Journal of Buddhist Ethics
ISSN 1076-9005
http://blogs.dickinson.edu/buddhistethics/
Volume 19, 2012

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The Five *Niyāmas* as Laws of Nature: an Assessment of Modern Western Interpretations of Theravāda Buddhist Doctrine

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Abstract

The doctrine of five *niyāmas*, or "orders of nature," was introduced to Westerners by Mrs. Rhys Davids in her *Buddhism* of 1912. She writes that the list derives from Buddhaghosa's commentaries, and that it synthesizes information from the piṭakas regarding cosmic order. Several Buddhist writers have taken up her exposition to present the Buddha's teaching, including that of karma, as compatible with modern science. However, a close reading of the sources for the five *niyāmas* shows that they do not mean what Mrs. Rhys Davids says they mean. In their historical context they merely constitute a list of five ways in which things necessarily happen. Nevertheless, the value of her work is that she succeeded in presenting the Buddhist doctrine of dependent arising (*paṭicca-samuppāda*) as equivalent to Western scientific explanations of events. In

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> conclusion, Western Buddhism, in need of a worked-out presentation of *paṭicca-samuppāda*, embraced her interpretation of the five *niyāmas* despite its inaccuracies.

In the first part of this article I will explore how the Theravādin commentarial list of fivefold *niyāma* has been used by recent writers on Buddhism to present the law of karma within a scientific worldview. In the second part I will show that, although it misrepresents the commentaries, this very misrepresentation is nevertheless an example of a Western desire for Buddhist doctrine to be made compatible with modern science. In the third part of the article I will argue, however, that such a desire is better served simply by a close reading of the early Buddhist scriptures.[2]

The Doctrine of the Five *Niyāmas*

Caroline Rhys Davids introduced the doctrine of the five *niyāmas* to the English-speaking world in her 1912 book *Buddhism: a Study of the Buddhist Norm*.[3] In this slender volume she presents *Dhamma*—the "Norm" of her title—as the natural law immanent in the cosmos: eternal, omnipresent and necessary, whether or not a Buddha discerns it (33–35). She admits that this is not exactly how the Buddha put it, but says that it is implied

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[2] This article has had a long gestation. For discussion and comments over the years I thank Dharmacaris Padmadīpa and Jayarava; Andrew Skilton and previous reviewers from ill-fated submissions elsewhere; and Daniel Cozort and an anonymous reviewer for *The Journal of Buddhist Ethics*. My comments on Sangharakshita in this article do not imply any more than a philological disagreement; as a member of the Triratna Buddhist Order I owe our founder a gratitude not diminished by critical discipleship.

[3] While she cites the form *niyama*, I will use the form *niyāma*, for reasons explained below. However, there is a persistent inconsistency among authors, including Buddhaghosa, and both *niyama* and *niyāma* will appear in quotation. There is no important distinction in meaning between the forms.

in the *suttas*, which everywhere show a scientific habit of mind (48, 71, 103). She goes as far as to say that *Dhamma* as natural law represents the culmination of the Western quest for truth:

> But how had it been with us, if in olden time some prophet had arisen, who had seen, in a vision of universal natural law, not a philosophic theory only, nor a scientific induction, but a saving Truth, a Religion . . . . (101)

The *Dhamma* of the Buddha is, in Mrs. Rhys Davids's view, such a "vision of a universal natural law" and also a "saving Truth." This being the case, the *Dhamma* corresponds to the Western scientific enterprise of discovering the laws of nature, except that "nature" now includes not only the material world governed by physical and biological laws, but also the mind as well as the path to enlightenment, the lawful unfolding of which the Buddha discerned.

Moreover, Mrs. Rhys Davids explains how the Buddha's teaching of karma integrates the moral order into the natural order of the universe, without needing to posit a transcendent power or deity:

> Now the Pitakas do not assert, but they leave it clear enough, that, in the organic universe, right and wrong, and those consequences of actions which we call justice, retribution, compensation, are as truly and inevitably a part of the eternal natural or cosmic order as the flow of a river, the process of the seasons, the plant from the fertile seed. Going farther than the modern scientific standpoint, they substituted a cosmodicy for a theodicy, a natural moral order for the moral design of a creative deity. (118)

It is at this point that she introduces the five *niyāmas* as a synthesis of the Buddha's teaching concerning different aspects of cosmic order and natural law:

> This order which Buddhism saw in the universe was called in Pāli *niyăm'ă*, that is, going-on, process. In it five branches, strands, phases were discerned: *kamma-niyama*, order of act-and-result; *utu-niyama*, physical (inorganic) order; *bīja-niyama*, order of germs, or seeds (physical organic order); *chitta-niyama*, order of mind, or conscious life; *dhamma-niyama*, order of the norm, or the effort of nature to produce a perfect type. (118–119)

These five aspects of natural order, she explains, though taught individually in the *piṭakas*, are not listed as fivefold *niyāma* there: "In them we have the expressions *niyāmatā*, *dhammatā*, abstract terms for normal orderly procedure" (119). The list of fivefold *niyāma* is first found in the 5th century C.E. commentaries of Buddhaghosa:

> He brings it forward when he is commenting on a refrain in the Buddha-legend, the telling of it being put in the mouth of the Buddha himself. The refrain is: "This, in such a case, is the norm" (or order of events, *dhammatā*). And he illustrates each of the five phases thus: (1) by the desirable and undesirable results following good and bad action, respectively; (2) by the phenomena of winds and rains; (3) by rice produced from rice-seed, or again, by sugary taste resulting from sugar-cane or honey; (4) by conscious processes, quoting from the Abhidhamma-Pitaka (Patthāna): "Antecedent states of consciousness with their properties stand to posterior states with their properties in the relation of efficient cause." For instance, "in sense-cognition, the receptive and other phases of consciousness come to pass after, and because of, the sensation of sight."; (5) by the natural phenomena occurring at the advent of a Bodhisat in his last rebirth, *i.e.*, of one

> who, when adult, will become a saviour of the world, or Buddha. Hence we may define the *Dhamma-niyama* as the order of things concerned with the production by the cosmos of its perfect or norm type. And we may say that our notion of moral law is covered by the first and last branches of the fivefold order, namely, the why we should be good, by the *kamma-niyama*, and the why we try to better our good, by the *Dhamma-niyama*.' (119–120)

Mrs. Rhys Davids used the five *niyāmas* to demonstrate how the Buddhist tradition teaches that the moral law, as the *kamma-niyāma*, is woven into the fabric of the universe, as an inescapable immanent process. This is how Buddhism substitutes a "cosmodicy" for a "theodicy": it solves the problem of suffering by explaining how immoral actions give rise to unpleasant consequences in accordance with an immanent moral order which is itself a part of the cosmic order. The Buddha's teachings made it plausible to think that:

> Sequence of deed and effect was as natural, as necessary, as *inexorably*, inevitably sure, as the way of sun and moon, the dying of all that is born, the reaction of sentience to stimulus. (122)

By contrasting the Buddhist conception of an immanent moral order with a theodicy, Mrs. Rhys Davids was seeking to present the Buddha's teaching as the natural religious complement to the scientific worldview, and hence a superior replacement for the Christian conception of morality.

Mrs. Rhys Davids also used the five *niyāmas* as a means to explain how the immanent moral order leads to a higher possibility of natural unfolding, in the sense that the Buddha, the exemplar and ideal of the

Buddhist faith, is the realization of a potential inherent in the nature of the universe:

> We saw . . . that in the universal order, a *dhamma-niyama* was distinguished, that is to say, the law of nature concerned with the evolution of a perfect type or super-man. Buddhists would probably admit that this included all Arahants, as differing from a Buddha only in degree of powers and attainments. But the law is cited . . . only in reference to a Buddha. It implies a serial, organic tendency in the universe towards a normal or perfect type. By the thought and action of this culminating type of individual the upward tendency in the many is held to be greatly forwarded, the rise being considerable during his lifetime, subsequently less. By upward tendency is here meant, it need hardly be said, better conformity, in character and conduct, to the moral law or kamma-order. The acts of mankind become more prevailingly such as have *pleasant* results. (240)

Mrs. Rhys Davids therefore takes the Buddha as the culmination of an evolutionary process immanent in nature.

