2

# **Death: An early Buddhist perspective**

The significance of death in Buddhist living, with a special reference to "brain death"

An introduction to the Buddhist bioethics and the concerns of Damien Keown

by Piya Tan ©2005, 2014

## 1 Introduction

- **1.1** In this essay, we will make a general survey of the nature of death and how we should see it in the light of the Buddha's teaching. Basically, we will examine what death is from the perspectives of the modern scientific and medical [2], the mythical [3], and the Dharma perspective [4]. We will then discuss some related issues, such as organ donations [5].
- **1.2** A more detailed survey of contemporary and practical perspective on <u>aging, death, and the departed</u> has been separately done in the essay entitled **Karma and the afterlife** (SD 48.1). This brief essay serves as an introduction to that longer survey, and they should be studied together.
- **1.3** The mindfulness of death as taught in early Buddhism and explained in Buddhaghosa's **Visuddhi,** magga has been surveyed in **Maraṇa,sati,kathā** (SD 48.14).

# 2 Buddhist mythology of death

#### 2.0 REALITY AND MYTHOLOGY

- **2.0.1** Although death marks the end of life as we generally know it, it is something bigger than all of mankind, because death holds us all tightly in its grip. Although medical science is helping us to better understand the nature of death with each new generation, we still do not fully know what actually happens when a person dies. We may know the physical aspects of death, but we can only speculate on its mental aspects. We know how the body dies, but we still do not really know what happens to the mind.
- **2.0.2** Since we have no empirical knowledge of what really happens after death, this is anyone's guess. We know that the body's destruction leads to death [2.3.2]. In other words, the sense-faculties are *all* broken down (cease functioning) or broken up (physically destroyed), or one of the vital organs stops functioning,<sup>1</sup> resulting in death. "Breaking up" of the body also refers to the consciousness leaving the body in a vegetative state.

Furthermore, when the physical body perishes, the mind has to move on. It is, nevertheless, difficult, if not impossible, for us to really know when our mind or consciousness has actually left the body, and been reborn.

However, even though early Buddhism, and Buddhism in general, teaches survival after death, not all religions, especially the God-religions, accept the idea of rebirth. Here, it is useful to note that those religions or systems that accept rebirth and redeath also conceive of time as being cyclic. In other words, our lives—collectively known as samsara (samsāra), or wandering-on—is endless and repetitive. Those systems that reject rebirth and redeath hold a linear view of time.

<sup>&</sup>lt;sup>1</sup> In Buddhist terms, this organ failure is part of break-down or break-up of "the body."

**2.0.3** Early Buddhism advocates an empirical vision of human life and quest for liberation. "**Empirical**" means "denoting a result that is obtained by experiment or observations rather than from theory."<sup>2</sup> This means that our understanding of life is based on our 5 physical senses and the mind, together known as the 6 senses (*sal-āyatana*).<sup>3</sup> Our spiritual practice is based on the understanding that these 6 senses, their respective sense-objects, sense-consciousnesses, and feelings are all impermanent.<sup>4</sup>

By **impermanent** here is meant that just as our bodies breathe in and have to breathe out—we take in air and we have to give it back, as it were—our minds, too, is but an endless series of mind-moments, a flow or stream of consciousness.<sup>5</sup> What we understand as person and personality<sup>6</sup> are bound with its continuity and memory.<sup>7</sup>

A **person** (*puggala*)—our conscious body—lives for only one life, creating karma and created by karma (*kamma*), but <u>the mind</u>, especially that part of it known as the <u>subconscious</u>, <sup>8</sup> is reborn. Both our consciousness or mind, and our body (the 5 senses), are shaped by our karma, our deliberate habits, both conscious and unconscious. <sup>9</sup> In other words, it is the mind that creates karma—karma is intention <sup>10</sup>—and we are, in turn, shaped by our karma. <sup>11</sup>

**2.0.4** The Neyy'attha Nīt'attha Sutta (A 2.3.5+6) reminds us, when looking at the suttas, to discern between teachings that are <u>explicit</u>, whose meanings have been drawn out  $(n\bar{t}'attha)$ , and those that are <u>implicit</u>, whose meanings need to be teased out (neyy'attha). In <u>the explicit teachings</u>, we use terms such as mind, consciousness, stillness, impermanence, awakening and nirvana. These are pointers to true reality. Of course, we still need to look in the direction they point, so that we have a vision of true reality, which, with practice, becomes clearer, and, we also enjoy greater inner calm and joy. <sup>12</sup>

More commonly, we see that the implicit teachings are usually used to teach the unawakened and the masses. They employ the language of figures, imagery, symbolism, story, even irony, and mythology. **Mythology** works its benefits when we see ourselves—or aspects of ourselves—playing different parts in the myth, or identifying with the actors in the myth. They work as <u>reflections</u> (what we were), <u>projections</u> (what we are) and <u>trajectories</u> (what we can be). Appreciating such myths, we have a better understanding of ourselves, how we have been led to our current position in life, and how we can shape our lives more wholesomely, or at least avoid the impending pitfalls and darkness that might otherwise await us.

A myth, then, is a real-life scenario presented before us as a sometimes gripping, sometimes liberating, narrative about what we were, what we are right now, and what we can be depending on the course we choose. We are shown the possible scenarios—the more myths we see, the more scenarios open up before us—so that we can wisely choose the best course for ourselves.<sup>13</sup>

<sup>&</sup>lt;sup>2</sup> A Dictionary of Science, Oxford: Oxford Univ Press, 2010.

<sup>&</sup>lt;sup>3</sup> See esp **Sabba S** (S 35.23), SD 7.1.

<sup>&</sup>lt;sup>4</sup> For a fuller understanding of this, read up on the 5 aggregates (pañca-k,khandha), SD 17.

<sup>&</sup>lt;sup>5</sup> On the stream of consciousness, see SD 17.8a (1.1.5, 4.3.1). On the continuity (santati) of the mind, see SD 17.1b (2); SD 17.8a (9).

<sup>&</sup>lt;sup>6</sup> See **The person in Buddhism,** SD 29.6b.

<sup>&</sup>lt;sup>7</sup> See **Karma and the afterlife,** SD 48.1, esp (9.1.2) Karmic accountability.

<sup>&</sup>lt;sup>8</sup> On the subconscious, see SD 48.1 (9.2.1).

<sup>&</sup>lt;sup>9</sup> See **The unconscious,** SD 17.8b.

<sup>&</sup>lt;sup>10</sup> More fully, "Karma, bhikshus, is volition [intention], I say. Having intended, one acts through body, speech and mind." (*Cetanā'haṁ bhikkhave kammaṁ vadāmi. Cetayitvā kammaṁ karoti, kāyena vācāya manasā*), in **Nibbedhi-ka (Pariyāya) S** (A 6.63/3:415), SD 6.11.

<sup>&</sup>lt;sup>11</sup> See **Karma,** SD 18.1.

<sup>&</sup>lt;sup>12</sup> A 2.3.5+6/1:60 @ SD 2.6b.

<sup>&</sup>lt;sup>13</sup> On mythology, see Myth in Buddhism, SD 36.1 esp (1).

2.0.5 In early Buddhism, there are two well known **mythologies of death.** The first centres around the figure of king Yama [2.1] and of Māra [2.2]. Both of them are closely related in the Vedas, where Death (*mṛtyu*) was originally only one of Yama's titles, but in early Buddhism, Mṛtyu came to be called Māra and assumed a mythical figure in his own right. Both the words come from the same root VMŖ, "to die." In **the (Pañca) Deva,dūta Sutta** (M 130), <u>death</u> is the last of the 5 divine messengers.<sup>14</sup>

It is also interesting to note that the name **Yama** was adopted unchanged by the Buddha in the suttas. This is what is technically called a <u>tatsama</u>, that is, a word that is spelt the same way both in Sanskrit and in Pali.<sup>15</sup> The name **Māra**, on the other hand, is a Pali name, closely related to the Sanskrit name Mṛtyu, <sup>16</sup> both of which come from the same root, VMṛ, "to die." Māra, then, is Death personified.

#### **2.1 YAMA**

#### 2.1.1 Origins of Yama

**2.1.1.1** According to the Vedas, **Yama** ("twin" or "binder") is the son of Vivasvat ("shining forth," RgV 10.14.5; Iranian Avestan *Vīvaṅhvant*), the sun. He is the first mortal to die (RgV 10.13.4), and so is the first of the dead, the king of the underworld. In both mythologies, Yima (as he is called in the Avesta) and Yama are the guardians of hell.

Yama's realm is called **Pātāla**, the realm of the "fathers" (*pitṛ*) or ancestors,<sup>17</sup> that is, the departed who receive offerings of food (*piṇḍa*) from humans.<sup>18</sup> Like the *Var* ("Enclosure") of king Yima in the Avesta, Pātāla is a paradise, albeit in a far remote corner of heaven. In the Rg Veda, it is a place of pleasure and satisfaction, attained when living relatives perform the right kind of sacrifices through the brahmins.<sup>19</sup> By the Buddha's times, however, it had evolved into a submarine abyss, a bottomless pit under the ocean. [1.1.1.4]

In the Vedas, Yama is not only king ( $yama,r\bar{a}j\tilde{n}ah$ , RgV 10.16.9), but also the First Ancestor, the king of the fathers ( $pitr,r\bar{a}ja$ ) and of the departed ( $preta,r\bar{a}ja$ ). While the Avesta depicts Yima as ruling in a earthly paradise, the Rg Veda depicts Yama as ruling a heavenly paradise, Pātāla. In the Avesta, Yima is recorded to be the first man and first king. Yama has a similar role in the Rg Veda.

**2.1.1.2** Yama's name means "twin." The Rg Veda mentions Yama's twin sister, **Yamī**, who asks him to mate with her to create the human race. <sup>23</sup>Yama, however, refuses. The Yama myth clearly had its

74

<sup>&</sup>lt;sup>14</sup> The 5 divine messengers (deva.dūta) are a young tender infant (birth), an aged person (decay). a diseased person (disease), a criminal being tortured (suffering), and a festering corpse (death): **M 130** (SD 2.23). In the post-Buddha Atharva,veda, Death, too, is a messenger of Yama (Macdonell 1963:172).

<sup>&</sup>lt;sup>15</sup> More generally, **tatsama** ("same as that") refers to words used in modern languages in the same form as Sanskrit, except for its pronunciation. **Tadbhava** ("becoming that"), on the other hand, refers to words derived from Skt but undergoes a change in spelling.

<sup>&</sup>lt;sup>16</sup> Mṛtyu (cognate of Latin, *mortis,* "death," appears early in the brahminical creation myth, recorded in Bṛhadaraṇyaka Upaniṣad (c500 BCE) as Chaos or cosmic "hunger" (aśanāya) covering the earth (BAU 1.2).

<sup>&</sup>lt;sup>17</sup> On the fathers (pitr), see SD 48.1 (1.1.1.2).

<sup>&</sup>lt;sup>18</sup> This important brahminical ritual is called *sa,piṇḍa,kārana*: see SD 48.1 (1.1.1.3).

<sup>&</sup>lt;sup>19</sup> See SD 48.1 (1.1.1.2).

<sup>&</sup>lt;sup>20</sup> On the departed (preta, P peta), see SD 48.1 (6.4).

<sup>&</sup>lt;sup>21</sup> Macdonnel 1897:171 (§77).

<sup>&</sup>lt;sup>22</sup> Danielou 1964:32; Kosambi 1956:78.

<sup>&</sup>lt;sup>23</sup> Yama and Yamī appear at Rv 10.10, about 50 other times in bk 1, but mostly in bk 10.

roots in the ancient Iranian Avesta (scripture of the Zoroastrians), we have **Yima** (or Jamshid)<sup>24</sup> (the cognate of Yama) and his female twin, Yimeh (cognate of Yamī).

