Early Buddhist Oral Transmission and the Problem of Accurate Source Monitoring

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Abstract
A comparative study of two early Buddhist textual collections, the Āṭṭhaka-vagga and the Udāna, points to a process during which commentarial material gradually became part of the canonical text during oral transmission. This relates to the problem of inaccurate monitoring of the source from which a particular type of information stems, which can be related to the potential impact of mindfulness on the generation of false memories. Although the cultivation of mindfulness tends to strengthen various aspects of memory, its potential to empower the mind’s ability to associate can at times result in errors of memory or recognition. The overall picture that emerges in this way helps understand a pattern evident in early Buddhist oral texts, which reflect a concern with precise transmission but at the same time also show substantial additions of later material.

Keywords Āṭṭhaka-vagga · Commentary · False memories · Oral transmission · Mindfulness · Source monitoring · Udāna

The fields of psychology and Buddhist studies have much to offer to each other in relation to research on mindfulness (Anālayo 2019). Potential collaboration and exchange of information are not confined to the background that an in-depth knowledge of Buddhist doctrine and practice can provide for the contemporary employment of mindfulness in health care and related areas. Research on mindfulness can in turn also offer support for a better understanding of aspects of the Buddhist traditions and their textual transmissions. A case in point is the psychological research on the relationship between mindfulness practices and the tendency to “false memories,” where recall of a past event, at times influenced by misinformation presented after such event, results in a memory of an event that may never happened in the past or that was different from that memory. An appreciation of the potential contribution of such research requires first surveying some features of oral transmission evidenced in early Buddhist discourse. Convenient cases for illustrating such features are two textual collections known as the Udāna and the Āṭṭhaka-vagga.

The Udāna Collection

The term udāna refers to an “inspired utterance,” in the sense of a saying that in some way expresses the speaker’s sentiments of inspiration. Such utterance often takes the form of a verse, although this is not invariably the case.

The Udāna collection extant in Pāli and representative of a Theravāda oral transmission lineage presents such inspired utterances in combination with prose narrations that purport to relate the circumstances leading to the altogether 80 udānas in question. The Pāli collection of such inspired utterances has parallels extant in Chinese, Sanskrit, and Tibetan, which for the most part do not include prose narrations. Only one parallel, extant in Chinese, shows a similar combination of inspired utterances with prose material (T 212). However, rather than providing a background narration, the prose portions in this work often take the form of a word commentary, in the sense of quoting selected words from the inspired utterance and then offering explanations of their significance. A comparative study shows that only in three cases do the Pāli version and its Chinese parallel provide a similar prose narration to a particular verse (Anālayo 2009).

Evaluating this situation from the viewpoint of the early Buddhist oral transmission, the situation that emerges in this way points to a pattern of prose material being added to a collection of inspired utterances already in existence. Such a conclusion is in itself nothing new, as already Winternitz...
(1920/1968, p. 67) expressed his belief that the prose sections were added later by commentators (“die Prosaerzählungen von einem oder mehreren Kommentatoren teils dazu erfunden, teils aus anderen Texten herübergenommen worden sind”). Similarly, Lamotte (1968, p. 465) took the position that, in general, the introductory narration is later than the inspired utterance (“dans la généralité des cas, le récit introductif est postérieur à l’udāna qu’il prétend expliquer”). In the words of Abeynayake (1984, p. 66), it is generally agreed that “the stories that occur in the Udāna are not as early as the stanzas.”

Closer inspection of the Pāli Udāna collection shows that the collection appears to be the result of a gradual process of such combination of prose with the inspired utterances rather than being the outcome of a one-time combination of these two types of text (Anālayo 2009). One of the relevant features concerns the thematic continuity among the inspired utterances collected in each of the eight chapters of the Udāna. During oral transmission, such thematic continuity helps to keep a set of verses or stanzas together.

In the case of the first four chapters, all of the ten inspired utterances in each chapter share the same theme: a “brahmin,” brahmaṇa, “happiness,” sukkha, a “monastic,” bhikkhu, and the “mind,” citta. In the fifth and sixth chapters, such thematic continuity holds only for four out of ten inspired utterances, and in the seventh and eighth chapters for only two out of ten. Thus, the degree to which thematic continuity among inspired utterances serves its role of facilitating oral transmission can be seen to decrease gradually.

Another tool to ensure precision during oral transmission is “concatenation.” This takes the form of a particular term from a preceding textual portion being repeated in the subsequent portion. Once a stanza shares the same or a closely similar term with the preceding stanza(s), it becomes easier to remember to recite it at the right moment, as the term in question serves as a cue for calling to memory the next stanza. Such concatenation is a recurrent feature in the first three chapters, still evident in the fourth, hardly noticeable in the sixth and seventh, and absent in the fifth and eighth chapter. In other words, only in the first chapters of the collection does concatenation fully support correct recall of individual udānas in their proper sequence.

In the case of prose material, the inverse situation to the above can be observed. In the first four chapters, similar or related narratives can at times occur at considerable distance from each other. In contrast, in the fifth to eighth chapters, such narrations tend to occur in close proximity. In other words, thematic continuity and concatenation point to the inspired utterances on their own being of central importance for the formation of the first four chapters, whereas in the case of the fifth to eighth chapters the content of the prose narration appears to have been a central factor for determining the sequence of the discourses and thereby ensuring the maintenance of the correct sequence during oral transmission.