In 1912, Buddhism was little known in the West and attracted considerable misunderstanding, to which Mrs. Rhys Davids alludes in her book. Part of her aim, therefore, was to present Buddhism not exactly as it was understood by Buddhists in places such as Sri Lanka and Thailand but in a way that would make sense to the Western popular readership at which her book was aimed. She boldly presents Buddhism as a kind of evolutionary naturalism—the view that everything arises from natural properties, requiring no supernatural explanations of events—fully in accord with the naturalism of science, and yet as firmly moral as Christianity. However, part of Mrs. Rhys Davids's exposition, the scheme of the

five *niyāmas*, does not, I will argue, bear the weight of her interpretation. This is perhaps not surprising, given that commentators such as Buddhaghosa knew nothing of modern science and the theory of evolution. My critique of Mrs. Rhys Davids's interpretation is not, however, merely of historical value. Western Buddhists subsequently took up her ideas, such that the five *niyāmas* continue to be presented as the proof of Buddhism's compatibility with science.

For instance, the Sri Lankan Bhikkhu, Nārada Thera, in his popularizing presentations of Buddhism, employed the scheme of five *niyāmas* in the form of an expanded paraphrase of Mrs. Rhys Davids:

> 1. *Utu Niyāma,* physical inorganic order; e.g., seasonal phenomena of winds and rains, the unerring order of seasons, characteristic seasonal changes and events, causes of winds and rains, nature of heat, etc. belong to this group.
>
> 2. *Bīja Niyāma,* order of germs and seeds (physical organic order); e.g., rice produced from rice seed, sugary taste from sugar-cane or honey, and peculiar characteristics of certain fruits. The scientific theory of cells and genes and the physical similarity of twins may be ascribed to this order.
>
> 3. *Kamma Niyāma,* order of act and result; e.g., desirable and undesirable acts produce corresponding good and bad results. As surely as water seeks its own level, so does Kamma, given opportunity, produce its inevitable result—not in the form of a reward or punishment but as an innate sequence. This sequence of deed and effect is as natural and necessary as the way of the sun and the moon, and is the retributive principle of Kamma. Inherent in Kamma is also the continuative principle. Manifold expe-

> riences, personal characteristics, accumulated knowledge, and so forth are all indelibly recorded in the palimpsest-like mind. All these experiences and characters transmigrate from life to life. Through lapse of time they may be forgotten as in the case of our experiences of our childhood. Infant prodigies and wonderful children, who speak in different languages without receiving any instruction, are note-worthy examples of the continuative principle of Kamma.
>
> 4. *Dhamma Niyāma,* order of the norm; e.g., the natural phenomena occurring at the birth of a Bodhisatta in his last birth. Gravitation and other similar laws of nature, the reason for being good, etc. may be included in this group.
>
> 5. *Citta Niyāma,* order of mind or psychic law; e.g., processes of consciousness, constituents of consciousness, power of mind, including telepathy, telesthesia, retro-cognition, premonition, clair-voyance, clair-audience, thought-reading, and such other psychic phenomena, which are inexplicable to modern science. (Nārada)

This paraphrase suggests that for Ven. Narāda the five *niyāmas* are like five drawers in which to place various phenomena. However, he also uses the list to make a point that was not made by Mrs. Rhys Davids, namely that not everything that happens to us is the result of past karma:[4]

> From a Buddhist standpoint, our present mental, moral, intellectual, and temperamental differences are preponderantly due to our own actions and tendencies, both past

[4] I have consistently used the Anglicized form "karma" for the sake of its familiarity, though the exactly equivalent Pali form *kamma* will often occur in quotation.

> and present . . . [but] although Buddhism attributes this variation to the law of Kamma, as the chief cause amongst a variety, it does not however assert that everything is due to Kamma . . . According to Buddhism, there are five orders or processes (*niyamas*) which operate in the physical and mental realms . . . Every mental or physical phenomenon could be explained by these all-embracing five orders or processes which are laws in themselves. Kamma as such is only one of these five orders. (Nārada)

To present karma in this way allows the Western reader to appreciate the Buddhist conception of a moral law without that law appearing to conflict with the operations of the laws of science.

The English Buddhist teacher Sangharakshita also takes up the doctrine of the five *niyāmas* in the form of a close paraphrase of Mrs. Rhys Davids, and like Ven. Narāda uses the doctrine to show that not everything that happens to us is the result of past karma. Sangharakshita notes that the *suttas* represent the Buddha as condemning this conception of karma as a form of fatalism, and introduces the five *niyāmas* as an elaboration of the canonical teaching that:

> [not] all experienced effects are products of willed action or karma . . . This important distinction is elaborated in the formula of the five *niyamas*, or different orders of cause-effect or conditionality obtaining in the universe. They are *utu-niyama*, physical inorganic order; *bīja-niyama*, physical organic or biological order; *mano-niyama* (non-volitional) mental order; karma-*niyama*, volitional order; and *dharma-niyama*, transcendental order. (*Three Jewels* 69)

While Mrs. Rhys Davids had understood the five *niyāmas* as five aspects of *Dhamma* as natural order or cosmic law, we notice that Narāda Thera

and Sangharakshita take each of the five *niyāmas* as distinct "orders," hence taking "order" not only in the sense of "pattern" but also in the sense of "category." Sangharakshita continues this terminological development by introducing the idea that the five *niyāmas* constitute "different orders of . . . conditionality," that is, orders of *paṭicca-samuppāda*. He makes explicit something only implicit in Mrs. Rhys Davids's presentation—that *niyāma* is closely connected with *paṭicca-samuppāda*, "dependent arising." Sangharakshita also develops a theme mentioned by Mrs. Rhys Davids when he takes *dhamma-niyāma* to mean "transcendental order," which elsewhere he glosses as the "sum total of the spiritual laws which govern progress through the stages of the Buddhist path" (*Buddha* 107).

David Kalupahana, writing in 1975, summarizes these ideas in his *Causality: The Central Philosophy of Buddhism*. He presents the five *niyāmas*, referencing Mrs. Rhys Davids as well as the commentarial sources, as a traditional Buddhist synthesis of its teachings regarding causality:

> in the later commentaries, which attempt to systematize the teachings found in the early sutras [sic], five kinds of causal patterns are enumerated. They are in the realm of (a) the physical (inorganic) world (*utuniyāma*), (b) the physical (organic) world (*bījaniyāma*), (c) the sphere of mental life (*cittaniyāma*), (d) the moral sphere (*kammaniyāma*), and (e) the higher spiritual life (*dhammaniyāma*) . . . (43; cf. 111)

He thus characterizes the Buddha's teaching as a form of naturalism, meaning that all phenomena unfold according to immanent causal patterns, and not through divine intervention or through chance. This suits his purpose of categorizing the Buddhist theory of causality in terms of Western philosophical theories.

This understanding of the five *niyāmas* can be found in diverse presentations of Buddhism such as those of the Theravādin Padmiri De Silva (41) or the Sōtō Zen master Jiyu-Kennet (10). The Sri Lankan *Encyclopedia of Buddhism*, having now reached "n," has an article on "niyāma Dhamma" that expands on the five *niyāmas* as "cosmic orders" (W. G. Weeraratne 190). And Damien Keown's *A Dictionary of Buddhism* defines *niyāma* thus:

> The laws, conditions or constraints that govern processes or phenomena. The *Pāli commentaries recognize five areas that are subject to law-like principles: (1) natural science and *ecology (*utu-niyama*); (2) botany (*bīja-niyama*); (3) morality (**karma-niyama*) (4) psychology (*citta-niyama*); (5) certain religious phenomena (*dhamma-niyama*). (199)

We notice that although Keown defines *dhamma-niyāma* in a general way here, without specifying what religious phenomena are subject to law-like principles, he otherwise maintains the connections established by Mrs. Rhys Davids between the various aspects of *niyāma* and Western scientific disciplines. Finally, Kate Crosby has recently employed the scheme of the five *niyāmas* to explore Sri Lankan Buddhist responses to the tsunami of 2004. Her discussion uses the theory of fivefold *niyāma* to distinguish *utu-niyāma* ("constraint by nature/season") from *kamma-niyāma* ("constraint by action") in relation to how Buddhists explain earthquakes. I will return to this study in an afterword to this article.