- **2.1.1.3** In later Puranas (brahminical hagiographical texts), Yama's realm is depicted very much like the Buddhist hells, where wrong-doers suffer from their own karmic retributions. During the Epic period of India, the Puranas depict Yama as ruling the underworld. This is Yama's best known role—as the guardian of the underworld—in which he is found in many contexts in Indian religions.
- **2.1.1.4** By the Buddha's time, apparently,  $p\bar{a}t\bar{a}la$  [2.1.1.1] has come to mean some kind of "bottom-less abyss" at the bottom of the ocean. In **the Pātāla Sutta** (S 36,4), the Buddha declares that this "bottomless abyss" ( $p\bar{a}t\bar{a}la$ ) is "only a designation for painful bodily sufferings." We see here what is today called the process of <u>demythologization</u>, that is, the removing or reinterpreting of mythical elements from an idea, narrative, cult, etc. The Buddha pragmatically gives new meanings to these elements, so that they point to Dharma-related approaches and realities. <sup>26</sup>

#### 2.1.2 Yama in early Buddhism

**2.1.2.1** Yama is the lord of death and the underworld. In the suttas, he is always referred to as "king Yama" (yama,rāja), and never as a god, but his messengers are known as "the divine messengers" (deva,-dūta), or even "messengers of the god," that is, Yama. The suttas consistently depict him as an almost sympathetic teacher, whose only task seems to be that of questioning those who fall into his realm (the hells).

The hell wardens bring the hell-beings before Yama, who then asks them why they have not heeded the divine messengers of birth, disease, decay, suffering and death. These 5 divine messengers are depicted as a new-born infant, a diseased person, an old man, a criminal being punished, and a corpse in the (Pañca) Deva,dūta S (M 130) and 3 divine messengers (decay, disease and death) in the (Yama) Deva,dūta S (A 3.35).<sup>27</sup>

**2.1.2.2** Thus, his role seems to be very limited, one of <u>an instructor</u>. He is not even the "lord of death," a role that is given to **Māra** as *maccu,māra* [2.2]. The suttas depict Yama as being himself subject to karma, like Māra (as they are both regarded as "living beings"). As such, Yama aspires to meet the Buddha and renounce the world, so that he will be liberated from the world.<sup>28</sup>

In short, in early Buddhism, Yama plays the role of reminding us of the impermanent nature of life, and of the consequences of bad karma. As such, it is wiser for us not to create bad karma, and end up meeting king Yama in the hells.

**2.1.2.3** In Chinese Buddhism, Yama appears in his most fearsome role as a judge of the dead, similar to his depiction in the post-Buddha Atharva Veda of the brahmins. Not only is Yama's role in Chinese

<sup>&</sup>lt;sup>24</sup> Jamshid is a common Iranian and Zoroastrian male name. In the eastern region of Greater Iran, Central Asia, and amongst the Zoroastrians of India, it is spelt Jamshed. As a king, Jamshid divided society into **4 classes**: <a href="mailto:the priests">the priests</a> (who worshipped their god, Hormozd), <a href="mailto:the warriors">the warriors</a> (who protected the people), <a href="mailto:the farmers">the farmers</a> (who grew grain for the people), and <a href="mailto:the artisans">the artisans</a> (who produced goods for the comfort and pleasure of the people). Apparently, this is more of a specialization of labour (with free mobility amongst them) than the rigid exploitative brahminical caste system of India.

<sup>&</sup>lt;sup>25</sup> S 36.4,4 @ SD 2.25.

<sup>&</sup>lt;sup>26</sup> On demythologization, see SD 4.1 (3).

<sup>&</sup>lt;sup>27</sup> Respectively, **M 130**, SD 2.23, & **A 3.35**, SD 48.10.

<sup>&</sup>lt;sup>28</sup> M 130,28+29 (SD 2.23 (4)); A 3.35,28-29 (SD 48.10).

Buddhism expanded, but it assumes the role of an infernal bureaucracy reflecting the Chinese imperial and feudal realities. Yama is represented as streamlining the hells into 10 courts, each presided by a lesser Yama, but also called "kings."

Unlike the early Buddhist Yama, the Chinese (and east Asian) Yama is a fearsome head judge with 10 deputies to mete out karmic retribution to the hell-beings. In fact, here, he reflects the feudal realities of the imperial legal system and administration. This Yama myth remains one of the salient features of popular Chinese Buddhism.<sup>29</sup>

# **2.1.2.4** This quartet of Dhammapada verses gives us a good idea of the early Buddhist notion of **Yama and his role in our spiritual life**:

Paṇḍu,palāso'va'dāni'si yama,purisā'pi ca taṁ upaṭṭhitā uyyoga,mukhe ca tiṭṭhasi pātheyyam pi ca te na vijjati	You are now (withered) like a yellow leaf, and Yama's men, too, have arrived for you, and you stand at the point of departure, but provision, too, you have none.	Dh 235
So karohi dīpam attano khippam vāyama paṇḍito bhava	Make an island of the self. Quickly strive, be wise!	
niddhanta,malo anangano	Cleansed of stain, blemish-free,	
dibbaṁ ariya,bhūmiṁ ehisi	you will go to the divine land of the noble ones.	Dh 236
Upanīta,vayo'va'dāni'si	You are now well advanced in age,	
sampayāto'si yamassa santike	you are heading into Yama's presence.	
vāso'pi ca te n'atthi antarā	There is no rest for you meantime [in between],	
pātheyyam pi ca te na vijjati	but provision, too, you have none.	Dh 237
So karohi dīpaṁ attano	Make an island of the self.	
khippam vāyama pandito bhava	Quickly strive, be wise!	
niddhanta,malo anaṅgaṇo	Cleansed of stain, blemish-free,	
na puna jāti,jaraṁ upehisi	never again will you meet decay and death.	Dh 238

#### 2.2 MĀRA

#### **2.2.1 Origins**

Māra, as we have noted, comes from the Vedic name Mṛtyu (P maccu), that is Death personified [2.0.5]. The word māra is the abstract noun from this root, and has both impersonal and personal meanings. The impersonal or abstract meanings are "killing, destroying; death, pestilence; slaying, killing; an obstacle, hindrance; the passion of love," and the personal or allegorical meanings are "god of love; the Destroyer, Evil One" (SED). [2.0.5]

It is clear that when the word was first used in the suttas, it only had the sense of <u>death</u> (*maccu*), that is, as *mṛtyu*.<sup>30</sup> In due course, *mṛtyu*, through its abstract sense, *māra*, took on allegorical and mythical senses. Both early Buddhism and later Sanskrit Buddhist texts share an ancient set of <u>4 kinds of māra</u>, that is, as defilements collectively (*kleśa,māra*), as the 5 aggregates (*skandha,māra*), as death personified (*mṛtyu,māra*), and as the deity Death (*deva.putra,māra*), a Buddhist Thanatos.<sup>31</sup>

<sup>&</sup>lt;sup>29</sup> On Chinese developments in the Yama myth, see SD 48.10 (3.3.2).

<sup>&</sup>lt;sup>30</sup> Eg **Aruna, vati S** (S 6.14/1:156 = v604), SD 61.15; Sn 357, 587; Dh 21, 47.

<sup>&</sup>lt;sup>31</sup> Eg Mahāvastu 3.281.7 f; Dharmasangraha 80; Šikṣā,samuccaya 195.10 f; Daśabhūmika S 65.2. See BHSD: Māra; also Har Dayal, *The Bodhisattva Doctrine in Sanskrit Buddhist Literature*, London, 1932:306-316. <u>Thanatos</u> is the Greek god of death or a daemon personification of Death, often referred to, but rarely appearing in person.

#### 2.2.2 Māra and Yama

**2.2.2.1** Māra allegorized as <u>death</u> (*maccu*), or <u>personified</u> as Death (*maccu*,*māra*), puts him in the same class as Yama, the ruler of the departed [2.1.2]. In the earlier suttas, we sometimes see them as being identical.<sup>32</sup> Māra evolved into the great distractor to the Buddha, the arhats, and to those on the spiritual path, so that he holds all living beings in his grasp. Yama, on the other hand, evolved into a dedicated role as the ruler of the underworld and afterlife.

If Māra dominates the living world, claiming all that live to be under his power and to hold them in his sway forever, Yama dominates the afterlife or underworld of the hells, where beings are tormented by their karma (personified as the hell wardens). While Māra is a positive world-engaging figure, Yama is a dark unseen figure of those disengaged from the living world. Māra also personifies personal death in terms of the aggregates, while Yama personifies death as the universal truth of karma.

**2.2.2.2** Hence, while Māra deals with the living, Yama deals with the dead. While Māra is the manifestation of all that is bad, the "bad one" himself, Yama, on the other hand, shows no trace of badness. In fact, he is almost sympathetic, even regretful, towards those hapless, recently deceased beings who have to appear before him in hell, and will be routinely tortured by the hell wardens.<sup>33</sup> [2.1.2.2]

The point remains that both Māra and Yama are "lords of death." However, **Māra** is the end-maker (antaka) not in the sense of ending suffering, but rather an ender of lives, with death as a means of renewing our lives, so that we keep returning Sisyphus-like to put our shoulders back again, and again, to the samsaric rock, and push it all over again over the same highs and lows of our new lives.<sup>34</sup> Death, then is merely the end of a chapter, and the start of a new one in the book of samsara.

**2.2.2.3 Māra**, then, is an agent of bad, the totality of our bad karma. He is an agent in the sense that we are pushed, as it were, by Māra to keep on investing in karma, or gambling with Māra at his table. We keep losing, and need to pay for our losses, with interest.

Yama, on the other hand, is not an agent at all. He is more of our own inner voice, our conscience, that we often hear, but fail to heed. So we look back at our lives with regret and suffering. That is what happens when we face Yama. At some point, Yama falls silent, as there is nothing more he can warn us against.<sup>35</sup> We have to face the music we have written ourselves, music that pains our own being. Our own karma taunts us (sakānu kammāni hananti).<sup>36</sup>

**2.2.2.4** We are our own worst Māra, the shadows of our mind that trail and trouble us whenever we try to turn away from it. In the light of truth and wisdom, the shadow becomes even sharper, so that, with our wisdom, we see it for what it us. Yama, then, is an archetype of the wise old man, the wisdom of ages, often hidden away by Māra's shadow, until we are confronted with suffering and what we fear most. Then, that Yama voice rings clearly in our hearts: Why did I do this? I should have known better.

Māra and Yama embody <u>two opposing aspects of death</u>. **Māra** works to repeatedly bring death to the living; **Yama** promises life for the dead.<sup>37</sup> The suttas play before our mind's eye both Māra and

 $<sup>^{32}</sup>$  Eg S 1:156; Sn 357 (gen maccuno), 581 (ins  $maccun\bar{a}$ ), 587; Tha 411; Dh 21, 47, 128, 135, 150, 287; and in the later texts: SnA 397; DhA 3:49; VbhA 100; Sadhp 295, 304.

<sup>&</sup>lt;sup>33</sup> For a special study, see **Māra,** SD 61.8. See also **Mahā Parinibbāna S** (D 16,3.4/2:103), SD 9; **Māra Tajjanīya S** (M 50), SD 36.4 (2.3).

<sup>&</sup>lt;sup>34</sup> On the Sisyphus myth, see see **Yodh'ājīva S** (S 42.3), SD 23.3 (1).

<sup>&</sup>lt;sup>35</sup> On <u>Yama's silence</u>, see SD 44.1 (1.2.2).