The overall impression that emerges from this state of affairs is one of a gradual growth of the collection, whose first part must have been based on assembling just inspired utterances. At this stage, thematic continuity and concatenation among the actual udānas were central tools to facilitate oral transmission. Once prose was subsequently added, such linkage between the inspired utterances no longer had its earlier effect, because the udānas came to be separated from each other through long sections of prose text. This subsequent addition, however, appears to have been concomitant with a general growth of the collection, as for the inspired utterances in the later part of the collection the prose narration took over the role of facilitating correct recall. This in turn implies that these inspired utterances would have been already accompanied by their prose sections when they became part of the Udāna collection.

The overall pattern that emerges from this reveals the gradual nature of the formation of textual collections during oral transmission and the resultant interrelationship between source text and commentary.

### The ṛṭṭhaka-Vagga

The pattern evident in the Pāli Udāna collection can be seen similarly in another verse collection, the ṛṭṭhaka-vagga. The way in which this collection of stanzas is now extant in Pāli takes the form of a chapter in the Sutta-nipāta collection, consisting of 16 discourses which comprise 210 verses (Sn 766 to 975). Narratives depicting the circumstances of the delivery of these verses are found in the respective Pāli commentary.

A Chinese parallel to the ṛṭṭhaka-vagga features as a standalone work. Awareness of the ṛṭṭhaka-vagga as an independently memorized collection can in fact be found, for example, in the Udāna. The relevant discourse reports the Buddha asking a monastic to recite the teachings he had learned, to which the latter complies by reciting the 16 discourses of the ṛṭṭhaka-vagga (Ud 5.6). Textual collections not belonging to the Pāli tradition also testify to the independent existence of this collection in other reciter lineages (Lévi 1915). In other words, the integration of the ṛṭṭhaka-vagga into the Sutta-nipāta is a later development that appears to be attested only for the Theravāda tradition.

Another and even more significant difference emerges with the Chinese parallel to the ṛṭṭhaka-vagga, as this combines verse with prose narration (Ṭ 198). As noted by Bapat (1950, p. 98), “no less than seven … of the sixteen Chinese stories introducing these ṣūtras are quite different from those in [the] Pāli” commentary. The combination of divergences and similarities in the prose commentary associated with the 16
versified discourses of the Āṭṭhaka-vagga thereby points to a gradual process of development similar to what can be discerned in the case of the Udāna. Some prose commentary must have come into existence relatively early and for this reason is shared by the Chinese parallel to the Āṭṭhaka-vagga and the respective Pāli commentary. Other instances of such prose commentary, however, appear to have emerged only later in the prolonged period of oral transmission and are for that reason substantially different in the two extant traditions.

At times, the information provided in such prose sections is required to be able to understand the verse in question. A case in point is the Māgandiya-sutta, which begins with the Buddha expressing his lack of interest in what is filled with urine and feces, which he would not even want to touch with his foot (Sn 835 and T IV 180b). On its own, it would be difficult to make sense of this verse. According to the background story found in the Chinese version and its counterpart in the Pāli commentary, the brahmin Māgandiya wanted the Buddha to marry his beautiful daughter. That is, the reference to a body filled with urine and feces serves as the Buddha expressing his lack of interest in what is filled with urine and feces, which he would not even want to touch with his foot (Sn 835 and T IV 180b). On its own, it would be difficult to make sense of this verse. According to the background story found in the Chinese version and its counterpart in the Pāli commentary, the brahmin Māgandiya wanted the Buddha to marry his beautiful daughter. That is, the reference to a body filled with urine and feces serves as the Buddha’s rather strongly worded rejection of this offer, conveying his total disinterest in Māgandiya’s daughter. It seems fair to assume that the basic idea of such an offer by Māgandiya, common to the two traditions, would have accompanied the verse from an early period onwards, simply because an oral performance of the verse without some such explanation would have failed to be understood by the audience.

The probably close relationship between prose and verse evident in this way in the Māgandiya-sutta can be contrasted with the case of the Kalahavivāda-sutta, which offers a penetrative analysis of the mental roots of quarrels and disputes (Sn 862) that culminates in the image of a sage who is completely aloof from any disputes (Sn 877). The Pāli commentary considers this to be one of several instances when the Buddha had a discussion with another mind-made Buddha created by himself for the purpose of discussion (Pj II 551).

The idea that the Buddha would create another mind-made Buddha in order to be asked suitable questions that he could then reply to carries a distinctly late flavor. The recurrent use by the Pāli commentary of this same trope for quite different discourses in the Āṭṭhaka-vagga gives the impression that it served to furnish the missing context for verses that were originally handed down without further indications about their setting and what prompted their delivery.

The Chinese version has in fact a completely different background story. The Chinese prose depicts the Buddha defeating six contemporary teachers through the performance of miraculous feats (T IV 181a). Yet, this framing hardly does justice to verses whose concern is to overcome the inner roots of dispute rather than to win a dispute.

In this way, neither of the prose narrations found in the Chinese text and the Pāli commentary offer a particularly convincing account of the setting of the actual verses. Both can safely be assumed to have been invented at a later time when information about what had motivated the delivery of the verses had long been lost.