Niyāma in the Pāli Commentaries

Let us now examine the commentarial sources upon which these interpretations of the *niyāmas* depend. The five *niyāma* doctrine is discussed only twice in the main Pāli commentaries, and once in a contemporaneous *Abhidhamma* manual:

1. The most concise discussion is found in *Sumaṅgala-vilāsinī* (Sv ii.432), Buddhaghosa's commentary on the *Dīgha Nikāya*, in a discussion of the meaning of *dhammatā* in the *Mahāpadāna Sutta* (DA ii.432). This is the source of Mrs. Rhys Davids's interpretation.

2. A similar discussion is found in the *Aṭṭhasālinī*, the commentary on the *Dhammasaṅgaṅi*, the first book of the *Abhidhamma Piṭaka* (As 272–274), in the context here of a discussion of the *abhidhamma* theory of perception.

3. And much the same discussion is put in verse in the *Abhidhammāvatāra*, a summary of *abhidhamma* by Buddhaghosa's contemporary, Buddhadatta (Abhidh-av 54).

There appear to be only a couple more references to the five-fold *niyāma* in the entire Pāli commentarial literature, neither of which adds any further information.[5]

According to Mrs. Rhys Davids, the Pāli word *niyāma* means "the order which Buddhism saw in the universe" (*Buddhism* 1912: 118). (She also writes that *niyāma* means "going-on, process," but as we will see, it certainly does not.) The definition of *niyāma* as "order" appears to be corroborated by the third definition of *niyāma* in the Pāli Text Society's Pali-English Dictionary as "natural law, cosmic order" (368). For this definition the PED gives references only to the two commentarial works cited above, and to the Rhys Davids's translation of the Dīgha Nikāya,

[5] In the 12th–13th c. South Indian *Abhidhamma-mātikā* and the 12th–13th c. Sri Lankan *Abhidhammāvatāra-purāṇatīkā*. My thanks to Jayarava for these references.

where husband and wife summarize a commentary on the word *dhammatā* thus:

> Dhammatā, i.e. says the Cy. is the nature, or order of things. The five old-world order of things is the Order of Karma, of the Seasons, of Life-germs, of Mind, and of the Dhamma. The last named is here implicated. (*Dialogues* 8–9)

Therefore, both the Rhys Davids believed that *niyāma* in this context means "natural law, cosmic order." Other translators of *niyāma* in this context also take it as "order" (Rahula 183; Tin 360). However, a closer look at this word in its semantic context reveals that "natural law, cosmic order" is something of a translation of the meaning of *niyāma* into a rationalistic Western context, while in Indian context it has a rather different resonance. This may reflect a rationalistic tendency on the part of T.W. Rhys Davids, accepted also at least here by his wife; as Richard Gombrich has observed, though "Rhys Davids was an excellent scholar … he naturally stressed the rationalist elements in Buddhism, because they formed the most striking contrast both to Christian, and . . . to other Indian traditions" (*Precept and Practice* 61). Such rationalism does not accurately represent traditional Buddhism (Hallisey 45).

The Sanskrit *niyāma* is derived from √*yam*, "hold," and hence means "holding-back" (MW 552) from an etymological point of view, or "restraint." As ethical "restraint," *niyāma* is the second of the eight limbs of *aṣṭāṅga-yoga*, referring to five ethical observances. Pāli *niyama* is used in this way in the *Milindapañha* (Mil 116). More importantly, however, the Sanskrit word also has the meaning of "necessity," "constraint," or "fixed rule" (MW 552; Cappeller 272; MacDonnell 141; Edgerton 298). In the *Mahābhārata* (Mhbh 3.281.33), Sāvitrī addresses the god of death, Yama, thus:

> *prajās tvayemā niyamena saṃyatā; niyamya caitā nayase na kāmayā*
>
> These human beings are controlled by your constraint (*niyama*);
>
> And being constrained, they are borne away, not through choice.

Yama's *niyama* is the personification of the necessity with which he controls the destiny of beings. It is *niyama* in the sense of "necessity," "constraint" or "fixed rule" that is relevant here. The Pāli *niyama* has just the same meaning as the Sanskrit.

In Pāli the form *niyama* is often used interchangeably with the form *niyāma*, and the same holds in principle in Sanskrit: *Sūtra* 3.3.63 in Pāṇini's Sanskrit grammar, the *Aṣṭādhyāyī*, states that the two are alternative forms (Katre 289). In Pāli, however, a certain distinction of meaning is apparent. Mrs. Rhys Davids, in an appendix to a translation of an Abhidhamma text, the *Kathāvatthu*, explains that in Pāli *niyama* means "fixity" while *niyāma* means "that which fixes" (Shwe Zan Aung 383). The new *Dictionary of Pali* suggests that the two forms largely overlap in meaning, but that *niyāma* also has the (more causative) sense of "inevitability" or "certainty" (DP II 599). The form *niyama* does not appear in the Pāli canon, but there are two canonical uses of the form *niyāma*.

Firstly, the Buddha uses *niyāma* to describe the inevitable working of dependent arising:

> *katamo ca bhikkhave, paṭiccasamuppādo. jātipaccayā bhikkhave jarāmaraṇaṃ uppādā vā tathāgatānaṃ anuppādā vā tathāgatānaṃ ṭhitāva sā dhātu dhammaṭṭhitatā dhammaniyāmatā idapaccayatā* (S ii.25)

> And what, monks, is dependent arising? Monks, with birth as condition, there is ageing and death: whether there is the appearance of Tathāgatas or the non-appearance of Tathāgatas, this principle still remains—the stability of Dhamma, the inevitability of Dhamma (*dhamma-niyāmatā*), specific conditionality.

This formulation is repeated for each of the relationships between the *nidānas* of *paṭicca-samuppāda*, emphasizing that the Buddha's teaching reveals the pre-existing conditions of *dukkha*. We should note that the Pāli is ambiguous as to whether *dhamma-niyāmatā* means "the inevitability of nature" (taking *dhamma* as a singular noun) or (as the commentary takes it) "the inevitability of phenomena" (taking *dhamma* as plural) (Bodhi *Connected Discourses* 741–2; Gethin 519). In either case, *niyāmatā* (*niyāma* with the abstract suffix *-tā*) means the fixedness and inevitability of, e.g., ageing-and-death for someone who has been born, and so on. The Buddha similarly uses *niyāma* to describe the intrinsic nature of things as impermanent, painful and non-self:

> *uppādā vā bhikkhave tathāgatānaṃ anuppādā vā tathāgatānaṃ ṭhitāva sā dhātu dhammaṭṭhitatā dhammaniyāmatā sabbe saṅkhārā aniccā'ti . . . sabbe saṅkhārā dukkhā'ti . . . sabbe dhammā anattā'ti* (A i.286).

> Whether there is the appearance of Tathāgatas or the non-appearance of Tathāgatas, this principle still remains—the stability of Dhamma, the inevitability of Dhamma (*dhamma-niyāmatā*), that all formations are impermanent . . . that all formations are painful . . . that all phenomena are not-self.

The word *niyāma* is therefore used here to mean necessity in the sense of inevitability; or as the commentary puts it, *svabhāva-niyāmatā*, "the fix-

edness of intrinsic nature" (Mp ii.380). It is this sense of *niyāma* as "necessity" and "inevitability" that we find in the Commentarial discussion of fivefold *niyama* or *niyāma*. In this article I will continue to cite the form *niyāma* for convenience, though the commentaries sometimes use the form *niyama*, and Mrs. Rhys Davids used the latter form.