<sup>&</sup>lt;sup>36</sup> From an untraced verse quoted at Kvu 20.3/598,7. Cf **Abhiṇha Paccavekkhittabba Ṭhāna S** (A 5.57): "I'm the owner of my deeds, the heir to my deeds, the womb of my deeds, the relative of my deeds, my deeds are my refuge; whatever deed I've done, good or bad, I'll be its heir" (A 5.57,6(5)+8), SD 5.12.

Yama, so that we see them for what they are. We must avoid and reject the former, and listen and work with the latter.<sup>38</sup> Either way, death is never the end of things: it's just a new beginning.

**2.2.2.5 Māra** is a destructive figure who works surreptitiously for the end of the Dharma itself. He works to *prevent and discourage* us from doing any good, so that we resign any such effort. **Yama**, on other hand, works as <u>an afterthought</u>, as it were, explaining to the hell-beings that they have brought hellish suffering upon themselves by their own efforts, on account of their own heedlessness (which is, of course, the realm of Māra). Yama here, as it were, works as an <u>antithesis</u> to Māra!

Both Māra and Yama, in early Buddhism, serve as <u>allegorical figures of the bad</u> that overwhelms us on our own account. **Māra** subtly but actively labours to encourage, even entice, us into worldly pleasures, so that we remain forever in his domain. **Yama**, on the other hand, openly but almost passively, works to warn us against being heedless in life, because the fruits of such heedlessness also work on us in death, or deep within our unconscious.

**2.2.2.6** Yama's **divine messengers** ( $deva, d\bar{u}ta$ ) are ever present in our world and lives, but Māra works to blind us from seeing their significance. We are blinded by <u>self-view</u>, which deludes us with the false notion that "it would not happen to us," or "my time has not yet come." Our selfishness goads us on to <u>doubt</u> that we are capable of good or that good is beneficial at all.

We cosmeticize and euphemize death through deeply ingrained <u>superstitions</u> and distracting <u>rituals</u> so that death seems to be merely a social event without any personal or spiritual significance. Only in heeding the divine messengers, we break these **3 terrible fetters**—self-delusion, doubting our capacity for good, and the rut of negative habits and rituals.<sup>39</sup> Yama, in this sense, is actually a didactic mentor in our unconscious, but which should be brought up and out into our active consciousness.

# 3 Early Buddhist definition of death

#### 3.1 CRITERIA FOR DEATH

**3.1.1** The early Buddhist definition of death is found in **the Mahā Vedalla Sutta** (M 43), where it is said to be the "loss" (*jahanti*, "are lost") of vitality, heat and consciousness, thus:

"Avuso, when this body loses three states, that is—

(1) vitality,  $\bar{a}yu$  (2) heat, and  $usm\bar{a}^{40}$  (3) consciousness.  $vi\tilde{n}\tilde{n}ana^{41}$ 

—it is then discarded, cast aside, lying like a lifeless log." (M 43,24/1:296), SD 30.2<sup>42</sup>

<sup>&</sup>lt;sup>37</sup> This positive aspect is later taken up by Kṣiti,garbha, the "earth-store" Bodhisattva, of Chinese Mahāyāna: see SD 40b (1.3.3).

<sup>&</sup>lt;sup>38</sup> Further, on Yama, see SD 2.23 (4).

<sup>&</sup>lt;sup>39</sup> Doctrinally, these are <u>the 3 fetters</u> of self-identity view, doubt, and attachment to vows and rituals, to be broken before we can be spiritually liberated: see **Emotional independence**, SD 40a.8.

<sup>&</sup>lt;sup>40</sup> Heat ( $usm\bar{a}$ , also  $usum\bar{a}$ ; Skt  $\bar{u}$ , sman) is the life-faculty itself, karma-born heat (of the living body) (MA 2:350): **D** 2:335,15; M 1:295,24 $\neq$  **S** 2:97,10 = 4:215,23 = 5:212,22; **S** 2:83,9, 3:143,4 $^*$ , 4:294,21.

<sup>&</sup>lt;sup>41</sup> Comy says "consciousness" here is "the mind" (citta) (MA 2:351,7). On consciousness, see Viññāṇa, SD 17.8a.

<sup>&</sup>lt;sup>42</sup> The def is briefly mentioned in a verse in **Pheṇa,piṇḍa S** (S 22.95,15(4)), SD 17.12. See also SD 48.2 (6.1.2.1).

**3.1.2** This **Mahā Vedalla Sutta** definition is quoted in the Paṭisambhidā,magga Commentary (PmA 1:153). The Sutta Commentary here also quotes **the Pheṇa,piṇḍa S** (S 22.95), where the conditions for death are briefly mentioned in verse:

When vitality, heat and consciousness | leave this physical body, then it lies there cast away, | without volition, food for others. (\$ 22.95(4)/3:143), \$D 17.12 The sentiments of this verse closely parallels this **Dhammapada** verse:

Aciram vat'ayam kāyo paṭhavim adhisessati chuddho apeta,viññāṇo nirattham va kalingaram

In no long time, this body, alas, will lie on the earth, cast away, bereft of consciousness, like a useless log. (Dh 41)

#### 3.2 VITALITY

**3.2.1** Although the loss of 3 conditions—vitality, heat and consciousness—constitute death, the first two are said, in **the Mahā Vedalla Sutta** (M 43), to be inseparable and interrelated, comparable to a lamp and its light.<sup>43</sup> This is understandable, as <u>vitality</u>, which clearly refers to our body's metabolism, a process that generates heat.

**Metabolism** (from the Greek *metabolē*, "change") is the set of life-sustaining chemical changes within the cells of living organisms. These enzyme-catalyzed reactions allow organisms to grow and reproduce, maintain their structures, and respond to their environments. Metabolism can also refer to all chemical reactions that occur in living organisms, including digestion and the transport of substances into and between cells.

There are 2 kinds of metabolism: <u>catabolism</u>, which breaks down organic matter (such as food) and harvests energy by way of cellular respiration, and <u>anabolism</u>, which uses energy to construct components of cells such as proteins and nucleic acids. We can include such processes within the early Buddhist notion of <u>vitality</u>, but these are only the physical or biological components.

**3.2.2** The 1<sup>st</sup> early Buddhist criteria for death is **the loss of** <u>vitality</u> (*āyu*). The word *āyu* usually means "life-span, age, longevity." Here, however, as **vitality**, *āyu*, is explained by the Commentary as "the form life-faculty" (*rūpa,jīvit'indriya*). What we have described as the production of energy and its usage [2.3.2.1] would be included in here. This also means that when vitality weakens, body heat also subsides. In this way, vitality and heat function together, and when one ceases, so does the other, thus significantly affecting our life-process.

#### 3.3 BODY HEAT

#### 3.3.1 Algor mortis

The 2<sup>nd</sup> early Buddhist criteria for death is **the loss of <u>body heat</u>** (*usmā*). As we have noted, heat functions together with vitality. Clinically, loss of body-heat is a medically accepted concomitant of death known as <u>algor mortis</u>, the steady decline of body temperature to the level of the surroundings [4.7.1].

<sup>&</sup>lt;sup>43</sup> M 43,22.2/1:295 @ SD 30.2.

#### 3.3.2 Karmic heat

The heat here, however, is "karma-generated heat element" (kammaja,tejo,dhātu). It is not only our body warmth and metabolism, but the very process of decay itself that our body goes through since the day we are conceived. It is an organic form of impermanence, change, and alteration. It coincides with what we familiarly know as "growth."

However, while the world tends to see growth as "growing," having *more*, being *more*, in Dharma language, growth is simply <u>decay</u>: the reality is that we are getting *less* of this earth (we are depleting its resources), we are becoming *less* as we age. In a money-centred society where everyone and everything are <u>measured</u>, we have the delusion that *more*, whether we need it or not, whether it is good or not, is "better."

In this sense, the Buddhist understanding of such "**progress'** overlaps with its medical sense when a doctor says that a medical condition or disease has "progressed," that is, worsened. This is one of the aspects of suffering (*dukkha*) as the 1<sup>st</sup> noble truth. Where "more" is "progress" at a dehumanizing rate, **less** is certainly better and "small" is beautiful in the sense that less and little can bring us great happiness, even liberation.

#### **3.4 Consciousness**

#### 3.4.1 Mind as consciousness

**3.4.1.1** The 3<sup>rd</sup> early Buddhist criteria for death is **the loss of <u>consciousness</u>** (*viññāṇa*). The word **viññāṇa**, "consciousness," here can be simply taken as what we today call "the mind" (*citta*) (MA 2:351). However, as we shall very soon see, this is too broad a term, as it refers to the processing of physical sense-experiences (seeing, hearing, smelling, tasting and touch).

Although all these physical processes, as we know them, may appear to have ceased, our awareness of our body and its surroundings is still present in various levels of clarity. **The dying person** will naturally and emotionally react to these experiences. This is when the dying person, if he is not spiritually trained or skilled, will be driven on by to the momentum of his past habitual karma.

**3.4.1.2** It is not difficult to imagine how our **habitual karma**—such as having lived a habitually moral life, only with exceptional lapses, and we are by nature morally inclined—that our last thoughts, too, would be wholesome. Nowhere in the suttas is it stated that the last thought-moment decide the course of our future rebirth (which is an Abhidhamma view).

However, should our last thought moment be extraordinarily bad, it is possible that its karmic momentum may influence the course of our rebirth. Once again, it must be stressed, this is <u>an extraordinarily rare</u> situation, where all the negative conditions come together. Yet, these conditions themselves must come from our past habitual karma anyway. The point, of course, remains that it is always good to keep up <u>a mind of lovingkindness</u>, <sup>44</sup> so that it is a basis for wholesome thoughts and joy. In that way, we leave this body happily moving on to a happy rebirth, even reaching the path itself. <sup>45</sup>

#### 3.4.2 The 2 kinds of consciousness

In contemporary terms, we may broadly say that we have two kinds of consciousness: the cognitive and the existential. **Cognitive consciousness** refers to the working of the 6 sense-faculties, which proces-

<sup>&</sup>lt;sup>44</sup> **Karaṇīya Metta S** (Sn 1.8,9bc): " ... So long as one is not drowsy, one should keep to this mindfulness (of lovingkindness)" (SD 38.3).

<sup>&</sup>lt;sup>45</sup> On the priority of the fruit of habitual karma deciding one's rebirth, see SD 58.2 (1.1.2.3).

ses the present state occurring in and around us. When it functions with an active conscious body—we see, hear, smell, taste, touch and think—then we are actively alive.

Existential consciousness or the subconscious [3.4.3], on the other hand, is that aspect of our mind shaped by our karmic habits and the past. This is what is reborn when the conscious body dies. In the suttas, this subconscious is termed the gandharva (gandhabba). 46 However, it is better known by its Abhidhamma terms of "death-consciousness" (cuti, citta), "rebirth consciousness" (patisandhi, citta), or the "life-continuum" (bhav'anga).47

3.4.3 The subconscious<sup>48</sup> or existential consciousness [3.4.2] is that part of our being, or more specifically, mind, that is reborn. This is like the karmic genes, with all our habits, good and bad, coded and recorded, as it were. When this subconscious is established in a new body, it springs into action again through the 3 karmic doors of body, speech and mind.