These few selected examples suggest that the Āṭṭhaka-vagga shares with the Udāna the gradual accretion of prose narrations. Such similarity between the expansion of the two collections during oral transmission can be further supported by turning to the tale of the murder of the female wanderer Sundarī. The story goes that non-Buddhist wanderers were envious of the fame and ample support received by the disciples of the Buddhists and plotted to defame them. For that purpose, they had Sundarī visit the Buddha regularly. They then killed her and buried her body in Jeta’s grove, where the Buddha often stayed. Afterwards, they spread the rumor that the Buddhist monks (or even the Buddha himself) had taken their pleasure with Sundarī and then killed her, with the discovery of her corpse in Jeta’s grove serving as confirmation of their allegations.

In the case of the Āṭṭhaka-vagga, this tale is found in the Pāli commentary (Pj II 518). This has a counterpart not only in the Chinese version of the actual discourse (T IV 176c) but also in the Udāna collection, where this story has acquired canonical status (Ud 4.8). In other words, different stages in the integration of this narrative into the actual text are evident in the two Pāli collections themselves.

**Commentary and Source Text**

The relationship between prose and verse in the case of the Udāna and the Āṭṭhaka-vagga is probably best understood as reflecting the interrelation between a canonical source text and its commentary during oral transmission. Further evidence to this relationship can be found elsewhere (Anālayo 2010b, 2020b). An example occurs in a depiction of the outcome to be expected from insight contemplation of the five aggregates of clinging, described in the Mahāsūṅgā-āgama parallel identify the target of such contemplation to be “conceit”:

The conceit ‘I am’ in relation to the five aggregates of clinging.

(MN 122: yo pañcas’ upādānakkhandhesu asmināno).

The existence of the ‘I am’ conceit in relation to these five aggregates of clinging.

(MĀ 191: 此五盛陰有我慢者).
Two parallels extant in Tibetan describe the case of having not yet reached the expected outcome of such insight contemplation in more detail:

The conceit of the notion ‘I am’, the desire for the notion ‘I am,’ and the underlying tendency to the notion ‘I am’ in relation to the five aggregates of clinging.

( skilling 1994 , p. 236: nye bar len pa ’ i phung po lnga po ’ di dag la nga’o snyam pa’i nga rgyal dang, nga’o snyam pa’i ’ dun pa dang, nga’o snyam pa’i bag la ryal).

The conceit of conceiving ‘I am,’ the desire for and underlying tendency to ‘I am’ in relation to these five aggregates of clinging.

(Up 4075: nye bar len pa’i phung po lnga po ’di rnams la bdag tu mngon pa’i nga rgyal dang, bdag tu ’dun pa’i phra rgyas).

The additional reference to “desire” and an “underlying tendency,” in addition to “conceit” itself, is found similarly in the commentary on the Pāli version of this discourse:

The conceit ‘I am,’ the desire for ‘I am,’ and the underlying tendency to ‘I am.’

(Ps IV 163: asmī ti māno asmī ti chando asmī ti anusayo).

In this way, the Pāli version testifies to an earlier stage (also evident in its Madhyama-āgama parallel), during which the reference to “conceit” had not yet become expanded by adding “desire” and an “underlying tendency,” although such associations were clearly known in the Pāli commentarial tradition. The Tibetan parallels in turn would reflect the tendency for such originally commentarial notions to become part of the source text.

Another example for the same pattern of addition in line with a commentary would be the introductory narration to a discourse featuring a monastic who admonishes a hunter. The Pāli version proceeds as follows:

The venerable Kassapagotta, who at that time had gone [into the forest] for the day’s [meditative] abiding, exhorted a certain hunter.

(SN 9.3: tena kho pana samayena āyasmā kassapagotto divāvihārāgato anīnataraṃ chetaṃ ovaḍati).

The Pāli commentary offers the following additional specification:

‘Hunter’ [means:] one deer hunter.

(Spk I 289: chetan i ekam migaluddakam).

Chinese discourse parallels have incorporated the idea of hunting deer in the following manner:

There was hunter named Chizhí, who set up a trap for deer not far away from Dasabalakassapa. Out of empathy, at that time Dasabalakassapa taught that hunter the Dharma.

(SÅ 1339: 有獵師名曰尺只，去十力迦葉不遠張網捕鹿。爾時十力迦葉為彼獵師哀愍說法).

There was a certain hunter called Liánjì who set up a trap for deer not far away from the venerable. At that time, the venerable had pity for the hunter and taught him the Dharma.

(SÅ2 359: 有一獵師名連迦，去尊者不遠施鹿網捕。爾時尊者憐愍獵師，為其說法).

In this way, the same basic idea of a deer hunter is evident in the Pāli commentary and the two discourse versions extant in Chinese, which have embellished the narration further by providing the hunter with a name and describing his actual setting up of a trap. Such embellishment would presumably have served to render the discourse more attractive to the audience listening to its recitation.

A set of commentaries on the collections of early discourses is extant only in Pāli, so that a correspondence between an idea found in the commentary of one tradition and in the canonical text of another tradition can more easily be shown for discourses found in the Chinese Agamas in comparison with the respective Pāli commentary. This does not entail, however, that such adoption has not affected discourses extant in Pāli. A case in point is the famous story of the murderer Angulimāla, who converted to become a Buddhist monk and eventually reached full awakening. In this case, the two Samyukta-āgama collections present by far the most succinct account of events among the parallel versions (SÅ 1077 and SÅ2 16), whereas the relevant Pāli discourse (MN 86) shows clear signs of later embellishment, as is the case for several other parallels.