The second canonical use of *niyāma* is in relation to the necessary good rebirth of someone who has faith in the Dhamma:

> *yo bhikkhave ime dhamme evaṃ saddahati adhimuccati, ayaṃ vuccati saddhānusārī okkanto sammattaniyāmaṃ sappurisabhūmiṃ okkanto vītivatto puthujjanabhūmiṃ* (S iii.225)
>
> Monks, one who places trust in and is convinced about these teachings is called a faith-follower, one who has moved into the certainty of rightness (*sammatta-niyāma*), moved into the stage of a good person, one who has overcome the stage of ordinary folk.

Such a person cannot be reborn in a lower realm and must attain the fruit of stream-entry. In this context, *niyāma* means the necessity or certainty of a good destiny for someone who has faith in the Buddha's teachings. This sense of *niyāma* as "necessity" or "certainty" in relation to destiny is also found in the Commentaries, but the fivefold *niyāma* is not concerned with the certainty of destiny in this sense.

We can now turn to the commentarial list of fivefold *niyāma* that Mrs. Rhys Davids took to mean five phases of natural law or cosmic order. The first occurrence of the list, in the *Sumaṅgalavilāsinī*, is representative. It occurs in the context of a commentary on the *Mahāpadāna Sutta*, in which the Buddha tells his disciples that it is *dhammatā* that there should be an earthquake when the Bodhisatta descends into his mother's womb, that four deities come to protect the Bodhisatta, that his mother becomes virtuous, and that there are also another thirteen won-

derful and miraculous events (D ii.12–15; Walshe 204). The term *dhammatā* is hard to translate but here means "normal custom" or "the usual way" (DOP II 471); the text says that it is "normal" that there should be an earthquake when the Bodhisatta is conceived, and so on. The commentary therefore discusses what it means to describe such unusual events as *dhammatā*:

> *ayam ettha dhammatā'ti ayaṃ ettha mātukucchi okkamane dhammatā, ayaṃ sabhāvo, ayaṃ niyāmo'ti vuttaṃ hoti. niyāmo ca nāmesa kammaniyāmo, utuniyāmo, bījaniyāmo, cittaniyāmo, dhammaniyāmo'ti pañcavidho*. (Sv ii.432)
>
> In this case, "this is normal (*dhammatā*)" means, when he descends into his mother's womb, in this case, this is normal; it is said that "this is nature (*sabhāva*), this is law (*niyāma*)"; and this which is named "law" is fivefold, being the law of karma (*kamma-niyāma*), the law of seasons (*utu-niyāma*), the law of seeds (*bīja-niyāma*), the law of the mind (*citta-niyāma*) and the law of nature (*dhamma-niyāma*).

Although words like "necessity" and "constraint" would be more literal translations of *niyāma*, they lack any philosophical resonance in English. I suggest it is more appropriate to render it "law" here, in the sense that what is being discussed are "laws of nature" in which things and events follow other things and events by necessity, following a fixed rule. However, although the word "law" has the right kind of tone we should bear in mind that there is no implication here of an abstract generalization or principle over and above any observable or stated regularity. The commentary goes on to explain the fivefold *niyāma* thus:

> In this respect, there is the giving of agreeable results for one who is skillful and the giving of disagreeable results for one who is unskillful—this is the law of karma. Illumi-

nating the meaning of that is, as for a verse, "not in the air" [Dhp 127], and there are stories to be told: there was once a woman who, having argued with her husband, and desiring to die by hanging herself, put her neck into a noose. Another man, who was sharpening a knife, saw, and, wishing to cut the noose, relieving her by saying "fear not, fear not!", rushed up. The rope appeared to be a poisonous snake, and he ran away terrified. The woman died right there. But this is here an example of illustrative stories.

The way trees come into fruit and flower and so on all at once in certain countries and at certain times, the blowing of the winds, the fierceness and gentleness of the sun's heat, the weather's being rainy or not, the opening by day and closing by night of lotuses—this and more is the law of seasons.

Only rice comes from rice-seed, only a sweet taste from something sweet, only a bitter taste from fruit that is bitter—this is the law of seeds.

Whatever former mental events are said to be the condition for whatever later mental events through being the support-condition, such that eye-consciousness and so on coming into existence are agreeing and so on with the preceding—this is the law of the mind.

However, this which is the incident of the shaking of the ten thousand world systems and so on [in the lives] of Bodhisattvas when they descend into their mother's wombs and so on —this is named the law of nature. Here, among these [five kinds of law], the law of nature is meant.

> Therefore just that meaning is being indicated in the text that begins "this, monks, is *dhammatā*." (Sv 433)

The commentary therefore concludes that the earthquakes at the conception of the Bodhisattva and so on are *dhammatā* or normal in the sense that they follow the law or necessity of nature. Exactly what this might mean I will discuss later. The passage from the *Atthasālinī* that discusses the fivefold *niyāma* (As 272–274) is largely the same, though there are other "illustrative stories" concerning the law of karma, this time more intelligible, and drawn from the commentary on the *Dhammapada* verse cited. The context, however, is different: rather than in the context of a commentary on the word *dhammatā*, the fivefold *niyāma* is evoked in the context of a commentary on the abhidhamma account of *citta*, or mental process. In this case, it is the law of mind (*citta-niyāma*) that is relevant among the five *niyāmas*. The verses from the *Abhidhammāvatāra* (Abhidh-av 54) reproduce this discussion very concisely.

We see then that the fivefold *niyāma* is presented in the commentaries as five "laws of nature" in the sense of ways in which things necessarily happen, or fixed orders of things. The "law of the seasons" (*utu-niyāma*) refers to the observable cyclical regularity of seasonal and diurnal phenomena, such as trees, winds and lotus flowers. The "law of seeds" (*bīja-niyāma*) is the observable reproductive continuity of plants, resulting in identical characteristics through the generations. I would suggest that these two kinds of law or necessity represent kinds of prescientific observation made in an agricultural society. The law of karma (*kamma-niyāma*), by contrast, is not an observable regularity but an expression of how consequences inevitably follow actions, a law known through religious belief, and illustrated through cautionary tales. The law of the mind (*citta-niyāma*) is similarly not an observable regularity but here refers to the unvarying sequence of mental events as described by abhidhamma theory. The law of nature (*dhamma-niyāma*), finally, re-

fers to normal yet necessary supernatural happenings in the life-stories of Buddhas, which we might describe as narrative regularities.

These five kinds of necessity are invoked, moreover, not simply to categorize but to *contrast* ways in which things regularly recur. In the law of seasons the regularity of events is *cyclical* through periods of time; in the law of seeds the regularity is *repetitive* over generations; in the law of karma the regularity concerns *inevitable* consequences; in the law of the mind the regularity is *sequential*; and in the so-called law of nature the regularity is a sort of narrative *uniformity* across the lives of all Buddhas.

We see then that the commentarial fivefold *niyāma* has its own integrity as a list of kinds of laws of nature. However, this conceptual integrity is misrepresented by describing fivefold *niyāma* as five "phases" of "the order that Buddhism saw in the universe" (Rhys Davids *Buddhism* 1912: 118), or as "five orders or processes (*niyamas*) which operate in the physical and mental realms" (Nārada), or as "different orders of cause-effect or conditionality obtaining in the universe" (Sangharakshita *Three Jewels* 69). These ways of presenting the fivefold *niyāma* impart a vagueness about what distinguishes the different kinds of *niyāma* that then allows their authors to exaggerate their scope so that they cover Western categories of subject matter. The law of seasons becomes "physical inorganic order," the law of seeds becomes "physical (organic) order," and the law of the mind becomes "psychic law." It is then but a short step to considering *utu-niyāma* to be the subject matter of physics and chemistry, *bīja-niyāma* to be the subject matter of biology, and *citta-niyāma* to be the subject matter of psychology (Sangharakshita *Buddha* 105, Keown 199).