This subconscious is neither some kind of essence nor an abiding entity of any kind. It is neither an unchanging self nor an immortal soul. Above all, it is not the "same" consciousness that moves on to a new life, a wrong view held by the monk Sāti, whom the Buddha sternly corrects, as recorded in the Mahā Taṇhā,saṅkhaya Sutta (M 38).<sup>49</sup> The Buddha stresses that "consciousness is dependently arisen;<sup>50</sup> that without a condition there is no arising of consciousness."51

For a proper understanding of the conditionality of consciousness, we should study the teaching on dependent arising (paţicca,samuppāda).52 In the case of the subconscious, it can be simply understood as being propelled by craving. At the close of the Kutūhala Sutta (\$ 44.9), the Buddha declares, "Vaccha, when a being has laid down this body, but has not yet been reborn in another body, it is fuelled by craving, I say. For, Vaccha, at that time, craving is the fuel."53 The craving, of course, arises from the intermediate being's past karma. Karma and rebirth, in short, are intimately related.<sup>54</sup>

#### 3.4.4 Consciousness cannot be measured

Let us return to the conditions of life according to early Buddhism. Even if modern medicine is able to measure vitality [3.2] and body heat [3.3], it still would not be able to measure consciousness, or know for sure if or when a being is really bereft of consciousness and truly dead. This existential consciousness may be energy; however, it is not physical, but karmic; in other words, it is mental. As such, there is no way it can be measured, not by any scientific instrument that we have today.

It is for this reason that traditional Buddhists, as a rule, treat the remains of the deceased with respect and care, and observe a period of religious observances or spiritual practices lasting from 3 to 7 days. Informed Buddhist scholars, such as Damien Keown (2010), too, reject the current prevalent medical definition of death as "brain death" [4.1.1] as being unsatisfactory as it omits the most vital, and immeasurable, aspect of life—consciousness.

<sup>&</sup>lt;sup>46</sup> See SD 48.1 (3.1).

<sup>&</sup>lt;sup>47</sup> See SD 48.1 (9.2.1.3).

<sup>&</sup>lt;sup>48</sup> On the subconscious and related terms (conscious, preconscious and unconscious), see SD 17.8a (6.1). Also see SD 48.1 (9.2.1).

<sup>&</sup>lt;sup>49</sup> M 38 @ SD 7.10, see esp §§2, 5.4.

<sup>&</sup>lt;sup>50</sup> "Consciousness is dependently arisen," paţicca, samuppannam viññāṇam. Cf Mahā Hatthi, padôpama S (M 28): "These 5 aggregates of clinging are dependently arisen." (M 28.28/1:191), SD 3.13.

<sup>&</sup>lt;sup>51</sup> M 38,5.4/1:258 @ SD 7.10.

<sup>&</sup>lt;sup>52</sup> See **Dependent arising,** SD 5.16.

<sup>&</sup>lt;sup>53</sup> S 44.9,15/4:400 @ SD 23.15.

<sup>&</sup>lt;sup>54</sup> See SD 48.1 (2.1).

#### 3.5 THE BREATH

#### 3.5.1 Heart-beat and breath

Traditional **cardiopulmonary definitions of death**, or asystolic cardio circulatory arrest (cessation of heart-beat and bloodflow) are no longer regarded as adequate signs of death<sup>55</sup> [4.1.1]. The reason for this is simple enough: there are many cases where people whose breath appeared to have stopped, have returned to life on their own accord. [4.2.2]

Such cessation of breath, albeit temporary, may last for hours, even days, up to a week in special cases. It is well known amongst Buddhists familiar with meditation that the breath becomes more restful, and even seems to stop in deep meditation. Such stoppages are regarded as normal and the result of the meditator's growing inner stillness.

#### 3.5.2 Dhyana

- **3.5.2.1** Deep meditation, known as  $\underline{dhyana}$  ( $jh\bar{a}na$ ) is characterized by loss of all physical sensation, suspension of breath, and cessation of thought and knowing in the normal sense of the word. At this level, the meditator reaches such a deep level of inner stillness that there is no input through the physical senses. The meditator is completely immersed a profoundly blissful mental state, free from any physical discomfort.<sup>56</sup>
- **3.5.2.2** In dhyana, not only the breath stops, but the heartbeat stops, too. As such, if probed with the medical or scientific instruments we have, the meditator is clinically dead.<sup>57</sup> This death-like state can last for hours, or even days, but never exceeding 7 days.<sup>58</sup> Then, the meditator would die, due to lack of nourishment. However, skilled meditators are able to rely on their body-clock to emerge from this state of suspended animation at a certain time.<sup>59</sup>
- **3.5.2.3** Those who are unfamiliar with such a meditation might mistake such a person for being dead.<sup>60</sup> On an even more advanced level, attainable only by full awakened beings, that is, the Buddha and the arhats, there is the attainment of cessation, a deep meditation that can last up to a week, and where all signs of life as we know it are absent from the meditator. [3.6.2]

#### 3.6 DEATH AND CESSATION

**3.6.1** The teaching on "the cessation of perception and feeling" (saññā,vedayita,nirodha), or "attainment of cessation" (nirodha,samāpatti), or "cessation" (nirodha) for short, seems to be unique to early Buddhism.<sup>61</sup> It is the last in a series of 9 progressive meditative states of "cessation" (anupubba,nirodha) of sub-

<sup>&</sup>lt;sup>55</sup> J L Bernat, eg, questions the concept of irreversibility in cardiac death: "Are organ donors after cardiac arrest really dead?" *Journal of Clinical Ethics* 17, 2006:122-132.

<sup>&</sup>lt;sup>56</sup> See SD 33.1b (6.2; 4.4.1.2).

<sup>&</sup>lt;sup>57</sup> On death and deep meditation, see SD 33.6 (3.5).

<sup>&</sup>lt;sup>58</sup> On the skills necessary for effective meditation, see **Vasa S** (A 7.38ab), SD 41.16.

<sup>&</sup>lt;sup>59</sup> See **Dhyana,** SD 8.4.

<sup>&</sup>lt;sup>60</sup> For a narrative of such a possibility, see an account of a purported dhyana experience of a lay Buddhist in Australia (Brahmavamso 2007:175-177; digital ed, 143 f). The problem with such a story is that it is related by a monk, well known for story-telling and humour, not by a team of medical or expert observers. Nevertheless, such accounts give us an idea of the possibility of good meditation.

<sup>&</sup>lt;sup>61</sup> Eg Satta Dhātu S (S 14.11/2:151), SD 71.14.

tle aspects of consciousness.<sup>62</sup> The (Anupubba) Vihāra Sutta 2 calls them "the successive attainments" (anupubba,samāpatti) (A 9.33).<sup>63</sup>

The meditator begins with the 4 form dhyanas ( $r\bar{u}pa$ -j, $jh\bar{a}na$ ), where the physical senses and thinking are transcended. On the basis of the 4<sup>th</sup> dhyana, he goes on to the finer states of the formless dhyanas ( $ar\bar{u}pa$ -j, $jh\bar{a}na$ ) or attainments ( $sam\bar{a}patti$ ), which ultimately transcends even consciousness itself.  $^{65}$ 

**3.6.2** According to **the Cūļa Vedalla Sutta** (M 44), the heart-beat and breathing stop,<sup>66</sup> but a residual metabolism keeps the body alive for up to 7 days (Vism 23.42/707). **The Mahā Vedalla Sutta** (M 43) explains the difference between **death and cessation**, thus:

In the case of one who is dead, his bodily, verbal and mental functions have ceased, life is exhausted, the vital heat extinguished, the faculties destroyed. In the case of one who has entered the cessation of perception and feeling his bodily, verbal and mental functions have ceased, but his life is not exhausted, the vital heat is not extinguished, the faculties are purified.

(M 43,25/1:296 abridged) + SD 30.2 (4)<sup>67</sup>

**3.6.3** One of the most fascinating problems in early Buddhism concerns **the final moments of the Buddha** —why he, after going through the gamut of the form and the formless dhyanas, finally passes away upon emerging from the fourth dhyana. The Abhidhamma scholastics explain this by reference to the "<u>life-continuum</u>" (*bhav'aṅga*) or the subconscious, that is, a flow of mind-moments or consciousness operating at an organic level (Vism 23.42).

The commentator **Dhamma,pāla** explains that the dying process needs the life-continuum: "There is no death within cessation, but on account of dying with the life-continuum after that." In modern paraphrase, the Buddha does not die while in cessation, "since death is an organic process." As such, the Buddha has to emerge from cessation in order to die, because there is no *bhav'aṅga* in cessation. Such an explanation was given in connection with the Buddha's own dying process [3.7].

This raises another interesting problem. Clearly, this final meditative process is ultimately involuntary. However, the Buddha needs to mentally determine at the start of his meditation, to put into motion this automatic process of his final nirvana.<sup>71</sup> If he does not determine this process, it is possible—but

<sup>&</sup>lt;sup>62</sup> On *anupubba,vihāra,* see **Tevijja S** (D 13) @ SD 1.8 (2.2) (3) n; **Ariya Pariyesanā S** (M 26,34.2-42/1:174 f), SD 1.11. Also D 33,3.2(6)/3:266, 290; A 9.31/4:409, 456; Pm 1.35.

<sup>&</sup>lt;sup>63</sup> A 9.33/4:410-414 @ SD 95.2. On "the progressive cessation of formations" (*anupubba,saṅkhārānaṁ nirodho*), see **Raho,gata S** (S 36.11/4:217), SD 33.6. As a spiritual skill, they are known as <u>the wisdom in attaining the 9 successive abodes</u> (*navânupubba,vihāra,samāpatti,paññā*), and is attr to Sāriputta: see SD 44.12 (1.8) n.

<sup>&</sup>lt;sup>64</sup> See **The Buddha discovered dhyana**, SD 33.1b (6.2.2).

<sup>&</sup>lt;sup>65</sup> SD 48.7 (3.2). On <u>the 4 form dhyanas</u>, see **Dhyana**, SD 8.4 (5). On <u>the formless dhyanas</u>, see **Paṭhama Jhāna Pañha S** (S 40.1) @ SD 24.11 (4.2, 5).

<sup>&</sup>lt;sup>66</sup> M 44,16-17/1:301 f.

<sup>&</sup>lt;sup>67</sup> See also M 44,16-21 & also M 43,42 & cf SD 1.11 (4.1).

<sup>&</sup>lt;sup>68</sup> Anto.nirodhe maraṇaṁ n'atthi carima,bhav'aṅgena mīyanato. Dhammapāla, in Paramattha,mañjūsā (Visuddhi,magga Ṭīkā) 1678.25. See Rewatadhamma 1969-1972. Qu in P Griffiths, *On Being Mindless*, La Salle, IL, 1986: 40 +n87.

<sup>&</sup>lt;sup>69</sup> Vism:Ñ 831 n17. An 2003:185 n3, D Keown 2010:11.

<sup>&</sup>lt;sup>70</sup> We might imagine that if the Buddha, or any arhat, were to remain in cessation, he could exist forever. However, this is impossible, as cessation can only last for 7 days at the most. By that time, such a person would have died anyway. On the fact that death cannot occur in cessation, see: SD 9 (9.10), esp (9.10.5).

<sup>&</sup>lt;sup>71</sup> **Mahā,parinibbāna S** (D 16) records that the Buddha, at 80, renounces his "life-formations. For this event, and related issues, see **D 16**,3.9-10 (SD 9 (9)).

simply unlikely in an awakened mind—to do otherwise and so be reborn. Let us now examine this fascinating issue of the Buddha's las moments further.

#### 3.7 THE BUDDHA'S LAST MOMENTS

#### **3.7.1 The 9 abodes**

**3.7.1.1** The Buddha's dying moments, carefully recorded in **the Mahā,parinibbāna Sutta** (D 16), give us a rare insight into how a saint passes away into nirvana, never to be reborn in any form. The Sutta records how the Buddha enters the 9 "successive abodes" (*anupubba,vihāra*) in ascending and descending order, and finally passing utterly away after emerging from the 4<sup>th</sup> dhyana.<sup>72</sup> Here is the Sutta passage on how the Buddha goes through the 9 successive abodes in ascending sequence, from the 1<sup>st</sup> dhyana to cessation:

Then the Blessed One attained the 1st dhyana.

