the relationships expressed in the twelve *nidānas* formula, doing so in terms of the specific Abhidhamma terminology for kinds of conditions.

The commentaries also, however, use the *imasmiṃ sati* formula to summarise not just the twelve *nidānas* in a narrow sense, but other causal relationships indicated in related lists and formulae. For instance, the commentary on the *Madhupiṇḍikasutta* (the Honeyball Discourse) comments on the teaching beginning, “When there is no eye, [no visual form, no visual consciousness]:”

In this way, indicating the entire round [of rebirth] in the sense of the twelve sense-spheres [eye and visual form, ear and sounds, etc.] [the Buddha said] “this being, that becomes,” and now indicating the end of the round in the sense of the negation of the twelve sense-spheres, he begins the teaching, **When there is no eye.**⁶¹

Here the commentator takes the *imasmiṃ sati* formula to represent a summary of the kinds of causal relationships involved in how experience works, such as the causal relationships between the sense-organs and sense-objects, the resultant sense-consciousnesses and the sense-contacts that results from all of these, which are some of the relationships discussed in the Honeyball Discourse.⁶²

⁶⁰ Mp V 62–63 on A 10: 92, V 184: *iti imasmiṃ sati idaṃ hotīti evaṃ imasmiṃ avijjādike kāraṇe sati idaṃ saṅkhārādikaṃ phalaṃ hoti. imassuppādā idaṃ uppajjātīti yo yassa sahaajātapaccayo hoti, tassa uppādā itaraṃ uppajjati nāma. imasmiṃ asatīti avijjādike kāraṇe asati saṅkhārādikaṃ phalaṃ na hoti. imassa nirodhāti kāraṇassa appavattiyā phalassa appavatti hoti.* The discourse recurs at S 12: 41, II 68, but the commentary on that passage does not gloss *imasmiṃ sati*.

⁶¹ Ps II 78 on M 18, I 112: *evaṃ imasmiṃ sati idaṃ hotīti dvādasāyatanavasena sakalaṃ vaṭṭaṃ dassetvā idāni dvādasāyatanapaṭikkhepavasena vivaṭṭaṃ dassento so vatāvuso cakkhusmiṃ asatīti desanaṃ ārabhi.*

⁶² With this commentarial passage, I would like to further qualify Shulman’s statement (2008: 307): “Hence it should be clear that the abstract formula [*imasmiṃ sati*] relates precisely and only to the mutual conditioning of the 12 links.” There are further

And, second, the commentators take the *imasmiṃ sati* formula to present various grammatical forms in the Pāli language by which the causal relationships of dependent arising can be expressed. While the grammatical forms used by the formula are hard to recognise in English translation, they stand out clearly in an inflected language like Pāli. Hence the commentary on the first discourse of the *Udāna* says, regarding the Buddha's purpose in teaching the general formula:

saying, **when [a phenomenon] exists** (not when it does not exist), **from [its] arising** (not from its cessation), he explains the nature of a causal factor, an origin, a birth, a production, for dependent arising, as expressed by the use of the locative and ablative cases in a causal sense.⁶³

That is to say, the use of the locative case (in the statement “this being, that becomes,” in which *imasmiṃ sati* is a locative absolute) and the ablative case (in the statement “from the arising of this, that arises,” in which *uppādā* is in the ablative case) simply convey different ways of expressing a causal relationship.⁶⁴ These selective quotations from the Pāli commentaries show how these Buddhists – who were able to understand the implications and subtleties of the Pāli language better than we can – saw the *imasmiṃ sati* formula as conveying the *paccayākāra*, or “system of conditions,” and as an abstract summary of *paṭicca-samuppāda* illustrating how causation as conditionality could be expressed in various grammatical forms.

formulations of dependent arising in the discourses, such as those in M 18, which complement the twelve *nidānas*, and indicate the wider applicability of the summary formula.