When viewed within the context of other texts in the collection in which this Pāli discourse is found, it stands out for the substantial degree of what appear to be subsequent embellishments. Another remarkable feature of the same Pāli discourse is the low percentage of textual material presented as spoken by the Buddha himself (Anālayo 2011, p. 502). In other words, much of this discourse is closer in kind to the narrative material usually found in commentaries. These two features may well be related to each other, in the sense that the various embellishments may have come into existence as part of a commentary, which only subsequently became part of the discourse itself.

A higher fidelity to what was perceived to be the Buddha’s own word, as compared with what the reciters would have
seen as narrative material provided by other reciters, can also be seen elsewhere. An example is the research by von Simson (1977) on formulaic descriptions that depict how someone approached the Buddha, which serve to set the scene for the ensuing teaching. Discourses transmitted by Sarvāstivāda reciters show a recurrent tendency to adopt a new formulation for this approach description. Yet, the older form is kept when such a description occurs in direct speech, such as when the Buddha reports how someone approached him. This difference appears to reflect a higher degree of fidelity in the transmission of textual portions perceived as being part of the source text, compared with textual material perceived as being of a more commentarial type.

Another case illustrating the relationship between source text and commentary would be the Satipaṭṭhāna-sutta, of which two versions are extant in Pāli. These two versions are found, respectively, in the collection of long discourses, Dīgha-nikāya, and in the collection of discourses of medium length, Majjhima-nikāya (DN 22 and MN 10). The differing locations convey a chief difference between the two in terms of their respective length. The version found in the Dīgha-nikāya, titled Mahāsatipaṭṭhāna-sutta, the “Great Discourse on the Establishments of Mindfulness,” is the longer (or ‘greater’) version of the two. Its greater length is due to providing a detailed exposition of the four noble truths. The Satipaṭṭhāna-sutta of the Majjhima-nikāya presents this topic only in a succinct manner. In this way, what in the Satipaṭṭhāna-sutta are four lines of text (in the PTS edition) become ten pages of text in the Mahāsatipaṭṭhāna-sutta (Anālayo 2014b).

As already pointed out by Winternitz (1920/1968, p. 51), this is clearly a case of a discourse becoming longer by the addition of material of a commentarial type (“mit einigen Zusätzen nach Art eines Kommentars”). Thomas (1927/2003, p. 252) took the same case as an illustration for a pattern of oral transmission where “there would also be the danger of unwittingly including discourses or commentaries … which were not an original part of the collection.”

**Oral Performance**

The instances surveyed above exemplify a pattern of considerable importance for a proper appreciation of the dynamics of oral transmission, which has profoundly impacted the nature of the early Buddhist texts: the interrelation between source text and commentary during oral performance and transmission (Anālayo 2011, pp. 880–883). The perspective that emerges in this way helps to explain the considerable amount of variations exhibited by parallel versions of the early discourses, rather than considering Buddhist oral tradition to be similar to oral improvisation of the type studied by Milman Parry and Albert Lord in Yugoslavia. An application of this model to the early Buddhist oral tradition had originally been proposed by Cousins (1983) and has recently been reaffirmed by McGovern (2019, p. 488) who claimed that “only modern Western prejudices provide any reason to argue otherwise.” The notion of an impact of Western prejudice is an interesting dimension to consider, although this could also be viewed in a somewhat different way, namely as pointing to an unwillingness to study an Asian tradition on its own terms and instead imposing perspectives gained from a Western cultural setting. It is far from self-evident that research based on Yugoslavian bards performing for entertainment in bars must be directly applicable to an ancient Indian oral tradition maintained by religious renunciants for the purpose of preserving texts considered within the tradition as sacred. It would seem considerably more natural and appropriate to evaluate the early Buddhist oral tradition from the viewpoint of its ancient Indian antecedents in the Vedic tradition.

At times, proponents of an improvisatory model appear to assume that substantial differences between parallel versions have so far not been properly taken into account. McGovern (2019) presented a comparative survey of the Tevijja-sutta (DN 13) and its Dīrgha-āgama parallel (DA 26), apparently unaware of the fact that in the meantime a translation of the Chinese parallel with comparative observations has already been published (Anālayo 2015). The differences found between these two versions are typical for what emerges in comparative studies, which has its beginnings in Buddhist studies nearly a century ago. In other words, such differences have for quite some time become a matter of common knowledge, making it fairly improbable that their consistent ignoring could explain why improvisatory models for understanding early Buddhist orality have not gained wide acceptance.

The challenge of developing a convincing model for understanding early Buddhist oral transmission is not confined to the need to account for differences between parallel versions, as it also requires taking into account frequent similarities, as well as other features that do not fit the idea of improvisation. Drawing attention to such similarities relies on a large body of evidence, available through comparative study (Anālayo 2011), a type of evidence that those promoting an improvisatory model often do not fully take into account.

A particularly good example for the complexity of the situation is the monastic code of rules (pātimokkha, pratiṃkṣa, 從解脱/波羅提木叉/戒本, so sāvarthapā), McGovern (2019, p. 463) rightly stated that “no one would seriously doubt that this list of rules was memorized.” Indeed, given its crucial role for the functioning and continuity of the monastic community, the code of rules could not have been open to improvisation and must have been seen by tradition as a fixed text. This in turn testifies to the notion of a fixed text, which has ancient Indian predecessors in the memorization of the Rigveda. The valorization of such a notion in the Indian setting is thus evident since early times and can therefore hardly be considered as merely a
protestant projection of Christian notions (McGovern 2019, p. 488).