Emerging from the first dhyana, he attained the 2nd dhyana.

Emerging from the second dhyana, he attained the 3rd dhyana.

Emerging from the third dhyana, he attained the 4th dhyana.

Emerging from the fourth dhyana, he attained the base of infinite space.

Emerging from the attainment of the base of infinite space,

he attained the base of infinite consciousness.

Emerging from the attainment of the base of infinite consciousness,

he attained the base of nothingness.

Emerging from the attainment of the base of nothingness,

he attained the base of neither-perception-nor-non-perception.

Emerging from the attainment of the base of neither-perception-nor-non-perception,

he attained <u>the cessation of perception and feeling</u>.

(D 16,6.8), SD 9

The Samyutta Commentary here explains that men and gods, seeing that the Buddha has stopped breathing, at once conclude that he has passed away. The elder Ānanda himself, thinking so, asks the arhat Anuruddha, foremost of those with the divine eye (clairvoyance), whether the Buddha has passed away. Anuruddha explains to Ānanda that the Buddha has merely attained the cessation of perception and feeling. (SA 1:223)<sup>73</sup>

**3.7.1.2** The Commentator Buddhaghosa asks: **How does Anuruddha know?** He explains that the elder himself attains the various attainments following the Buddha's own meditative progress, and emerges from the base of neither-perception-nor-non-perception. Then, he knows that the Buddha has enter-

<sup>&</sup>lt;sup>72</sup> D 16,6.8+9/2:156 @ SD 9. These 9 stages, comprising the 4 dhyanas (*jhāna*), the 4 formless attainments (*samāpatti*) and the cessation of perception and feeling (*saññā,vedayita,nirodha*), are known as "the 9 successive abodes" (*anupubba,vihāra*) (D 3:265, 290 (cf 2:156); A 4:410, 414; S 2:216, 222; U 78; Pm 1.5, 2.30; Miln 176). They are also called "the 9 successive cessations" (*anupubba,nirodha*) (D 33,3.2(6)/3:266, 290; A 9.31/ 4:409, 456; Pm 1.35). (**Anupubba) Vihāra S 2** calls them "the successive attainments" (*anupubba,samāpatti*) (A 9.33/4:410-414). On "the progressive cessation of formations" (*anupubba,sankhārānam nirodho*), see **Raho,gata S** (S 36.11/4:217), SD 33.6. As a spiritual skill, they are known as <u>the wisdom in attaining the 9 successive abodes</u> (*navânupubba,vihāra,samāpatti,paññā*), and is attr to Sāriputta: see SD 44.12 (1.8) n.

<sup>&</sup>lt;sup>73</sup> See An 2003: 184 n5.

ed cessation, and that "within cessation, death cannot occur" (DA 2:594).<sup>74</sup> We have already noted how Dhammapāla alludes to the "life-continuum" (*bhav'aṅga*), implying that one must emerge from the attainment of cessation in order to die because there is no life-continuum in cessation [3.6.3].

**3.7.1.3** Upon emerging from cessation, the Buddha then moves through the 9 successive abodes in reverse, down to the first dhyana, and then back upwards again to the fourth dhyana, and emerging from it, passes immediately away.

Then the Blessed One, emerging from the cessation of perception and feeling, attained the attainment of the base of neither-perception-nor-non-perception. Emerging from the attainment of the base of neither-perception-nor-non-perception, he attained the base of the attainment of nothingness. Emerging from the attainment of the base of nothingness, the base of infinite consciousness. he attained Emerging from the attainment of the base of infinite consciousness, the base of infinite space. he attained the base of infinite space, Emerging from the attainment of the 4<sup>th</sup> dhyana. he attained Emerging from the 4<sup>th</sup> dhyana, he attained the 3<sup>rd</sup> dhyana. Emerging from the 3<sup>rd</sup> dhyana, he attained the 2<sup>nd</sup> dhyana. Emerging from the 2<sup>nd</sup> dhyana, he attained the 1<sup>st</sup> dhyana. the 2<sup>nd</sup> dhyana. Emerging from the 1<sup>st</sup> dhyana, he attained Emerging from the 2<sup>nd</sup> dhyana, he attained the 3<sup>rd</sup> dhyana. Emerging from the 3<sup>rd</sup> dhyana, he attained the 4<sup>th</sup> dhyana. Emerging from the 4th dhyana, immediately after which the Blessed One attained parinirvana.

(D 16,6.9)<sup>75</sup>

**3.7.1.4** Buddhaghosa, in his Mahā Parinibbāna Sutta Commentary, then adds interesting details regarding **the kinds of meditation** that the Buddha uses as "bases" (*thāna*) for attaining each of the 4 dhyanas. Using 24 bases, he attains the 1<sup>st</sup> dhyana; 13 bases to attain the 2<sup>nd</sup> dhyana; 13 bases to attain the 3<sup>rd</sup> dhyana; and 15 bases to attain the 4<sup>th</sup> dhyana.

How does he do all this? He attains **the 1**st **dhyana** on these <u>24 bases</u>: the 10 impurities (asubha), <sup>76</sup> the 32 parts of the body ( $dvatti\dot{m}s'\bar{a}k\bar{a}ra$ ), <sup>77</sup> the 8 devices ( $kas\bar{n}na$ ), <sup>78</sup> lovingkindness, <sup>79</sup> compassion, gladness, equanimity, the breath ( $\bar{a}n\hat{a}p\bar{a}na$ ) <sup>80</sup> and limited space ( $paricched\bar{a}k\bar{a}sa$ ). <sup>81</sup>

<sup>&</sup>lt;sup>74</sup> Buddhaghosa also notes this point in his Visuddhi,magga (Vism 23.42/707).

<sup>&</sup>lt;sup>75</sup> This § [9] as at **Vihāra S 2** (A 9.33/4:410 ff).

<sup>&</sup>lt;sup>76</sup> These are the 10 stages of bodily decomposition (used in countering lust) (Vism 6/178-196).

<sup>&</sup>lt;sup>77</sup> These are meditations on our own body-parts (but may be those of others, too) to perceive the body's repulsiveness: see **Kāya,gatā,sati S** (M 119,7/3:90; Vism 8.44)

<sup>&</sup>lt;sup>78</sup> The usual list of 10, but here the last two—space kasina and consciousness kasina—have been omitted (Dhs 166-264). The omission is explained at DhsA 186.

<sup>&</sup>lt;sup>79</sup> These 4—lovingkindness (*mettā*), compassion (*karuṇā*), gladness (*muditā*) and equanimity (*upekkhā*)—are, of course, <u>the divine abodes</u> (*brahma,vihāra*). These are taken as separate at **Vism 9**/321-355, but treated as a set and in sequence at **Dhs 53-55**, as here. The first 3 abodes can be cultivated up to the 3<sup>rd</sup> dhyana, but only the 4<sup>th</sup> can reach the 4<sup>th</sup> dhyana: see *Bhāvanā*, SD 15.1 (Fig 8.1);. For details, see *Brahma,vihāra*, SD 38.5.

<sup>&</sup>lt;sup>80</sup> This is, of course, the mindfulness of the breath (ānâpāna,sati): see Ānâpāna,sati Sutta (M 118), SD 7.13; comy details at Vism 8.145-244/266-293.

<sup>&</sup>lt;sup>81</sup> Buddhaghosa here uses this term to refer to the (limited) space kasina ( $\bar{a}k\bar{a}sa,kasina$ ).

The Buddha attains the 2<sup>nd</sup> dhyana on the bases of the same set, omitting the 10 impurities and the 32 parts of the body. He attains the 3<sup>rd</sup> dhyana on the same bases. He attains the 4<sup>th</sup> dhyana on 15 bases: the 8 kasinas, the divine abode of equanimity, the breath, limited space, and the 4 formless attainments.

This impressive list of meditation is given by the commentator clearly to highlight the fact that the Buddha has <u>complete self-mastery</u> even in his last moments. In fact, the attainment of cessation alone is impressive enough, because no other teachers have ever attained such a level before the Buddha, and no one else other than the Buddha, the arhats and non-returners, are able to attain cessation.

**3.7.1.5** The Mahā Parinibbāna Sutta also tells us that "emerging from the 4<sup>th</sup> dhyana, immediately after which the Blessed One attained parinirvana" [3.7.1.3]. The Samyutta Commentary explains "**immediate**" (samanantara), saying that here there are 2 kinds: immediately after dhyana and immediately after reviewing. In the former case, one emerges from the 4<sup>th</sup> dhyana, descends into the life-continuum (bhavana) and attains parinirvana.

In the latter case, one emerges from the 4<sup>th</sup> dhyana, reviews the dhyana-factors again, then descends into the life-continuum and attains parinirvana, as in the case of the Buddha. But buddhas, pratyeka buddhas, noble disciples, and even ants and termites pass away by way of the noble truth that is suffering, with a karmically indeterminate *bhavaṅga* consciousness (SA 1:224).

- **3.7.1.6** There are 2 possible related explanations why <u>the Buddha passes away on emerging from the 4<sup>th</sup> dhyana</u> rather than in any other meditative plane.
- (1) Firstly, the Buddha still has a physical body, and secondly, the formless attainments do not provide any avenue out of samsara, serving only as the highest states of meditative bliss *within* samsara. Hence, we see the pre-eminence of the 4 form dhyanas for Buddhists.<sup>82</sup>
- (2) A more complicated explanation depends on our understanding of the nature of the Buddha's body, which lacks the aggregates of clinging (*upadāna-k,khandha*) [3.8.1.1]. This means that he has no more fuel for rebirth. Hence, in our understanding, his body simply ceases to function, and since it is still form-based, it naturally has to pass away in the form sphere rather than in the formless sphere or in a state of cessation. [3.6.3]

#### 3.8 DEATH OF THE BODY

#### 3.8.1 The breaking up of the body

**3.8.1.1** The early suttas often describe the passing away of a normal human being as occurring "with the body's breaking up, after death" (*kāyassa bhedā param,maraṇā*).<sup>83</sup> Buddhaghosa explains this phrase as follows:

"<u>With the body's breaking up</u>" ( $k\bar{a}yassa\ bhed\bar{a}$ ) means on abandoning the 5 aggregates that are clung to ( $up\bar{a}d\bar{a}na-k$ ,khandha); "after death" (param, $maran\bar{a}$ ) means that in-between state (tad-antar- $a\dot{m}$ ), in the grasping of the aggregates that have been generated (abhinibbatta-k,khandha,gahane).

Or, "with the body's breaking up" means the interruption of the life-faculty, and "after death" means after the death-consciousness (cuti,  $cittato\ uddha\dot{m}$ ). 85 This is, then, the key element in the early Buddhist

<sup>&</sup>lt;sup>82</sup> I have asked a few prominent forest monks about this, but none of them knew the reason for the attainment-sequence in which the Buddha passes away. For <u>Buddhaghosa's views</u>, see DA 594 f = An Yang-Gu (tr), *The Buddha's Last Days*, 2003: 185-187.

<sup>83</sup> Eg **Deva,dūta S** (M 130,2.3/3:178 @ SD 2.23.

<sup>&</sup>lt;sup>84</sup> On the 5 aggregates, see SD 17.

<sup>&</sup>lt;sup>85</sup> Vism 13.91/427; cf NcA 69.

concept of death, that is, the notion of <u>disintegration of the body</u>, so that the mind moves on to find a suitable new body to continue its existence.<sup>86</sup>

**3.8.1.2** The expression, "the body's breaking up," also applies to to the deaths of arhats, where the passing away is complete. We have at least two dramatic examples of the "body's break-up" as recorded in the Commentaries. The first example is that of the arhat Bakkula [3.8.2.1], and the other of the elder Ānanda [3.8.2.2]. Below [5.2.2], we will discuss the "whole death" of body and mind, as we know it.