Therefore, based on a vagueness of interpretation of the commentarial fivefold *niyāma*, Mrs. Rhys Davids and others have been able to make a considerable conceptual expansion, from the idea of five kinds of

regularity or law, to five broad domains of nature or reality that are law-governed. Let us briefly clarify the nature of this expansion, as our authors appear to have made it unconsciously. The commentarial fivefold *niyāma* can certainly be said to describe five kinds of necessity, regularity or laws of nature, known through pre-scientific agricultural observation, *abhidhamma* theorizing and religious belief, respectively. Mrs. Rhys Davids and others wished to recognize in these five kinds of laws of nature some resemblance to modern scientific accounts of such laws. They then took these five kinds of *niyāma* to be not just particular kinds of regularity but representative categories of domains of knowledge. Hence, Mrs. Rhys Davids et al. take *utu-niyāma* to mean the entire field of laws of nature that operate in the physical inorganic domain; hence, *utu-niyāma* becomes that domain of nature which is studied by physics and earth science. The commentaries, however, merely characterize the law of seasons in terms of repetitive necessity. The outcome of this implicit conceptual expansion is that any scientific law can now be accommodated into the list of fivefold *niyāma*; for instance, the laws of plate tectonics can be classed as part of *utu-niyāma.*

In the case of the *dhamma-niyāma*, however, Mrs. Rhys Davids's expansion of the idea of *niyāma* has completely misrepresented the original idea. Having set itself the task of commenting on why it is *dhammatā* or normal that earthquakes and other supernatural phenomena occur at the birth of the Bodhisatta and on other important occasions, the commentary on the *Mahāpadāna Sutta* concludes that their happening is a law of nature (*dhamma-niyāma*). What exactly the commentary means is not easy to discern, but there is simply no reason to conclude that *dhamma-niyāma* means "the effort of nature to produce a perfect type" as Mrs. Rhys Davids does (*Buddhism* 1912: 120). We can understand a little better what the commentary means, however, because the phrase *dhamma-niyāma* recurs in the commentary to the *Mahāsaccaka Sutta* (M i.247). Here the Buddha recounts the story of his pre-awakening asceti-

cism in the company of five monks, and how, when he had given up his austerities, his five companions left him. The commentary comments on this passage thus:

> *ukkaṇṭhitvā dhammaniyāmen'eva pakkantā, bodhisattassa sambodhiṃ pattakāle kāyavivekassa okāsadānatthaṃ dhammatāya gatā* (Ps ii.291)
>
> Being dissatisfied they left just through a law of nature (*dhamma-niyāma*); they went when the time for the Bodhisatta's awakening had arrived because it was right (*dhammatā*) in the sense that it gave him the opportunity for bodily seclusion.

In this passage the commentary once again equates *dhamma-niyāma* and *dhammatā*, but this time it is not trying to explain a supernatural occurrence such as an earthquake, but simply an important moment in the Buddha's life-story. Since this life-story is traditionally understood to be common to all Buddhas, these events are supposedly natural in the sense of being necessary within the traditional narrative of any Buddha's life-story. Hence we might translate *dhamma-niyāma* as a "necessity of the way things are."[6]

[6] Or perhaps, taking *dhamma* in a normative sense, we should translate "the necessity of the way things should be". If we read *dhamma-niyāma* normatively like this—as "the constraint of what is right"—we may also discern a connection with the way the term *dharma-niyamaḥ* is used in the Sanskrit grammatical tradition. Patañjali, in his *Mahābhāṣya* on Pāṇini's *Aṣṭādhyāyī*, quotes a *vārttika* by Katyāyana that runs: *siddhe śabdārthasambandhe lokato'rthaprayukte śāstreṇa dharma-niyamaḥ* (Mbh I 8): "When (it is assumed that) the use of words is occasioned by the thing meant, grammar (provides) a restriction [*niyama*] (on the use of words) for the sake of *dharma* 'religious merit.'" (Joshi 117). The text is discussing the value of grammar, given that ordinary people do not need to study grammar in order to communicate successfully. The value, the grammarians say, is that the study of grammar makes it possible for meaning to be conveyed by the use of the correct words, and this restriction or necessity in the use of Sanskrit leads to happiness (Joshi 125). Buddhaghosa was familiar with the Pāṇinian grammatical tradition in Sanskrit (Pind), and may therefore have been familiar with the conception of a restriction (*niyamaḥ*) for the sake of what is right *(dharma*), though

This conception of a "necessity of the way things are" in which all Buddhas have the same archetypal life-story is part of the religious world-view of Buddhism. It was merely wishful thinking on the part of Mrs. Rhys Davids to interpret *dhamma-niyāma* to mean "a serial, organic tendency in the universe towards a normal or perfect type" (*Buddhism* 1912: 240). Her conception attempts to evoke a vision of the Buddha as the culmination of the evolutionary process, in the modern Western sense, but this is clearly not what the commentaries meant by *dhamma-niyāma*. Sangharakshita's development of Mrs. Rhys Davids on this point, that *dhamma-niyāma* represents the "sum total of the spiritual laws which govern progress through the stages of the Buddhist path" (*Buddha* 107) is very far-fetched philology.

The Five *Niyāmas* and Western Buddhism

And yet underlying this far-fetched philology is a perfectly reasonable interpretation of an element of the Buddha's teaching, an interpretation that, as I will show, requires no recourse to the *niyāmas*. This mistaken use of the five *niyāmas* therefore represents an attempt to present Buddhist ideas to Westerners in a way that is not in opposition to the scientific worldview, a presentation that unsuccessfully leans on the supposed authority of a traditional Buddhist doctrine. To conclude this investigation, I will identify three aspects of this interpretation among writers on the *niyāmas*, and I will try to develop sounder philosophical grounds for the doctrines involved.

Let us first examine the idea of cosmic order in Buddhism. We have seen that though the word *niyāma* does mean "order" in the sense of "regularity," it does not really mean "the order which Buddhism saw

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of course as a Buddhist he would not have believed that correct grammar constituted *dhamma*.

in the universe" (Rhys Davids *Buddhism* 1912: 118). The word *niyāma* is used only in particular contexts and always with an emphasis merely on the necessity of things and events occurring in a certain order. However, the word *dhamma* can have just this meaning, as Mrs. Rhys Davids was perfectly aware (*Buddhism* 1912: 33ff). Among the several distinct meanings of the word *dhamma* is the essential nature of things to which the Buddha's teaching points, and it therefore signifies "how the world of experience works, the processes by which it works and is explained" (DOP II 461). *Dhamma* can therefore be understood to mean "natural law" or "cosmic order" (cf. PED 337; Gethin 519), though with an important caveat: this order is not a law outside or different from phenomena; *dhamma* should not be hypostasized as a cause or origin for things (Rahula 188). *Dhamma* hence means "order" in the sense of the observable relatedness of things. This relatedness of things the Buddha called *paṭicca-samuppāda*, "dependent arising," and he expressed it in the general principle:

> *imasmiṃ sati idaṃ hoti, imass'uppādā idaṃ uppajjati;*
>
> *imasmiṃ asati idaṃ na hoti, imassa nirodhā idaṃ nirujjhati.*
>
> This being, that becomes; from the arising of this, that arises.
>
> This not being, that does not become; from the ceasing of this, that ceases. (Ud 1.1, etc.)

Furthermore, the Buddha is reported as saying that "One who sees dependent arising (*paṭicca-samuppāda*) sees the *Dhamma*; one who sees the *Dhamma* sees dependent arising" (M i.190–1). This formulation seems to exploit two meanings of *Dhamma*, as "teaching" and as "nature": who sees (understands) dependent arising sees the Buddha's teaching (*Dhamma*); who sees (understands) the nature of things (*dhamma*) sees dependent arising.