⁶³ Ud-a 40: *sati, nāsati, uppādā, na nirodhā 'ti pana hetuatthehi bhummanissakkavacanehi samatthitaṃ nidānasamudayaajātipabhavabhāvaṃ paṭiccasamuppādassa dasseti*; alternative translation in Masefield 1994b: 69–70.

⁶⁴ The grammatical analysis of causation goes back ultimately to the Sanskrit grammatical tradition brought to early perfection in Pāṇini, who described both the locative case and the locative absolute construction in *Aṣṭādhyāyī* 2.3.36–37: *saptamī adhikaraṇe / yasya ca bhāvena bhāva-lakṣaṇam*, “The seventh (case, i.e. the locative,) denotes the locus of action / and of which there is the characterisation of an action (or state) by means of (a different) action (or state)” (Katre 1987: 146). The Pāli grammarians later followed the Sanskrit tradition closely (Collins 2006: 37). As for the ablative, Collins (2006: 47) summarises the Pāli grammarians, who again rely on Pāṇini's *Aṣṭādhyāyī* for their definition of the ablative as *apādāna*: 1.4.24, *dhruvam apāye apādānam*: “*apādāna* denotes that which functions as a stable point (*dhruvam*) with respect to a movement away from itself (*apāye*) (i.e. a point of departure)” (Katre 1987: 83).

Conclusion

I began this article by criticizing the Buddhist modernist view that the *imasmiṃ sati* formula is a statement of a “principle of causation” for Buddhism, similar to a scientific law of causation, in which there is nothing more to causation than that if *X* occurs *Y* follows and when *X* does not occur *Y* does not follow. I showed that the *imasmiṃ sati* formula, understood in this way, in fact expresses merely the correlation or co-variance of events, which does not necessarily imply causation. I then showed how this modernist view tries to interpret dependent arising as a Buddhist version of a regularity account of causation. I went on to explore what may be termed an alternative modernist conception of dependent arising as being about how experience works, a conception that chimes nicely with the early Buddhist emphasis on unsatisfactoriness (*dukkha*). But this left a question concerning the significance of the *imasmiṃ sati* formula. I conjectured that the formula was originally a template for an enquiry into the causal structure of experience. This means that the enquirer, having ascertained that, for instance, when there is birth, there is ageing and death, and when there is no birth, there is no ageing and death, may reasonably infer that birth is the cause of ageing and death in the sense of being its most important necessary condition.

I went on to present some evidence for my conjecture in the way Pāli commentaries interpret the *imasmiṃ sati* formula as a presentation formula for the conditionality of the twelve *nidānas*. I will conclude by briefly indicating how later Buddhist philosophy may be seen to have developed an account of the *imasmiṃ sati* formula as representing the inferential logic that leads to the discovery of dependent arising. It is evident that the process of inferring causal relationships begins from observing the concomitance of observed features of experience. In later centuries, this form of inference became well known through Indian logic, especially in the Nyāya school. Uddyotakara, for instance, defined a “cause” (*kāraṇa*) as “when this exists, that comes to be, and when this does not exist, that does not come to be.”⁶⁵ The concomitance or

⁶⁵ Uddyotakara (6th c.), *Nyāyasūtravārttika: kāraṇam hi nāma tasya tad bhavati yasmin sati yad bhavati yasmiṃś cāsati yan na bhavati*, quoted in Cardona 1981: 97, n. 1.

“presence” (*anvaya*) of two phenomena, as well as their non-concomitance or “absence” (*vyatireka*) are sufficient to infer a causal relationship.⁶⁶ That is to say, there can be knowledge by inference (*anumāna*) that *X* is the cause of *Y* when it is observed that:

- (1) When there is *X*, there is *Y* = “presence” (*anvaya*)
- (2) When there is no *X*, there is no *Y* = “absence” (*vyatireka*)⁶⁷