#### 3.8.2 Self-combustion

**3.8.2.1** An arhat's death is the final one, where, with the body's breaking up, there is no more rebirth for him. An arhat has neither attachment to life nor the love for death—he lives the moment happily to the very last. Of this, the arhat **Sāriputta** sings:

```
I delight not in death, nor do I delight in life; I shall cast aside this body fully aware and mindful.

I delight not in death, nor do I delight in life; I await my time as a servant his wages. (Tha 1002 f)<sup>87</sup>
```

Then, we have the interesting case of the 160-year-old arhat, **Bakkula**, who, aware of his impending death, invites his colleagues to his own funeral!

Then, later, the venerable Bakkula took his cell's key and went from cell to cell, saying: "Come along, bhante! Come along, bhante! Today I shall attain nirvana."88

Then, seated in the midst of the community of monks, the venerable Bakkula entered nirvana. (M 124,40-41), SD 3.15

The Commentary explains that Bakkula, thinking that all his life he has never made himself a burden to other monks, does not want his body to be a burden after his death, too. Then he enters into the fire element (*tejo,dhātu*), that is, meditating on the fire element (*tejo kasina*), attains nirvana by causing his entire body—skin, flesh, blood, etc—to be consumed by flames, leaving only the relics (MA 4:196). This is what we would today call **self-combustion**.

**3.8.2.2** The  $2^{nd}$  example of <u>self-combustion</u> is that of the final passing away of the arhat **Ānanda**. Although the Pali canon has no record of  $\bar{A}$  nanda's final nirvana, we have an embedded account of it in the Dhammapada Commentary, and another by the Chinese pilgrim, **Faxian**, probably based on an ancient Indian tradition (Foguoji:G 44).

An account of Ānanda's final nirvana is parenthetically embedded in the story of Tissa, the forest-dwelling novice (Vana, vāsi Tissa Sāmaņera Vatthu) in the Dhammapada Commentary (DhA 5.15). It is said that when Ānanda is 120 years old, realizing that his time is approaching, he announces to the inhabitants of both sides of the river Rohiņī that he will pass away in seven days' time.

When the day comes, Ānanda appearing mid-air over the Rohiṇī at the height of seven palm trees, so that he can be witnessed by the Sakyas and the Koliyas, who have gathered on their respective banks of the river. Since both sides have supported him equally, he decides that his relics would be equally shared between them. When he has finished giving his final discourse, he determines, "Let my body split in two; and let one portion fall on the near side and the other on the far side!"

<sup>&</sup>lt;sup>86</sup> For an instructive discussion, see Keown 2010:12-15.

<sup>&</sup>lt;sup>87</sup> See SD 53.7 (2.5.4).

<sup>&</sup>lt;sup>88</sup> Ajja me parinibbānaṁ bhavissati. On paribbāna and related terms, see **Bakkula S** (M 124,41) n, SD 3.15; also SD 9 (15): Aspects of (pari)nibbāna.

He enters into meditation on the fire-element and his body bursts into flames. Then, his body splits into two, and one portion of his relics falls on the Sakya side, and the other on the Koliya side. It is said that the lamentations of the two tribes sound like the earth splitting open, sounding even more mournful than the sound of the lamentation at the final nirvana of the Buddha himself.<sup>89</sup>

#### 3.8.3 Consciousness unestablished

**3.8.3.1** When the Buddha or an arhat passes away, where does his consciousness go to? We could figuratively say that "he" attains or enters nirvana—but it must be stressed this is only *figuratively* speaking—just like fire that has gone out. Just as the fire has gone nowhere—it has simply ceased to exist—so, too, an awakened one's consciousness does not go anywhere. **The Aggi Vaccha,gotta Sutta** (M 72) should be studied in this connection. <sup>90</sup>

The key idea here is that the after-death state of an awakened saint cannot be meaningfully spoken of in any logical or conceptual terms. None of <a href="the-4">the 4</a> possible statements of truth—whether the saint or his consciousness exists, or not exist, both exist and not exist, or neither exists nor not exist—does not apply. Technically, we should say or mean here the 4 possible statements are: x is existent, x is non-existent, x is both existent and non-existent, and x is neither existent nor non-existent. However, it is easier to understand what is meant here if we use the verb-forms, "does," "does not," etc.

He cannot be said to **exist**, because he has attained final nirvana. Any notion that he exists—such as imagining him to be an eternal Buddha or cosmic Bodhisattva—would fall into the wrong view of <u>eternalism</u>. He cannot be said to "**not** exist," which is an <u>annihilationist</u> view. It also entails that he is comparable to something in his category of existence.<sup>91</sup>

To say that he **both** exists and does not exist, is to tend to the view of partial-eternalism. If we insist that he **neither** exists nor does not exists, then, we may be evading making any stand, especially by prevaricating—then, this is likely to be construed as "eel-wriggling" or endless hedging, that is, evading an answer either out of fear of answering wrongly or not at all.<sup>92</sup>

**3.8.3.2** There is some difficulty with the translation of the important phrase, *a(p)patiţţhita viññāṇa*, which describes the consciousness of the newly departed arhat (including the Buddha). The generally accepted translation is "unestablished consciousness." This term is invariably used in connection with accounts of Māra's search for the rebirth-consciousness (*paţisandhi,citta*) of an arhat who has just passed away, such as that of the monks Vakkali, as recorded in **the Vakkali Sutta** (S 22.87) and Godhika, in **the Godhika Sutta** (S 4.23).<sup>93</sup>

Elsewhere—such as in **the Brahma Nimantanika Sutta** (M 49)—Māra actually finds the consciousness of the dead. <sup>94</sup> But here he fails to find it, because it is <u>unestablished</u> (a(p)patitthita), that is, it finds no footing for a new life. It is clear here that the death consciousness, that is, the rebirth-consciousness,

<sup>&</sup>lt;sup>89</sup> DhA 5.15/2:99 f on Dh 75; also in the Tibetan Dulva (Vinaya), W W Rockhill, *The Life of the Buddha*, London, 1884:165 f.

<sup>&</sup>lt;sup>90</sup> M 72/1:483-469 @ SD 6.15.

<sup>&</sup>lt;sup>91</sup> This is Yamaka's view: see **Yamaka S** (S 22.85), SD 21.12.

<sup>&</sup>lt;sup>92</sup> This tetralemma is found in many places in the Canon, eg, **Param Maraṇa S** (S 16.12/2:222 f), SD 65.14, where the Buddha mentions it to Mahā Kassapa. For <u>details</u>, see SD 40a.10 (6.7-6.10). The tetralemma is mentioned by lemma in 4 suttas in Samyutta (S 24.15-18/3:215 f). **Avyākata Samyutta** contains some suttas dealing with it (S 44.2-8/4:381-397). On the tetralemma, see **Unanswered questions**, SD 40.10 esp (7). On the hedgers or eel-wrigglers, see SD 5.8 (4.5). For a possible state *other* than the tetralemma, see **Anurādha S** (S 22.86), SD 21.13. For <u>a more</u> detailed analysis of the 10 points in terms of the tetralemma, see **Māluṅkya,putta S** (M 63), SD 5.8 (2).

<sup>&</sup>lt;sup>93</sup> Respectively, S 22.87 (SD 8.8) & S 4.23 (SD 49.11).

<sup>&</sup>lt;sup>94</sup> M 49,5/1:327 (SD 11.7); cf S 4:38 f.

does not survive in an "unestablished" condition, since the texts (S 4.23 and S 22.87) state that with the passing away of the arhat, consciousness, too, ceases. 95

**3.8.3.3** The conclusion of the Vakkali Sutta (S 22.87,39 f) is important in countering the wrong view that some form of "unsupported" consciousness remains after the passing away of an arhat (as proposed, for example, by Peter Harvey). <sup>96</sup> It is probable that Harvey arrived at his thesis from translating *apatiţţhita* as "unsupported" rather than "unestablished," which would then not support his thesis. Here, it helps to think in Pali, rather than in English.

As soon as Vakkali and Godhika<sup>97</sup> die, Māra, on both occasions, looks for their rebirth-consciousness, but fails to find any, since they are "unestablished" or "unsupported" (*appatiṭṭhita*), that is, find no footing for a new life. It is clear here that the death-consciousness (= rebirth-consciousness) does not survive in an "unestablished" or "unsupported" condition, since the texts (S 4.23 and S 22.87)<sup>98</sup> state that <u>with</u> the passing away of the arhat, consciousness, too, ceases.<sup>99</sup>

**3.8.3.4** At this point, we should have sufficiently understood the early Buddhist conception of life, dying and death. If we are still uncertain of the basic Buddhist teachings on these points, it might help to read them over again. If we feel ready to continue this interesting discussion, we will now move on to discuss the medical definition of death [4], followed by the Buddhist responses [5].

# 4 Medical perspectives of death<sup>100</sup>

#### **4.1 CONSCIOUSNESS**

- **4.1.1** Outside of medicine, amongst traditional culture and individuals, especially in **Buddhism**, a key idea in the definition of death is that <u>it does not occur all at once</u>. Firstly, there should be clear physical signs that life has ceased, such as a lack of respiration and responsiveness as well as pallor and stiffening. Even then, according to Buddhism, death is not complete until **consciousness** (*viññāṇa*) has left the body.
- **4.1.2** A serious difference between medical science and early Buddhism lies in how they view consciousness. Medical science generally sees consciousness as the activity of the senses centred in the brain. In other words, it is actually a body-based activity. Hence, when the body or the brain dies, the mind and consciousness ends, too.

Buddhism, on the other hand, sees the mind and the brain as existing separately, and that the mind is not located in the brain. In fact, according to early Buddhism, the mind is not located anywhere, but is a pervasive reality that works with the physical senses, but is able to function and exist by itself, even in a disembodied existence.<sup>101</sup> In fact, according to early Buddhism, and Buddhism in general, it is the con-

<sup>&</sup>lt;sup>95</sup> See also **Parivīmaṁsana S** (S 12.51/2:80-84), SD 11.5. See SD 8.8 (1.4).

<sup>&</sup>lt;sup>96</sup> P Harvey, *The Selfless Mind*, Richmond: Curzon Press, 1995:208-210.

<sup>&</sup>lt;sup>97</sup> S 22.87,40/124 (SD 8.8) & S 4.23,19/1:122 (SD 80.1).

<sup>&</sup>lt;sup>98</sup> See also **Parivīmaṁsana S** (S 12.51/2:80-84), SD 11.5.

<sup>&</sup>lt;sup>99</sup> See also S:B 421 n314 where Bodhi disagrees with Harvey's view.

<sup>&</sup>lt;sup>100</sup> Most of the materials in this section have been culled or summarized from *Macmillan Encyclopedia of Death and Dying*, 2003:224-229 (Definitions of death).

<sup>&</sup>lt;sup>101</sup> On the early Buddhist view of the brain and the mind, see SD 17.8c (7). See also SD 17.8c (6).

sciousness—more specifically what we call the "existential consciousness" or "rebirth consciousness"—that is reborn. 102

**4.1.3** Buddhists generally take this belief into account in deathbed duties and last rites that are intended to free or help the consciousness—or, more exactly, **the intermediate being** (antarā,bhava)—to move on to a happy state. Traditionally, Buddhists observe a wake over the body for at least 3 days, but usually not exceeding 7 days, to perform the proper lovingkindness-based last rites, especially offerings and dedication of merits for the benefit of the dying or the departed. This window or duration is also to ensure that the consciousness has completely left the body.