Buddhism, therefore, sees order in the universe in the sense that things arise and pass away according to *Dhamma* and according to the principle of conditionality. There is clearly some basis for a comparison of *Dhamma* in the sense of "natural order" and Western conceptions of "natural law" and "cosmic order," and Mrs. Rhys Davids was attempting to begin that comparison with her presentation of the five *niyāmas*. As we have seen, later writers took the next step and described these *niyāmas* in terms of Western disciplines such as physics, biology, psychology, and so on (Sangharakshita *Buddha* 105–107; Keown 199). Because the fivefold *niyāma* does not equate to these disciplines, the conversation turned out to be based on a misunderstanding. Nevertheless the attempt represents the concern of Buddhist writers to present Buddhism as compatible with the Western conception of an ordered cosmos, capable of being understood through science; and this aims to establish Western Buddhism as a participant in mainstream secular humanist culture.

It is true that this attempt is a creative endeavor. Although *paṭicca-samuppāda* as a general principle appears to be universal in scope (that is, everything in the universe is said to arise on conditions, and so on), in practice the Buddha only appears to have taught the dependent arising and ceasing of *dukkha* or suffering. All occurrences of the general principle of *paṭicca-samuppāda* in the Pāli canon (except one at M ii.32) are immediately followed by expositions of the twelve *nidānas*, whose purpose is to show the "the arising of this whole mass of *dukkha*" (Ud 1.3 etc.) in the course of human experience. Also, the Theravāda commentarial tradition appeared to understand *paṭicca-samuppāda* to refer solely to the twelve *nidānas* (see for instance *Visuddhimagga* ch.17; Vism 517ff.). My conclusion, therefore, is that any attempt to relate *paṭicca-samuppāda* to the subject matter of physics and chemistry should be acknowledged as an innovation and a creative Western exposition of the *Dhamma* rather than something prefigured in doctrines such as that of the fivefold *niyāma*.

Let us secondly examine the relation of karma to universal order. Mrs. Rhys Davids stressed how the teaching of the five *niyāmas* integrates karma, and hence morality, into the order of the universe, substituting a "cosmodicy for a theodicy" (*Buddhism* 1912: 118). Presenting the Buddhist teaching of an immanent moral order to a Western audience in the early part of the twentieth century, she was no doubt responding to an understandable concern about the basis of ethics in a world only recently divested of its divine moral guardian by the theory of evolution. The commentarial fivefold *niyāma* does not particularly teach the immanence of moral order in this sense, but only that karma leads by necessity to inevitable, appropriate results. Nevertheless, the Buddha's teaching concerning karma and its results, which the *kamma-niyāma* partly characterizes, certainly constitutes what we could describe in Western idiom as an immanent moral order. This moral order is summed up in the well-known verse cited in the commentarial passage already quoted (Sv 433):

> *na antalikkhe na samuddamajjhe na pabbatānaṃ vivaraṃ pavissa*
>
> *na vijjatī so jagatippadeso yatthaṭṭhito mucceyya pāpakammā*
>
> Not in the sky, nor in the midst of the sea, nor by hiding in a mountain cave:
>
> No place on earth is to be found where one might escape one's wicked deeds. (Dhp 127)

Whether one believes that there is such an immanent moral order is, however, more of a matter of faith than whether one believes in physical order in the universe, which is a matter of observation.

Ironically, later writers on the five *niyāmas* have claimed that the five *niyāmas* prove that not everything happens through karma. The concern of these writers is to harmonize the religious teaching of karma

with Western scientific explanations of events, in which karma plays no part. This attempted harmonization takes the form of supposing that a given event might be explained in terms of the *kamma-niyāma*, or might rather be explained through some other *niyāma*, for instance, the "physical inorganic order." In this way, one might explain that a tsunami, for instance, occurs solely because of plate tectonics, and not because of anyone's past actions. But I would argue that this distinction of two kinds of explanation is a false one and unnecessarily weakens their case. A tsunami can be explained in an impersonal way through plate tectonics, and at the same time its consequences for particular individuals can explained as the working out of those individuals's past karma. These are not incompatible explanations; the question is rather which we should prefer. This can be further explained with the help of one of the "illustrative stories" concerning *kamma-niyāma* given in the *Aṭṭhasālinī* (in fact a summary of one of the stories illustrating *Dhammapada* v.127 in its commentary, Dhp-a iii.38–44; trans. Burlingame 286–291):

> A certain bhikkhu lived in a cave. A huge mountain peak fell and closed up the entrance. On the seventh day of itself it moved away . . . That bhikkhu in a previous existence was a cowherd. When an iguana entered a hole he closed the entrance by a handful of broken twigs, and on the seventh day he came and opened it. The iguana came out trembling. Through pity he spared its life. That action did not allow that bhikkhu to escape even when he had entered a mountain cave and sat there . . . This is known as the *kamma-niyama.* (As 273–274; Maung Tin 361–362).

There is no need for the reader to suppose that the commentator is explaining the avalanche as solely caused by the *bhikkhu*'s past actions, only that the relationship of the avalanche to the *bhikkhu* can be explained in terms of his karma. If the commentator had had access to a geological

explanation of avalanches, this would have in no way detracted from the point, which is that karma represents an inevitable kind of necessity. Explanations in terms of karma represent a moral hermeneutic of experience, which does not necessarily rival objective explanations of events.

Those writers who wished to show that not everything happens through karma had no need to appeal to the commentaries anyhow, since the Pāli canon straightforwardly tells us this is the case, and without making any false distinctions. The wanderer Moḷiya Sīvaka is recorded as asking the Buddha whether everything that happens to us happens because of past karma, a point that was evidently disputed among the philosophers of the day. The Buddha replied:

> *yaṃ kiñcāyaṃ purisapuggalo paṭisaṃvediyati sukhaṃ vā dukkhaṃ vā adukkhamasukhaṃ vā sabbantaṃ pubbekatahetu ti yañca sāmaṃ ñātaṃ tañca atidhāvanti, yañca loke saccasammataṃ tañca atidhāvanti, tasmā nesaṃ samaṇabrāhmaṇānaṃ micchāti vadāmi.* (S iv.230).
>
> Saying, "whatever a person experiences, pleasant, unpleasant or neither, all this is caused by what was done in the past," they exceed what is known by oneself, they exceed what is considered true in the world; therefore I say that those ascetics and brahmans are wrong.

The Buddha goes on to tell Sīvaka that experience may be due to bile, phlegm or wind, to an imbalance of these humors or to their union, to a change in season (*utu-pariṇāma*), to some acute cause, or it may be the result of karma. (M 101 and A i.174 make the same point). The Buddha's point seems to be that we should not attribute all of our minor health problems to past karma. I will forestall this discussion for the sake of brevity by offering a tentative conclusion about how karma as "immanent moral order" relates to modern scientific explanations of events.

This immanent moral order constitutes a moral hermeneutic of experience, but according to the Buddha this moral hermeneutic is not always appropriate, in the light of other, more adequate explanations of events. In short: not everything that happens to us is because of our karma.

Let us finally examine how Buddhas arise in relation to universal order, something that Mrs. Rhys Davids and Sangharakshita ascribe to *dhamma-niyāma*, and which Mrs. Rhys Davids describes as the "upward tendency" in existence (*Buddhism* 1912: 240). I have shown that *dhamma-niyāma* does not mean anything like this, but is instead a way of characterizing narrative regularities in the life-story of Buddhas. We can surely appreciate, though, the need for a doctrine that presents the emergence of Buddhas as the pinnacle of the evolutionary process, hence relating the *summum bonum* of Buddhism to the basic explanatory narrative of modern science. Once again, however, we find that there was no need to appeal to any commentarial source, as the Pāli canon itself in fact teaches that spiritual progress happens according to a natural law.