The inference of a causal relationship is, in western terms, an inductive one, but in the Buddhist case the inductive inference leads not only to a form of descriptive empirical knowledge, but to a direct knowledge by acquaintance of causation in experience.⁶⁸ The Buddhist philosopher Dharmakīrti argues that this knowledge of causation is taught by the Buddha for the sake of gaining *nirvāṇa*,⁶⁹ and this shows nicely how knowledge of dependent arising participates in an intellectual context quite different to that of modern empiricism. Within this intellectual context, the purpose of knowledge of dependent arising is to uproot the human tendency to interpret experience in terms of “I,” “me” and “mine.” As Dharmakīrti puts it:

Since one sees that there is no end of the effect so long as the cause remains, one inquires into what is incompatible with the cause in order to get rid of it. And the antidote to the cause is ascertained by knowing the nature of the cause. The cause is attachment, which is created by the concepts of self and ownership, and which become part of one’s character.⁷⁰

⁶⁶ The method of *anvaya* and *vyatireka* was developed in the tradition of grammar (*vyākaraṇa*) (Cardona 1967) before being taken up by logicians and philosophers (Cardona 1981). This leads to the possibility that the Buddha’s method of enquiry, preserved in the *imasmīṃ sati* formula, was originally inspired by the Brahmanical tradition of grammatical analysis, although this is a topic for another article. The Buddhist logicians Dignāga and Dharmakīrti also made use of the method of *anvaya* and *vyatireka* (Hayes 1988: 298; Hayes and Gillon 1991: 35–37).

⁶⁷ Jayatilleke (1963: §203, p. 146) in fact compares the method of *anvaya-vyatireka* to the “Method of Agreement and the Method of Difference” in Mill’s *System of Logic*, and likewise takes it to be the import of the *imasmīṃ sati* formula in the early Buddhist discourses.

⁶⁸ Jayatilleke (1963: §714, pp. 416ff.) goes on to discuss what exactly direct knowledge means in early Buddhism. His conclusion (1963: §794, p. 464) that Buddhism is a form of empiricism has been critiqued by Hoffman (1982) as following from his commitment to a scientific modernist interpretation of Buddhism.

⁶⁹ I am merely gesturing here to a topic explored more thoroughly by Hayes (1997).

⁷⁰ *Pramānavārttika* 1.136–137, trans. Hayes 1997.

With this in mind, I will end with an interpretation of the Buddha’s words to the wanderer Udāyi (at M 79, II 32), quoted above:

But, Udāyi, let the past be, let the future be; I will teach you the Dharma: this being, that becomes, from the arising of this, that arises; this not being, that does not become, from the cessation of this, that ceases.⁷¹

In context, Udāyi has been wondering about the relation of a teacher’s supposed omniscience to the past and future. The Buddha’s words aim to bring Udāyi’s attention back to a different conception of knowledge, namely, of how experience works, independent of past and future. The occurrence of the *imasmim sati* formula should be understood as the Buddha’s instruction to Udāyi to pay attention to the method of enquiry into how experience works. The reference to letting go of past and future is a brief reminder of the point of this enquiry, which is to gain a knowledge of dependent arising.⁷² With this knowledge, the interpretation of experience in terms of “I,” “me” and “mine” become redundant, as indicated here in the *Pratītyasūtra* (“Discourse on Dependent Arising”), preserved in Sanskrit:

And because the informed noble disciple has clearly seen both dependent arising and dependently-arisen phenomena with perfect understanding as is actually the case, he does not ruminate on the past, thinking, “Did I exist in the past? Or did I not exist in the past? Who was I in the past? How did I exist in the past?”; and neither does he ruminate on death, thinking, “Will I exist in the future? Or will I not exist in the future? Who will I be in the future? How will I exist in the future?”; neither does he question himself internally, thinking, “What is this? How did it happen? What kinds of person will we become? Where has this living being come from? When it passes away from here, where will it go to?”⁷³

⁷¹ M 79, II 32: *api ca udāyi tiṭṭhatu pubbanto tiṭṭhatu aparanto dhammaṃ te desessāmi. imasmim sati idaṃ hoti imassuppādā idaṃ uppajjati. imasmim asati idaṃ na hoti imassa nirodhā idaṃ nirujjhati.* There is one other Pāli discourse in which the general formula is stated without the twelve, at S 12:62, II 96, where it is followed by a detailed exposition of the causal relationship between contact (*phassa*) and feeling (*vedanā*) but without discussing any other *nidānas*.