#### 4.2 EXTERNAL SIGNS OF DEATH

#### **4.2.1** Basic observations<sup>104</sup>

**4.2.1.1** Over a century ago, doctors would determine death based on a few basic observations. Death was determined when the heartbeat and bloodflow had ceased. To confirm death, there were simple tests, such as pinching or pricking the skin and getting no response, and no adjustive movements when the body is moved to a different position. Such observations and tests were, in most cases, regarded as sufficient to define death as the absence of cardiac activity, respiration, and responsiveness.

To ensure that the absence of cardiac activity (heartbeat) was permanent, the doctor or nurse would listen over the heart with a stethoscope, or directly with the ear, for at least 5 minutes. Permanent cessation of breathing was confirmed by observing that a mirror held before the mouth shows no haze, or that a feather placed on the upper lip does not flutter. Furthermore, the primary muscles (such as those of the arms) became flaccid.

- **4.2.1.2** Besides *algor mortis* or the loss of body heat, there were related minor signs of death. The facial muscles relax, producing the staring eye and gaping mouth of the "Hippocratic countenance." The back lost its curves if the deceased had been lying in bed or some flat surface for some time. The skin became discoloured, turning wax-yellow and the hand-webs lost their pink transparency. When the skin is burned, there was no blistering or redness (Christison's sign). When a ligature was made around a finger, and then removed, it made no white ring which turned redder than the surrounding skin.
- **4.2.1.3** Lividity or *livor mortis* (the process of blood flowing downwards and causing a reddish-purple colour on the skin), *rigor mortis*, which set in 3 to 4 hours after death and lasted between 36 and 48 hours. Sometimes, there were spontaneous movements in the feet and legs caused by biochemical reactions (perhaps giving rise to a belief in spirit possession in some cultures or people).

#### 4.2.2 Exceptions

There were, however, exceptions that prove disturbing. Trauma, illness, and even "fainting spells" occasionally reduced people to a condition that could be mistaken for death. The fortunate ones recovered, thereby prompting the realization that a person could look dead but still be alive. The unfortunate ones were buried or cremated. The reported cases of such seeming "returnings from the dead" during the mourning and funeral periods inspired widespread fears of live burial, especially from the late 18<sup>th</sup> century into the early years of the 20<sup>th</sup> century.

<sup>&</sup>lt;sup>102</sup> On the existential consciousness or rebirth consciousness, see SD 17.8a (6.10); SD 17.8b (3).

<sup>&</sup>lt;sup>103</sup> On the intermediate being, see SD 48.1 (3.1)

<sup>&</sup>lt;sup>104</sup> On this section, see *Black's Medical Dictionary*, 41<sup>st</sup> ed, 2005:192 f Death, Signs of.

#### **4.3 HEART-BASED DEFINITIONS**

#### 4.3.1 Legal definition

- **4.3.1.1** The accepted <u>legal definition of death</u> in the middle of the 20<sup>th</sup> century was the cessation of life as indicated by the absence of blood circulation, respiration, pulse, and other vital functions. In other words, asystolic cardiocirculatory arrest (cessation of heart-beat and bloodflow), or simply, circulatory arrest defines a person's death.
- **4.3.1.2** However, the development of new biomedical techniques soon raised questions about the adequacy of this definition. Cardiopulmonary resuscitation (CPR) had resuscitated some people whose conditions seemed to fulfill such a criteria of death.

#### 4.3.2 Heart attack, heart failure

- **4.3.2.1** A cardiac arrest is different from <u>a heart attack</u>, but may be caused by it. A **heart** attack occurs when insufficient blood flows into the heart muscles. <sup>105</sup> It differs from <u>congestive heart failure</u>, where circulation is substandard, but the heart is still pumping enough blood to sustain life. Arrested blood circulation prevents delivery of oxygen and glucose in the body. Lack of oxygen and glucose to the brain causes loss of consciousness, which then results in abnormal or absent breathing.
- **4.3.2.2** Brain damage is likely to happen if cardiac arrest goes untreated for more than 5 minutes. Immediate treatment is vital for the best chance of survival and neurological recovery. Cardiac arrest is a medical emergency that, in certain situations, is potentially reversible if treated early. Unexpected cardiac arrest can lead to death within minutes: this is called sudden cardiac death (SCD). The treatment for cardiac arrest is immediate defibrillation if a "shockable" rhythm is present, while CPR is used to provide circulatory support and to induce such a "shockable" rhythm.

#### **4.4 ORGAN TRANSPLANTATION**

#### 4.4.1 Life-support technology

Scientific advances have contributed to more accurate understanding and definition of death. Traditional cardiopulmonary definitions of death [4.7.1], are no longer regarded as adequate signs of death. This is because advanced technology may support, even replace, the loss of heart or lung function. In fact, every solid organ (except the brain) can be supported by technology in an intensive care unit, or replaced by transplantation.

New technology introduced life support systems that could prolong respiration and other vital functions in people whose bodies could no longer maintain themselves. Some of them were fortunate enough

<sup>&</sup>lt;sup>105</sup> T Mallinson, "Myocardial infarction." Focus on First Aid 15: 2010:15.

<sup>&</sup>lt;sup>106</sup> P Safar. "Cerebral resuscitation after cardiac arrest: a review," *Circulation* 74,6 pt 2, Dec 1986:IV138–53. M Holzer & W Behringer, "Therapeutic hypothermia after cardiac arrest," *Current Opinion in Anesthesiology* 18,2 Apr 2005:163-168. P Safar, F Xiao, A Radovsky, et al, "Improved cerebral resuscitation from cardiac arrest in dogs with mild hypothermia plus blood flow promotion," *Stroke* 27,1 Jan 1996:105-113.

<sup>&</sup>lt;sup>107</sup> James M Rippe & Richard S Irwin, *Irwin and Rippe's intensive care medicine*. Hagerston, MD: Lippincott Williams & Wilkins, 2003.

<sup>&</sup>lt;sup>108</sup> Harrison's principles of internal medicine. 15<sup>th</sup> ed. New York, 2001: ch 39.

<sup>&</sup>lt;sup>109</sup> J L Bernat, eg, questions the concept of irreversibility in cardiac death: "Are organ donors after cardiac arrest really dead?" *Journal of Clinical Ethics* 17 2006:122-132.

to recover, but the cost of maintaining them indefinitely, and also the diminishing hope over time, had also to be taken into consideration. It was difficult for the living relatives and loved ones to properly enter their grieving process while the body is still there for a prolonged period.

#### 4.4.2 Clinical death

With advances in the technique of organ transplants from cadavers to restore health and preserve the life of the living, new problems and considerations arose. If a person in a persistent vegetative state were regarded as dead, then an organ harvested from such a cadaver for transplant might save another person's life. A new definition of **clinical death** was attempted. Simply, this meant that if CPR was applied to the unconscious person, but he did not revive, and had other physical symptoms of death, he would be declared "clinically dead."

Understandably, this concept had its drawbacks. It conjured up the notion of a temporary death, which was a contradiction in terms. In fact, clinical death had no standing in law and the legal process. Furthermore, new discoveries on the cellular level, suggested that a person might be declared dead, but his body was significantly still alive, at least on the cell, tissue and organ levels.

#### 4.5 OUR DYNAMIC BODY

#### 4.5.1 Cell death

During our life-time, our body changes every moment. Cell death, however, is very different from body death, which marks the end of a single life. Like all living beings, humans, are an unstable flux between the opposing forces of on-going disintegration and on-going growth and integration.

On average, some 500,000 cells die each second in a human. Each day, some 50 billion cells in our body are replaced, so that, according to some authorities, we effectively have a new body each year or after a few years. Each year, about 98% of our body's molecules and atoms have been replaced. 110

#### 4.5.2 Coma and brain death

- **4.5.2.1** How do we then know that death has occurred on all these levels: the cellular, the tissue, and the organic? Although the question was not fully answered, it was raised to a new level with the introduction of concept of **brain death**. The monitoring of the electrical activity of the brain made it possible to measure when "brain death" has occurred.
- **4.5.2.2** A medical notion of death was first described in 1959 in French medical literature as "coma dépassé," a state beyond coma. The notion of brain death was widely embraced by those who see it as a credible determinant in limiting the number and duration of persistent vegetative states, and increasing the opportunities for organ transplantation. Thus, it became the most popular definition of **non-reversible coma**, which is regarded as death.
- **4.5.2.3** The concept of **brain death** was influenced by two major health care advances in the 1960s: the development of intensive care units. Firstly, with artificial airways and mechanical ventilators to

<sup>&</sup>lt;sup>110</sup> See Pim van Lommel, 2004.

<sup>&</sup>lt;sup>111</sup> P Mollaret & M Goulon, "Le coma dépassé: mémoire préliminaire," in *Revue Neurologique* 101, Paris, 1959: 3-15 <a href="http://www.ncbi.nlm.nih.gov/pubmed/14423403">http://www.ncbi.nlm.nih.gov/pubmed/14423403</a>; P Wertheimer, M Jouvet & J Descotes, "A propos du diagnostic de la mort du systèm nerveux dans les comas avec arrêt respiratoire traités par respiration artificielle." *Press Médicale* 67, 1959:87 f <a href="http://www.ncbi.nlm.nih.gov/pubmed/13633814">http://www.ncbi.nlm.nih.gov/pubmed/13633814</a>. See also C Pallis, "ABC of brain stem death. Reappraising death," *British Medical Journal* (Clin Res ed) 285(6352), 13 Nov 1982:1409-1412. C Pallis, & D H Harley, "ABC of brainstem death," 2<sup>nd</sup> ed. London: BMJ Publishing, 1996:8-12.

treat irreversible apnea (cessation of breath), brain failure could be prevented from progressing into cardiac arrest. Secondly, there was the emergence of organ donation arising from the new discipline of transplant surgery.

4.5.2.4 The question then arose: Is non-reversible coma really death? Researchers then recommended that a distinction should be made between "coma" and "brain death." There are several levels of coma with a number of possible causes. Brain death refers to a state of such severe and irreparable damage that no mental functioning exists or can return. In less than a decade, this definition was confirmed by the landmark work of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death (1968).

#### 4.6 OFFICIAL DEFINITIONS

#### 4.6.1 The Harvard criteria

In 1968, the Ad Hoc Committee of the Harvard Medical School proposed the definition of death as the non-reversible loss of brain function. 112 It included the traditional signs. The person was dead if unresponsive, even to ordinarily painful stimuli, showed no movements and no breathing, as well as none of the reflexes that are usually included in a neurological examination. [4.7.1]

There were two new criteria, however, that were not measured in the past: a flat reading on the electroencephalogram (EEG) and lack of blood circulation in the brain. "The Harvard criteria," as they were known, soon became the dominant approach to defining death. Subsequent studies have generally supported the reliability of these criteria. The new definition of death won acceptance by the American Medical Association, the American Bar Association, and other influential organizations.

#### 4.6.2 President's Commission

**4.6.2.1** In the early 1980s, there was already intense argument about the type and extent of brain damage that should be the basis for definition of death. In1981, a President's Commission for the Study of Ethical Problems in Medicine and Biomedical Research took the definition of death to an even higher level, incorporating the concept into a new Uniform Determination of Death Act (UDDA). It accepted the basic Harvard Committee criteria [4.6.1], and is adopted by almost all the US states. 113

Taking a conservative position, the Commission stated that a person is not dead until all brain functioning has ceased. This position takes into account the fact that some vital functions might still be present or potentially capable of restoration even when the higher (the cerebral or cortical) centres of the brain have been destroyed. The most significant position advanced by the Commission dealt with a question that as of 2002 is still the subject of controversy: whole-brain death versus cerebral death. 114

The discussions to define death continued. The questions that continued to be asked was: When can we treat the human body differently from our living body? In 2008, the President's Council on Bioethics said that we should move away from brain death and that we should instead speak of total brain failure.<sup>115</sup>

<sup>&</sup>lt;sup>112</sup> www.ncbi.nlm.nih.gov/pubmed/5694976.