Several Pāli discourses describe how various experiences on the path to awakening arise dependent on earlier factors, in a formulaic sequence culminating in liberation. A series of discourses (A x.1–5) describe the path as arising from "virtuous conduct" (*kusalāni silāni*), and another (D iii.288) from "wise attention" (*yoniso manasikāra*). Another of these discourses links the twelve *nidānas* of *paṭicca-samuppāda* with the factors of the path via "faith" (*saddhā*) (S ii.29). The sequence of links culminating in liberation is called "transcendental dependent arising" (*lokuttara paṭicca-samuppāda*) in the post-canonical *Nettipakaraṇa* (Nett 67; Bodhi *Transcendental*). Therefore, just as the *dukkha* of continued existence in *saṃsāra* arises according to immanent natural law, as described by the twelve links of *paṭicca-samuppāda*, so the path leading to liberation from *dukkha* and to *nibbāna* is said to arise according to a natural lawful process. There is therefore ample basis within the Pāli canon for a crea-

tive interpretation of the "upward tendency" in existence, even though the term *dhamma-niyāma* is not an appropriate term for it.

My conclusion is thus that Mrs. Rhys Davids's creative translation of the commentarial fivefold *niyāma* into her doctrine of the five *niyāmas* fulfilled a distinct need. It enabled her to demonstrate that the teaching of Buddhism was in harmony with Western scientific conceptions of an ordered universe, each aspect of nature unfolding according to its own immanent aspect of order. Later writers, presenting Buddhism to a Western audience, found that the doctrine of five *niyāmas* also allowed them to meet a need to present karma as merely a component part of natural order, and not the whole of it; and also to present the unfolding of the spiritual path as a part of the natural order, requiring no transcendent power to bring it about. In this way, Mrs. Rhys Davids's creative translation of the five *niyāmas* enabled the presentation of Buddhist doctrine in a form very amenable to the concerns and presuppositions of a Western audience, while apparently supported by the authority of the Theravādin commentaries, and hence the doctrine was rapidly assimilated into Western presentations of Buddhism. Although I have shown that Mrs. Rhys Davids and her followers have overstated the meaning of the five *niyāmas* I have also shown that there are some sounder philosophical and interpretive bases for an introduction of the *Dhamma* into Western scientific culture.

Afterword: the Five *Niyāmas* in Later Abhidhamma Tradition

In the revised edition of *Buddhism* (re-subtitled *its birth and dispersal*), Mrs. Rhys Davids does not discuss the five *niyāmas*, preferring her later and peculiar re-reading of early Buddhism, in which, for instance, *anattā* becomes a "sinister" addition to the Buddha's original teaching (*Buddhism* 1934). However, there may have been another reason for this

abandoning of the doctrine of five *niyāmas* besides her change in personal beliefs. A record of her correspondence with the Burmese teacher Ledi Sayadaw reveals him correcting her published interpretation of *dhamma-niyāma* (Sayadaw 234). According to the Sayadaw's secretary, U Nyana, *dhamma-niyāma* means the "order of nature" as a whole, within which universal category the other four *niyāmas* are particular categories of order in nature (Sayadaw 235). Although this interpretation evokes some objections from Mrs. Rhys Davids, the long explanation by the Sayadaw that follows appears to convince her that her interpretation of *dhamma-niyāma* as "the effort of nature to produce a perfect type" is not what the term means. Perhaps this correspondence was part of what led her to question her creative translation of the five *niyāmas*, and ultimately to put it aside.

However, some more discussion of the five *niyāmas* in the abhidhamma tradition is warranted here, as it sheds more light on the "need for doctrine" I have identified. Ledi Sayadaw's interpretation of fivefold *niyāma* is set within the thought-world of Theravādin *abhidhamma*. His *Niyāma-Dīpanī* was written in Pāli, and Mrs. Rhys Davids in fact edited its translation.[7] His perspective on the fivefold *niyāma* seems not to be only Burmese, since the same abhidhamma perspective is evident in the work of the Thai scholar P. A. Payutto (1–5). In this perspective, *dhamma-niyāma* is understood as meaning the fixed order of arising and ceasing of all phenomena (Sayadaw 187; Payutto 2). Within this universal fixed causal order of things are particular fixed orders, such as the *utu-niyāma*, *bīja-niyāma*, *kamma-niyāma* and *citta-niyāma.* Ledi Sayadaw also describes other kinds of *niyāma*, such as a *jāti-niyāma*, the fixed order of birth, whereby human beings are born with particular gender and so on (187),

[7] I have not been able to discover the original publication date of Ledi Sayadaw's *Niyāma-Dīpanī* or of the correspondence with Mrs. Rhys Davids; however, the translation cites Mrs. Rhys Davids's *Buddhism* of 1912 and must therefore post-date it, and Ledi Sayadaw died in 1923.

a *buddha-niyāma*, the fixed order by which Buddhas arise, and a *sāvaka-niyāma*, the fixed order by which disciplines become awakened (246–247). These ideas go considerably beyond the original commentarial account of the fivefold *niyāma*; they show that the topic has continued to be explored among Theravādins.

Ledi Sayadaw's account of *dhamma-niyāma* highlights how Mrs. Rhys Davids invented her interpretation of *dhamma-niyāma* as "the effort of nature to produce a perfect type" from a need to present Buddhism in terms of evolution to a Western audience. Ledi Sayadaw himself makes no attempt to meet this "need for doctrine" in Western terms that I have described. However, in an article of 2008, Kate Crosby uses Ledi Sayadaw's discussion of the fivefold *niyāma* to discuss attitudes among Sri Lankan Buddhists to the 2004 tsunami. Her discussion implies that the scientific explanation of tsunamis in terms of plate tectonics is the same as Ledi Sayadaw's *abhidhammic* discussion of *utu-niyāma*: "impersonal plate tectonics clearly coincides with the *utu-niyama* of *abhidhamma* analysis" (61). Crosby also states that the *utu-niyāma* "explains less predictable natural phenomena such as earthquakes" (59), and cites Ledi Sayadaw in a footnote, though in fact the Sayadaw does not mention earthquakes in his discussion of *utu-niyāma*. I want to show that here we have the same misrepresentation of the five *niyāmas* because of the same need for doctrine as I have discussed above in relation to Mrs. Rhys Davids and others who borrowed her ideas.

The abhidhamma tradition represented by Ledi Sayadaw extends the commentarial meaning of *utu-niyāma* from the observable regularity of the "law of seasons" to the more general "caloric order," taking *utu* in the sense of "heat," and uses it as a metaphysical principle to explain the generation of material form. This extension of meaning brings the "caloric order" closer to being a general explanation of the physical universe:

> Heat in its primal form is the germinator of all the material phenomena. And this element or primal form of heat is just utu. Conversely . . . utu is the primal form of fire. Now to return to the 'caloric order' . . . [which is] the fixed process that determines the four-fold succession of evolution, continuance, revolution (i.e. dissolution), and void of the universe. (Sayadaw 180)

However, this exposition of *utu-niyāma* is an explanation on an entirely different basis to that of science. As a footnote in the translation implies, such an abhidhammic "physics" is reminiscent of Heraclitus but unlike modern science, which is based on empirical observation and the formulation of testable laws. Modern science does *not* explain anything in terms of a "caloric order," and plate tectonics is *not* the same as *utu-niyāma*.

The false conflation of explanatory frameworks—modern science and abhidhammic analysis—seems to be based simply on the fact that both explain physical phenomena. But while the abhidhammic analysis is based on the a priori assumption of metaphysical categories such as the four "great elements" (*mahābhūtāni*) (Sayadaw 178–180), these categories have no place in modern science. It would appear that Crosby, like Mrs. Rhys Davids and other writers on *niyāma* before her, appears to have unconsciously conflated Theravādin analysis with modern science. Crosby discusses the fivefold *niyāma* in order to make the point that Buddhism does not explain all events in terms of karma (59), the contrary of which is not an unusual view among traditional Buddhists, despite the Buddha's denial of it. However, neither the Pāli commentaries nor Ledi Sayadaw employ the fivefold *niyāma* in this critical way. The distinction that is really to be made is that between the impersonal explanations of events by modern science and the religious hermeneutic of experience in terms of karma, and I have argued above that these are not

in fact incompatible. The typology of the fivefold *niyāma* is not strictly relevant for making the distinction, and is probably only used to confer the apparent authority of Buddhist tradition on a doctrinal distinction made necessary by the success of scientific explanations.