In spite of clearly being perceived as a fixed text, the different extant versions of the monastic code of rules exhibit, alongside a large degree of correspondence, minor and even a few major differences (Pachow 1955). These differences reflect patterns of change in line with what can be found on comparing parallel discourses. Since a way of explaining such variations has to be found that is applicable as well to the monastic code of rules and its crucial function for maintaining a monastic community, improvisation or intentional change as the chief mode for the formation and transmission of the source texts is simply not a promising candidate.

When viewed from the perspective of actual oral performance, the reciter of a text has to negotiate between the tradition’s demand for accurate and precise reproduction of a text, something regularly strengthened through group recitation, and the needs of the particular audience of the oral performance. In order to appeal to the listeners, their interests and levels of understanding need to be taken into account, and this naturally leads to adaptation and alteration.

An obvious way to negotiate these two conflicting needs of precise reproduction and adaptation to the audience is to provide a commentary alongside the recitation of the source text. In this way, various explanations and personal ideas can be freely voiced as a comment on the text. In other words, it is in the context of providing a commentary on the source text that active creativity and improvisation have their place.

Some such comments would be fairly short-lived, in the sense of being made only once or a few times during an oral performance and then being lost again. This could be either due to their lack of appeal to the audience or else because they address something unique to the context of that specific oral performance that is not relevant beyond that particular setting. Other comments, however, may be of more general appeal and relevance and for this reason will be passed on to subsequent generations of reciters. As a result, those subsequent generations will receive from their predecessors two types of text, the source text and its commentary.

In an oral setting (as distinct from written and printed text), the difference between source text and commentary is not necessarily always self-evident, given that they are both stored in memory and have been received from the same person(s). During the prolonged period of oral transmission, the dividing line between what is “canonical” and what is “commentarial” would naturally tend to become a fluid one.

An example is the standard beginning of a discourse in the form “thus have I heard” (Anālayo 2014a), followed by detailing the location where the Buddha was reportedly staying at that time. This is clearly a commentary, in the sense of an explanation that must have been added by the reciters subsequent to the first delivery of the discourse. Yet, over time this commentary has become an integral part of the canonical discourse.

The integration of information of commentarial origin into the source text can safely be assumed to have been part of the early Buddhist oral tradition from its very inception, in the form of a framework providing each discourse with an introductory indication “thus have I heard,” followed by at least a brief reference to a location, and often also with a concluding line reporting the reaction of the audience to the teaching just delivered. With such a starting point, some gradual embellishment of the type evident in the case of the deer hunter, discussed above, seems only natural. In the course of time, this same tendency would then have led to larger narrative portions, as evident in the discourse on Anāgaliṁa as well as in the case of the Pāli Udāna collection and the Chinese parallel to the Atthaka-vagga (as well as its Pāli commentary).

The above is not meant to reduce the dynamics of early Buddhist orality to an interplay between source text and commentary. Other patterns can also be seen at work, such as, for example, the tendency to employ abbreviation and its counterpart in a subsequent expansion of the abbreviated texts (Anālayo 2020a), which can proceed beyond what had earlier been abbreviated. Nevertheless, the intrusion of commentarial material into the source text does appear to have been a factor of considerable impact on how the early Buddhist discourses have been transmitted.

Developments in Buddhist Thought

Whereas the integration of a commentary is fairly innocuous in the case of providing circumstantial information on the setting of a discourse, other instances of the same tendency can involve substantial departures from the type of thought reflected in the early discourses. For this reason, comparison of parallel versions of a discourse preserved by different reciter traditions can be a fertile field for identifying stages of development in Buddhist thought.

Examples are the gradual emergence of Abhidharma (Anālayo 2014b) and the beginnings of ideas that eventually coalesced into the bodhisattva ideal (Anālayo 2010a, 2017). Both are trajectories of central importance for later Buddhist traditions.

As pointed out by Harrison (2018, p. 17), when studying such material, there is a need to ascertain “the direction of influence,” that is, whether certain developments evident in such later additions to the early discourses led to particular ideas, such as the arising of the bodhisattva ideal, or whether such ideas had already arisen at an earlier stage and then influenced the commentary given on an discourse, which in turn eventually was absorbed by the discourse.

The possibility of already-existing ideas influencing a collection of early discourses can be seen with particular clarity in
McDermott (DRM) paradigm, which involves presenting memories. Wilson et al. (2015) found that those in the mindfulness group, compared with those in the control group who did not receive mindfulness training, showed a higher susceptibility to false memories. The research was based on employing the Deese-Roediger-McDermott (DRM) paradigm, which involves presenting participants with a list of words that are semantically related. For example, a list could have the words “bed, rest, awake, tired, dream.” A false memory occurs when participants wrongly assert that they also saw the semantically related term “sleep,” which is not part of the original list. Such a semantically related term tends to be referred to as a “critical lure,” in the sense of being closely related in meaning but not actually found among the words in the original list. The occurrence of such a false memory is then a case of failing to discern clearly the source of the term “sleep” as something stemming from one’s own associations rather than having originated externally, namely in the list of words one had been shown.