⁷² Likewise for S 12: 62, II 96, the *imasmim sati* formula should be understood as the Buddha’s instruction to the monks to pay attention to an enquiry into how experience works; in this case, how various kinds of feeling (*vedanā*) arise in relation to various kinds of contact (*phassa*).

⁷³ NS 14 (Tripāṭhī 1962: 150–151): *yataś ca śrutavatāryaśrāvakeṇa pratītyasamutpādaś ca pratītyasamutpannāś ca dharmā yathābhūtaṃ samyakprañāyā sudṛṣṭā bhavanti |*

In conclusion, the *imasmiṃ sati* formula represents a method of enquiry to gain inferential knowledge of dependent arising, or how experience works, a knowledge that puts an end to the causes and conditions of unsatisfactoriness.

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Abbreviations

References to Pāli texts are to the PTS editions.

A	<i>Aṅguttaranikāya</i> , vols. 1–5 (Morris and Hardy 1885–1900).
D	<i>Dīghanikāya</i> , vols. 1–3 (Rhys Davids and Carpenter 1890–1911).
DĀ	<i>Dīrghāgama</i> (CBETA, Chinese Buddhist Electronic Text Association, 1998–2020).
M	<i>Majjhimanikāya</i> , vols. 1–3 (Trenckner and Chalmers 1888–1899).
MĀ	<i>Madhyamāgama</i> (CBETA, Chinese Buddhist Electronic Text Association, 1998–2020).
Mp	<i>Manorathapūraṇī</i> (Walleser and Kopp 1936–1973).
Nett	<i>Nettipakarāṇa</i> (Hardy 1902).
NS	<i>Nidānasaṃyukta</i> (Tripāṭhi 1962).
OED	Oxford English Dictionary (https://www.oed.com).
Pj	<i>Paramatthajotikā</i> II (Smith 1916).
PTS	Pali Text Society.
Ps	<i>Papañcasūdanī</i> (Woods and Kosambi 1928).
S	<i>Samyuttanikāya</i> , vols. 1–5 (Féer 1884–1898).
SĀ	<i>Samyuktāgama</i> (CBETA, Chinese Buddhist Electronic Text Association, 1998–2020).
Sn	<i>Suttanipāta</i> (Andersen and Smith 1913).
T	<i>Taishō Shinshū Daizōkyō</i> 大正新脩大藏經. Tokyo: Taishō issaikyō kankōkai, 1924–1935 (via CBETA). Texts cited by volume number, followed by page and register (a, b, c).
Ud	<i>Udāna</i> (Steinthal 1885).
Ud-a	<i>Udānāṭṭhakathā</i> (Woodward 1926).

sa na pūrvāntaṃ pratisarati / kin nv aham abhūvam atīte 'dhvani / aho svin nāham atīte 'dhvani / ko nv aham abhūvam atīte 'dhvani / kathaṃ nv aham abhūvam atīte 'dhvani / aparāntaṃ vā na pratisarati / kin nu bhaviṣyāmy anāgate 'dhvani / aho svin na bhaviṣyāmy anāgate 'dhvani / ko nu bhaviṣyāmy anāgate 'dhvani / kathaṃ nu bhaviṣyāmy anāgate 'dhvani / adhyātmaṃ vākathaṃkathābhavati / kiṃ svid idam / kathaṃ svid idam / ke santaḥ ke bhaviṣyāmaḥ / ayaṃ satvaḥ kuta āgataḥ / sa itaḥ cyutaḥ kutraḡamī bhaviṣyati. There is a parallel in Pāli at S 12: 20, II 26–27.

- Vin *Vinayaṭīka*, vols. 1–4 (Oldenberg 1879–1883).
 Vism *Visuddhimagga* (Rhys Davids 1920–1921).

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