Abbreviations

A: *Anguttara Nikāya*, ed. R. Morris, E. Hardy. London: Pali Text Society, 1885–1900.

Abhidh-av: *Abhidhammāvatāra*, in *Buddhadatta's Manuals*, ed. A.P. Buddhadatta, London: Pali Text Society, 1915.

As: *Atthasālinī*, ed. E. Müller. London: Pali Text Society, 1897.

D: *Dīgha Nikāya*, ed. T. W. Rhys Davids, J. E. Carpenter. London: Pali Text Society, 1890–1911

Dhp: *Dhammapada*, ed. O. von Hinuber, K. R. Norma., Oxford: Pali Text Society, 1994.

Dhp-a: *The Commentary on the Dhammapada*, ed. H. C. Norman. London: Pali Text Society, 1906–1914.

DP II: Cone, Margaret. *A Dictionary of Pali, vol II*, Bristol: Pali Text Society, 2010.

M: *Majjhima Nikāya*, ed. V. Trenckner, R. Chalmers. London: Pali Text Society, 1887–1902.

Mbh: *Patañjali: Vyākaraṇa-Mahābhāṣya*, ed. Kielhorn, F., Abyankar, K.V., Poona. Rev. ed. 1962.

Mhbh: *Mahābhārata*, crit. ed., online at www.sub.uni-goettin-

gen.de/ebene_1/fiindolo/gretil/1_sanskr/2_epic/mbh/sas/mahabharata.htm

Mil: *Milindapañha*, ed. V. Trenckner. London: Pali Text Society, 1880.

Mp: *Manorathapūraṇī: commentary on the Aṅguttara-Nikāya*, ed. M. Walleser, H. Kopp. London: Pali Text Society, 1936–1957.

MW: Monier Williams, M. *A Sanskrit-English Dictionary*. London: Oxford University Press, 1899.

Nett: *Nettipakaraṇa*, ed. E. Hardy. London: Pali Text Society, 1902.

PED: *The Pali Text Society's Pali-English Dictionary*, ed. T. W. Rhys Davids, W. Stede. Chipstead: Pali Text Society, 1921–1925.

Ps: *Papañcasūdani: commentary on the Majjhima-Nikāya*, ed. J. H. Woods, D. Kosambi, I. B. Horner. London: Pali Text Society, 1933–1938.

S: *Saṃyutta Nikāya*, ed. L. Féer. London: Pali Text Society, 1884–1998.

Sv: *Sumaṅgala-Vilāsinī, commentary on the Dīgha Nikāya*, ed. T. W. Rhys Davids, J. E. Carpenter. London: Pali Text Society, 1886–1932.

Ud: *Udāna*, ed. P. Steinthal. London: Pali Text Society, 1885.

Vism: *Visuddhimagga*, ed. C. A. F. Rhys Davids, 1975, London: Pali Text Society. (Orig. publ. 1920–21).

References

Bodhi, Bhikkhu. "Transcendental Dependent Arising", *The Wheel* 277–278, Kandy: Buddhist Publication Society, 1980. Online at www.accesstoinsight.org/lib/authors/bodhi/wheel277.html

Bodhi, Bhikkhu, trans. *The Connected Discourses of the Buddha: A Translation of the Saṃyutta Nikāya*. Boston: Wisdom, 2000.

Burlingame, E. W., trans. *Buddhist Legends: translated from the original Pali text of the Dhammapada Commentary*, *part 2*. London: Pali Text Society, 1969 (orig. publ. 1921).

Edgerton, Franklin. *Buddhist Hybrid Sanskrit Dictionary*, New Haven: Yale University Press, 1953.

Cappeller, Carl. *Sanskrit-English Dictionary*, Strassburg, 1891.

Crosby, Kate. "Kamma, Social Collapse or Geophysics? Interpretations of Suffering among Sri Lankan Buddhists in the Immediate Aftermath of the 2004 Tsunami" in *Contemporary Buddhism*, 9: 53–76, 2008.

Gethin, Rupert. "He Who Sees Dhamma Sees Dhammas: Dhamma in Early Buddhism" in *Journal of Indian Philosophy*, 32: 513–542, 2004.

Gombrich, Richard. *Buddhist Precept and Practice*, Oxford: Clarendon, 1971.

Hallisey, Charles. "Roads Taken and Not Taken in the Study of Theravāda Buddhism" in *Curators of the Buddha*, ed. Donald Lopez, University of Chicago Press, 31–62, 1995.

Jiyu-Kennet, Rōshi P. N. T. H. *Zen Is Eternal Life* (4th ed.), California: Shasta Abbey Press, 1999.

Joshi, S.D. and Roodbergen, J.A.F. 1986. *Patañjali's Vyākaraṇa-Mahābhāṣya: Paspaśāhnika*, Pune: University of Poona.

Kalupahana, David J. *Causality: The Central Philosophy of Buddhism*, Honolulu: The University of Hawai'i Press, 1975.

Katre, S. M. *Aṣṭādhyāyī of Pāṇini*, University of Texas Press, 1987.

Keown, Damien. *A Dictionary of Buddhism*, Oxford: OUP, 2003.

Ledi Sayadaw. "Niyama-Dipani or Manual of Cosmic Order", in *The Manuals of Buddhism*, trans. Barua, B. M, Rhys Davids, C. A. F., & Nyana. Bangkok: Mahamakut Press, 1978 (orig. publ. 1965). Online at www.dhammaweb.net/html/view.php?id=5

MacDonnell, A. A. *A Sanskrit-English Dictionary*. London: Longmans, 1893.

Nārada Thera. *Buddhism in a Nutshell*. Kandy: Buddhist Publication Society, 1966 (orig. publ. 1933). Online at www.buddhanet.net/pdf_file/buddha-teachingsurw6.pdf

Payutto, P. A. *Good, Evil and Beyond: Karma in the Buddha's Teaching*, trans. Bhikkhu Puriso. Bangkok: Buddhadhamma Foundation, 1993. Online at www.buddhanet.net/pdf_file/good_evil_beyond.pdf

Pind, Ole. 1989. 'Studies in the Pāli Grammarians I', in *Journal of the Pali Text Society*, XIII, 33–82.

Pind, Ole. 1990. 'Studies in the Pāli Grammarians II', in *Journal of the Pali Text Society*, XIV, 175–218.

Rahula, Walpola. "Wrong Notions of *Dhammatā (Dharmatā)*", in L. Cousins et al, eds., *Buddhist Studies in Honour of I.B. Horner*, Dordrecht: Reidel, pp.181–191, 1974.

Rhys Davids, C. A. F. *Buddhism: a Study of the Buddhist Norm*, London: Williams and Norgate, 1912.

Rhys Davids, C. A. F. *Buddhism: its Birth and Dispersal*, London: Thornton Butterworth Ltd., 1934.

Rhys Davids, T. W. and C. A. F., trans. *Dialogues of the Buddha, part II*, London: Pali Text Society, 1910.

Sangharakshita. *The Three Jewels*, Glasgow: Windhorse, 1977 (orig. publ. 1967).

Sangharakshita. *Who Is the Buddha?* Glasgow: Windhorse, 1994.

Shwe Zan Aung and Rhys Davids, C. A. F., trans. *Points of Controversy, being a translation of the Kathāvatthu from the Abhidhamma-piṭaka.* London: Pali Text Society, 1915.

De Silva, Padmasiri. *Environmental Philosophy and Ethics in Buddhism*, Basingstoke: Macmillan, 1998.

Tin, Maung, trans. *The Expositor (Aṭṭhasālinī) Buddhaghosa's Commentary on the Dhammasaṅgani, Vol II*, ed. C. A. F. Rhys Davids, London: Pali Text Society, 1921.

Walshe, Maurice. *The Long Discourses of the Buddha*. Somerville, Mass.: Wisdom, 1995 (orig. pub. 1987).

Weeraratne, W. G., ed. *The Encyclopaedia of Buddhism, vol. VII*, Colombo: Government of Sri Lanka, 2003.