Rosenstreich (2016) also found an increase in provoked false memories in two experiments based on the DRM paradigm, the first involving a mindfulness training with five weekly sessions of 30 minutes and the second based on a single training of 30 minutes. However, an attempt by Baranski and Was (2017) to replicate the research by Wilson et al. (2015) did not find an increase in false memories after mindfulness training. Instead, the mindfulness group significantly decreased false memories after the mindfulness induction. Baranski and Was (2017, p. 1576) reasoned that “the effects of mindfulness meditation on false recall are not robust, leading to variable results.”

Yeh and Lu (2017) employed the DRM paradigm in a bilingual context, with Taiwanese participants who, in addition to their native language Chinese, were also fluent in English. The results showed that mindfulness training led to false memories in cross-language conditions but not in within-language conditions. If the original list and the tested list were in the same language, mindfulness practice actually reduced false memories. However, this pattern did not find confirmation in another study by Yeh and Lu (2019), similarly undertaken in a bilingual context.

Another study based on the DRM paradigm with a mindfulness training of just 3 minutes, undertaken after having been shown the word lists, resulted in reduced false memory of critical lures (Calvillo et al. 2018). The potential of presenting the mindfulness training just before retrieval in order to reduce false memories had already become evident in previous research by Lloyd et al. (2016), similarly involving a 3-minute mindfulness exercise.

Based on the DRM paradigm and 12-minutes mindfulness training, Meeks et al. (2019) found mindfulness to be effective in reducing false memories after a negative mood induction and when negative lures were present but not in a neutral mood. Sherman and Grange (2020) found a 15-minutes mindfulness training to have no effect on either correct or false memory based on the DRM paradigm.

Proceeding beyond the testing of word recognition, a study by Qi et al. (2018, p. 827) investigated event memory, finding an increase in false memories by adolescents after seven
weekly mindfulness trainings of 30 minutes duration each, where “mindfulness reduced accuracy after false information was introduced compared with the active control group at memory retrieval.” In other words, from the viewpoint of this research, “it appears that mindful practice led students to process the incoming information in the absence of effortful elaborations, which consequently gave rise to source-monitoring failures at retrieval.”

However, in a study of source monitoring based on a mindfulness training of 12 minutes and showing participants a brief video followed by a summary of its contents which contained some misinformation, Alberts et al. (2017) found that mindfulness had no effect on the formation of false memories but, notably, at the same time its practice did lead to an improvement of source monitoring.

**Interpretation of the Research Results**

The above-surveyed research publications give the impression that mindfulness meditation may at times increase susceptibility for recognition and memory errors, but at other times it may rather decrease these, or else it may simply have no noticeable effect on them. Out of these different possibilities, the potential of mindfulness to result at times in memory errors is of particular relevance from the viewpoint of early Buddhist oral transmission.

Regarding this potential impact of mindfulness, Wilson et al. (2015, p. 1571) reasoned that “when meditators embrace judgment-free awareness and acceptance, their reality-monitoring accuracy may be impaired, increasing their susceptibility to false memories.” In other words, “mindfulness meditation appears to reduce reality-monitoring accuracy. By embracing judgment-free awareness and acceptance, meditators can have greater difficulty differentiating internal and external sources of information” (p. 1572).

A problem with this interpretation relates to the need to ascertain the implications of the notion of mindfulness as non-judgmental. In the context of mindfulness meditation, it entails non-reactivity. It does not necessarily imply an inability to discern the difference between external data and internal associations. As pointed out by Kabat-Zinn (2011, p. 291), “non-judgmental does not mean to imply to the novice practitioner that there is some ideal state in which judgments no longer arise. Rather, it points out that … we do not have to judge or evaluate or react to any of what arises.” Adair and Fredrickson (2015, p. 198) noted that, “as a non-judgmental stance, mindfulness should allow for greater perceptual objectivity.”

Rather than relating an increase of false memories to the non-judgmental dimension of mindfulness, according to Rosenstrech (2016, p. 67) “an efficient semantic activation in the mindfulness group (as compared to control) may account for the increased recognition of studied words and critical lures, without affecting the rate of spontaneous false memories.”

In evaluating such repercussions of semantic activation, of interest is an adaptive view of memory errors proposed by Schacter et al. (2011, p. 467), in that these “reflect adaptive cognitive processes that contribute to the efficient functioning of memory, but produce distortions as a consequence of doing so.” In other words,

Misinformation errors may reflect the operation of a dynamic memory system that flexibly incorporates relevant new information in order to update memory … However, the ability to update memory comes at a cost: in situations where source memory accuracy is stressed, such as eyewitness memory, misinformation errors have negative consequences (p. 470).

Konjedi and Maleeh (2018, p. 18) reasoned that mindfulness “can suppress false memory by reinforcing source monitoring” but at the same time “create it by enhancing activation process,” in that its cultivation can “have constructive effects on the quality of encoding and executive functioning as crucial components of source monitoring ability” and also “enhance semantic processing as the underlying mechanism of activation process” and thereby lead to false memories.

**Source Monitoring and Oral Transmission**

In simple terms, although mindfulness training has a range of beneficial effects, its tendency to empower the mind’s ability to associate can result in errors of recognition and memory. This is of particular interest in relation to the early Buddhist oral tradition, as the intrusion of commentarial-type material into the source text could well be related to the issue of source monitoring.

The early discourses report an injunction given by the Buddha that even newly ordained monastics should immediately be instructed in the four establishments of mindfulness (SN 47.4 and SÅ 621). Although a lifestyle of full-time meditation need not have been the norm followed by all those who took ordination in the Buddhist order, the basics of monastic conduct and behavior have a close relationship to mindfulness. Circumspect and calm behavior of the type expected of any Buddhist monk or nun do require at least some degree of mindfulness. This in turn makes it reasonable to assume that the monastics involved in the recitation and oral transmission of the texts would have had some exposure to basic mindfulness practice.

From the viewpoint of the potential impact of mindfulness on recognition and memory errors, the intrusion of originally commentarial material into the source text during oral
transmission would therefore seem quite natural. This type of change, probably often though not invariably unintentional, could indeed coexist with an effort to transmit the received texts correctly. A combination of textual fidelity with even substantial change would be similar to the case of mindfulness, where a range of beneficial repercussions combine with the potential for false memories. Viewed from this perspective, contemporary research on mindfulness offers help to appreciate and understand the dynamics of oral transmission surveyed in the first part of this article. Such research helps to provide a background to an apparent conundrum posed by the early Buddhist discourses, where recurrent indications of a concern with accurate transmission exist alongside undeniable evidence of change and alteration of texts which are believed to have been spoken originally by the Buddha and his close disciples. Instead of being two opposite tendencies, from the viewpoint of contemporary research in psychology, these two could instead be viewed as complementary aspects of the same basic situation: an attempt at precise recall can, at times, combine with the integration of commentarial-type material into the source text.

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Compliance with Ethical Standards

Conflict of Interest The author declares he has no conflict of interest.

Ethical Approval This article does not contain any studies performed by the author with human participants or animals.

Abbreviations

DN, Dīgha-nikāya; MĀ, Mahāyana-āgama (T 26); MN, Majjhima-nikāya; Pj II, Paramatthajotikā; Ps, Pāpañcasūdana; PTS, Pali Text Society edition; SĀ, Saṃyukta-āgama (T 99); SĀ’, Saṃyukta-āgama (T 100); Sn, Sutta-nipāta; SN, Saṃyutta-nikāya; Spk, Sāratthapakāsinī; T, Taishō edition; Ud, Udāna; Up, Abhidhammakośiyā-tīkā

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References

Abeynayake, O. (1984). A textual and historical analysis of the Khuddaka Nikāya. Colombo: Tisara.

Adair, K. C., & Fredrickson, B. L. (2015). Be open: mindfulness predicts reduced motivated perception. Personality and Individual Differences, 83, 198–201. https://doi.org/10.1016/j.paid.2015.04.008.

Alberts, H. J. E. M., Otgaar, H., & Kalagi, J. (2017). Minding the source: the impact of mindfulness on source monitoring. Legal and Criminological Psychology, 22(2), 302–313. https://doi.org/10.1111/lcpr.12102.

Anālayo, Bh. (2009). The development of the Pāli Udāna collection. Bukkō Kenkyū, 37, 39–72.

Anālayo, Bh. (2010a). The genesis of the Bodhisattva ideal. Hamburg: Hamburg University Press.

Anālayo, Bh. (2010b). The influence of commentarial exegesis on the transmission of Āgama literature. In K. Meisig (Ed.), Translating Buddhist Chinese, problems and prospects (pp. 1–20). Wiesbaden: Harrassowitz.

Anālayo, Bh. (2011). A comparative study of the Majjhima-nikāya. Taipei: Dharma Drum Publishing Corporation.

Anālayo, Bh. (2013). Mahāyāna in the Ekottarika-āgama. Singaporean Journal of Buddhist Studies, 1, 1–43.

Anālayo, Bh. (2014a). The Brahmajāla and the early Buddhist oral tradition. Annual Report of the International Research Institute for Advanced Buddhism at Soka University, 17, 41–59.

Anālayo, Bh. (2014b). The dawn of abhidharma. Hamburg: Hamburg University Press.

Anālayo, Bh. (2015). Brahmanvihāra and awakening, a study of the Dirgha-āgama parallel to the Tevijja-sutta. Asian Literature and Translation: A Journal of Religion and Culture, 3(4), 1–27.

Anālayo, Bh. (2016). Ekottarika-āgama studies. Taipei: Dharma Drum Publishing Corporation.

Anālayo, Bh. (2017). Buddhapada and the Bodhisattva path. Bochum: Projektverlag.

Anālayo, Bh. (2019). Adding historical depth to definitions of mindfulness. Current Opinion in Psychology, 26, 11–14. https://doi.org/10.1016/j.copsyc.2018.09.013.

Anālayo, Bh. (2020a). Peyāla in the Skandha-samuyukta, contraction and expansion in textual transmission. In Dhammadinna (Ed.), Research on the Samyukta-āgama (pp. 53–108). Taipei: Dharma Drum Publishing Corporation.

Anālayo, Bh. (2020b). The Tevijjavacchagotta-sutta and the Anupad-sutta in relation to the emergence of Abhidharma thought. Journal of Buddhist Studies, 17.

Bapat, P. V. (1950). The Arthapada-sutra spoken by the Buddha. second book. Visva-Bharati Annals, 3, 1–109.

Baranski, M., & Was, C. A. (2017). Mindfulness meditation may not increase false-memory and may instead protect from false-memory susceptibility. Mindfulness, 8(6), 1569–1579. https://doi.org/10.1007/s12671-017-0729-7.

Calvillo, D. P., Flores, A. N., & Gonzales, L. C. (2018). A brief mindfulness induction after encoding decreases false recognition in the Deese-Roediger-McDermott paradigm. Psychology of Consciousness: Theory, Research and Practice, 5(2), 131–139. https://doi.org/10.1037/cns0000145.

Cousins, L. S. (1983). Pali oral literature. In P. Denwood (Ed.), Buddhist studies: ancient and modern (pp. 1–11). London: Curzon.
Harrison, P. (2018). Early Mahāyāna: laying out the field. In P. Harrison (Ed.), Setting out on the great way: essays on early Mahāyāna Buddhism (pp. 7–31). Sheffield: Equinox.

Kabat-Zinn, J. (2011). Some reflections on the origins of MBSR, skillful means, and the trouble with maps. Contemporary Buddhism, 12(1), 281–306. https://doi.org/10.1080/14639947.2011.564844.

Konjedi, S., & Maleeh, R. (2018). Sleep and mindfulness meditation as they relate to false memory. Psychological Research, 1–28. https://doi.org/10.1007/s00426-018-1098-0.

Lamotte, É. (1968). Les yakṣa Ajakalāpaka et Bakkula dans les écritures canoniques du Bouddhisme. In L. Renou (Ed.), Mélanges d’Indianisme à la mémoire de Louis Renou (pp. 445–466). Paris: Éditions de Boccard.

Lévi, S. (1915). Sur la récitation primitive des textes Bouddhiques. Journal Asiatique, 11(5), 401–447.

Lloyd, M., Szani, A., Rubenstein, K., Colgary, C., & Pereria-Pasarin, L. (2016). A brief mindfulness exercise before retrieval reduces recognition memory false alarms. Mindfulness, 7, 606–613. https://doi.org/10.1007/s12671-016-0495-y.

McGovern, N. (2019). Protestant presuppositions and the study of the early Buddhist oral tradition. Journal of the International Association of Buddhist Studies, 42, 449–491. https://doi.org/10.2143/JIABS.42.0.3287485.

Meeks, J. T., Taul, M. L., Rice, R. A., Posey, Z. W., & Harper, N. R. (2019). Negative mood reduces negative false memories after a brief mindfulness exercise. Mindfulness, 10, 2507–2521. https://doi.org/10.1007/s12671-019-01223-6.

Pachow, W. (1955). A comparative study of the prātimokṣa, on the basis of its Chinese, Tibetan, Sanskrit and Pali versions. Santiniketan: Sino-Indian Cultural Society.

Qi, H., Zhang, H. H., Hanceroglu, L., Caggianiello, J., & Roberts, K. P. (2018). The influence of mindfulness on young adolescents’ eyewitness memory and suggestibility. Applied Cognitive Psychology, 32(6), 823–829. https://doi.org/10.1002/acp.3452.

Rosenreich, E. (2016). Mindfulness and false-memories: the impact of mindfulness practice on the DRM paradigm. The Journal of Psychology, 150(1), 58–71. https://doi.org/10.1080/00223980.2015.1004298.

Schacter, D. L., Guerin, S. A., & St. Jacques, P. L. (2011). Memory distortion: an adaptive perspective. Trends in Cognitive Sciences, 15(10), 467–474. https://doi.org/10.1016/j.tics.2011.08.004.

Sherman, S., & Grange, J. A. (2020). Exploring the impact of mindfulness on false-memory susceptibility. Psychological Science, 31(8), 968–977. https://doi.org/10.1177/0956797620929302.

Skilling, P. (1994). Mahāsūtras: great discourses of the Buddha. Oxford: Pali Text Society.

Thomas, E. J. (1927/2003). The life of Buddha as legend and history. Delhi: Munshiram Manoharlal.

von Simson, G. (1977). Zur phrase yena ... tenopajagāma / upetya und ihren Varianten im buddhistischen Sanskrit. In H. Härtef (Ed.), Beiträge zur Indienforschung, Ernst Waldschmidt zum 80. Geburtstag gewidmet (pp. 479–488). Berlin: Museum für Indische Kunst.

Wilson, B. M., Mickes, L., Stolarz-Fantino, S., Evrard, M., & Fantino, E. (2015). Increased false-memory susceptibility after mindfulness meditation. Psychological Science, 26(10), 1567–1573. https://doi.org/10.1177/0956797615593705.

Winternitz, M. (1920/1968). Geschichte der indischen Literatur, Band 2, die Buddhistische Literatur und die heiligen Texte der Jainas. Stuttgart: K.F. Koehler.

Yeh, L. H., & Lu, A. Y. C. (2017). Relationship between trait mindfulness and false memory: A bilingual Deese–Roediger–McDermott paradigm. Universal Journal of Psychology, 5(3), 105–113. https://doi.org/10.13189/ujp.2017.050302.

Yeh, L. H., & Lu, A. Y. C. (2019). Association of trait mindfulness with the false recognition of emotional words in bilinguals. International Journal of Research Studies in Psychology, 8(2), 67–80. https://doi.org/10.5861/ijrspb.2019.4009.

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