<sup>&</sup>lt;sup>113</sup> Section one of the Act entitled "Determination of Death" states: "An individual who has sustained either (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of all functions of the entire brain, including the brain stem, is dead. A determination of death must be made in accordance with accepted medical standards." See Keown 2010:16 f.

<sup>&</sup>lt;sup>114</sup> For arguments on how the Commission, while attempting to escape metaphysical claims, ended up deploying them, see J P Bishop 2011.

<sup>&</sup>lt;sup>115</sup> Us Govt 2008.

**4.6.2.2** However, some important specifications and cautions were emphasized. It was noted that errors in certification of death are possible if the patient has undergone hypothermia (extreme cold), drug or metabolic intoxication, or circulatory shock—conditions that can occur during some medical procedures and could result in a suspension of life processes that is not necessarily permanent.

Furthermore, the status of children under the age of 5 years, especially the very young, requires special attention. More reliable examination of young children and their guidelines were established a few years later.

- **4.6.2.3** In the Code of Practice drawn up in 1983 by a Working Party of the Health Departments of Great Britain and Northern Ireland, however, it is stated that "death can also be diagnosed by the irreversible cessation of brain-stem function." The brain stem is responsible for respiration, homoeostasis and other basic functions. This is described as "**brain death**."
- **4.6.2.4** Some argued that **the person** is lost permanently when cerebral functions have ceased. Although there is still electrical activity in the brain stem, intellect, memory, and personality have perished. The death of the person, they argued, should be the primary consideration and it would be pointless, therefore, to maintain a persistent vegetative state in a life-support system.<sup>116</sup>

#### **4.7 CONFIRMATION OF DEATH**

#### 4.7.1 Determining brain death.

- **4.7.1.1** Medical researchers have come up with the following criteria for diagnosing and determining **brain death**:
- (1) A physician experienced in the relevant clinical criteria and diagnostic procedures is required to declare brain death.
- (2) For the purposes of organ donation, two physicians are required to declare brain death. Neither physician can have had any significant association with the potential recipient, nor can they participate in any way in the transplant procedures.
- (3) All brain-stem reflexes (pupillary, oculocephalic [doll's eyes], oculovestibular [cold caloric], corneal, gag, cough and respiratory) must be absent when tested with appropriate stimuli at the bedside.
- (4) Motor responses within the cranial nerve distribution must be absent when tested with stimuli applied to any part of the body. Spinal cord reflexes may still be present in some cases. Seizures or decorticate/decerebrate posturing rule out a diagnosis of brain death.
- (5) Reversible conditions such as hypothermia (temperature < 32.2°C), and the influence of central nervous system depressants and muscle relaxants must be ruled out.
- (6) Determining the irreversibility of coma may require a period of observation between 2 and 24 hours, depending on the cause of the coma.
- (7) During apnoea testing, no spontaneous respiration should be evident upon disconnection of the ventilator for a period long enough to allow the partial pressure of carbon dioxide in arterial blood to rise above 60 mmHg and the pH to fall below 7.28 (usually 10 minutes).
- (8) If aspects of the clinical examination cannot be completed at the bedside, supportive diagnostic procedures (eg, radionuclide scanning or 4-vessel cerebral angiography to rule out intracranial blood flow) can be considered to support the diagnosis.

  (Lazar et al 2001:835)<sup>117</sup>

<sup>&</sup>lt;sup>116</sup> See **The person in Buddhism**, SD 29.6b.

<sup>&</sup>lt;sup>117</sup> For a shorter list of such criteria, see Shemie et at 2008:89.

**4.7.1.2** Even <u>brain death</u> as a criterion for determining the death of a person is only a medico-legal and social construction. It implies a notion of irreversible loss of personhood and integrative functions of the brain, but only to that extent it gives us a practical notion of death. Miller and Truog (2012) have suggested that we should remove brain death from the lexicon of medical definitions and concepts, allowing families to decide when a person deserves care and when a person's cadaver can be used for medical purposes.

Miller and Truog also suggest that we do away with the "dead donor" rule and make it clear to families that brain death is a legal fiction. As technology and knowledge advance, they reveal the new limitations in the definition and terminology of death. The word "death" itself may be inadequate to describe the event or process as defined in such domains as the medical-biological, legal, social, bioethical, philosophical, existential, religious and spiritual.

**4.7.1.3** Engelhardt (1988) has noted that social realities have always compelled us to define death. After all, we need to know when it is time to bury a body, when the deceased's will can be executed, and when we no longer owe the body the same respect as all other bodies in a society. Such vital decisions cannot be left to a few, even when they are experts in science or other fields. Life is sacred, especially those of our significant others, even if we may have no real control over our own when we die.

Not all cultures or religious communities, however, accept the medical or official definition of death when it occurs to their near and dear ones or to those in their own midst. However, for the moment, total brain death constitutes the best definition we have in medical and social terms. 121

Yet, as Buddhists, we are well aware that even if all these signs of death are clinically present and medically certifiable, the most vital aspect of life is still unaccounted for: <u>consciousness</u> in its most subtle, but significant, form, that is, as **the subconscious** or the life-continuum. This is what actually keeps us alive, and as long as it is present (that is, we are not reborn), the unconscious body may revive itself within a reasonable time, usually not beyond a week.<sup>122</sup>

# 5 Buddhist perspective on some contemporary death-related issues

#### 5.1 WHAT IS DEATH?

#### 5.1.1 Consciousness is impermanent

**5.1.1.1** At this point, it is helpful to recap a key idea in our discussion: What is death? Amongst Godbelievers and those who believe in some kind of life "essence," death may be spoken of as the separation of the soul or spirit or essence from the body. Buddhists, however, avoid using the word or idea of "soul" or any term that suggests any kind of unchanging or abiding entity, simply because there is no such thing. Whatever exists must exist in time; it must change.

<sup>&</sup>lt;sup>118</sup> R M Taylor, eg, criticized it as a social construct created for utilitarian purposes to permit transplantation: "Reexamining the definition and criteria of death," *Seminars in Neurology* 17, 1997:265-270. Cf C Machado, J Korein, Y Ferrer, L Portela, M de la C Garcia & J M Manero, "The concept of brain death did not evolve to benefit organ transplants," *J of Medical Ethics* 33,4 Apr 2007:197-200 <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2652772/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2652772/</a>.

<sup>&</sup>lt;sup>119</sup> See A Capron, "Legal issues in pronouncing death," in Reich 1995:534-539.

<sup>&</sup>lt;sup>120</sup> Karen Gervais, "Death, definition and determination: philosophical and theological perspectives," in Reich 1995:540-548.

<sup>&</sup>lt;sup>121</sup> See Shemie, Lazar & Dickens 2008.

<sup>&</sup>lt;sup>122</sup> On the subconscious, see SD 48.1 (9.2.1.4).

**5.1.1.2** To know something is to understand it in terms of the past, the present and the future. The moment we say we *know* something, it is gone. We *knew* it, meaning that state has passed, and is now only a memory. That memory allows us to recognize or perceive a similar state when it arises again. Then we relate to it and project its course (what will happen or what we *will* know): that's the future.

The continuity of causes and effects, and the conditionality of our karmic habits, work together to fuel our mind, which in turn shapes our actions and speech. When the body ceases to function, the conditioned mind, by way of the subconscious, moves on to sow the karmic seeds in the new existence and restart the whole existential cycle. In essence, this is how our **subconscious** works.

#### 5.2.2 Whole-body death

**5.2.2.1** We have briefly discussed the death of the body as its "breaking up" [3.8.1], and that, in the case of the arhats, the mind is no more "established," finds no footing for rebirth [3.8.3]. The question now is what then happens to the body and mind of the unawakened? In other words, we can see human existence as the integral coexistence and interaction between the spiritual and the material, between the mind  $(n\bar{a}ma)$  and the body  $(r\bar{u}pa)$ . 123

With what we now understand, we are in a better position to ask: What are the <u>criteria</u> for declaring death, that a person is really dead? Clearly, we need here to identify the physiological conditions that are necessary for supporting the living relationship between our spiritual and material aspects of our being, that is, between (to use helpful Buddhist terminology) "name"  $(n\bar{a}ma)$  and form  $(r\bar{u}pa)$  of a human individual.

**5.2.2.2** Another way of asking this question is, as put by Damien Keown, "In the absence of what conditions can we be sure that there is no subsisting relationship between the two?" The early Buddhists sources provide us with a test for death, namely, the loss of bodily heat [3.3], but we now need to ask what that test is telling us.

In simple terms, what happens when our body loses heat, and how is this bodily change significant? This is the point where our biological integrity has been lost, and our material form ( $r\bar{u}pa$ ) will begin to deteriorate irreversibly. This is, in fact, the universal medical criterion today—that of **brain death**—that is, either of the whole brain (as in the USA) or of the brain stem (as in the UK) [4.5-4.6].

**5.2.2.3**<sup>124</sup> Both Tsomo (2006) and Keown (2010) are clearly unhappy with the criterion of brain death. Tsomo seems to assume that this alienates Buddhism, even makes it, in some way, opposed to science. Keown shares his unease about brain death, but feels that Buddhism can work with science. In fact, a number of people, including doctors and philosophers, are sceptical about the brain death criterion, and there is a growing body of dissident literature<sup>125</sup> which believes that the criterion is conceptually and scientifically flawed. The UDDA criterion [4.6.2.1] that death can be equated with "irreversible cessation of all functions of the entire brain," and similar ones, have serious problems.

Keown gives the following **5 reasons for rejecting the brain death criterion**, or at least, to use it with great reservation:

 $<sup>^{123}</sup>$  Here we will examine  $n\bar{a}ma, r\bar{u}pa$  only in connection with the dying process. For a study of  $n\bar{a}ma, r\bar{u}pa$  as part of the 5 aggregates, see SD 17.2a (12); as a link in dependent arising, see **Paţicca, samuppāda**) **Vibhaṅga S** (S 12.2,11/2:3 f) n, SD 5.15.

<sup>&</sup>lt;sup>124</sup> This section is from Keown 2010:16 f.

<sup>&</sup>lt;sup>125</sup> Eg Potts et al 2000.

- (1) The 1<sup>st</sup> problem is that there are many such definitions, along with many associated protocols worldwide for the diagnosis of brain death. This suggests an underlying lack of scientific rigour surrounding the concept.
- (2) Secondly, even if agreement existed on a single protocol, total *cessation* of brain function is rare in transplant candidates and residual vital signs continue to be registered.<sup>126</sup>
- (3) Third, the loss of *function* in an organ is not the same as the destruction of that organ. Function can come and go in the way that a computer can be turned on and off while remaining fully serviceable. The fact that function is not presently observed does not mean that it cannot return.

A fully secure definition of brain death would require nothing less than the total destruction of the brain tissue through necrosis (cell death), as occurs, for example, due to ischemia (loss of blood flow) over a period of time. If the brain were truly dead (as opposed to not being seen to function during a limited period of observation) it would provide strong evidence of human death, but this is not what the brain death protocol requires.

- (4) A 4<sup>th</sup> difficulty is that the requirement for *irreversibility* is problematic, since irreversibility is a prognosis, not a demonstrable medical fact (many conditions once deemed "irreversible" are today easily curable).
- (5) Fifthly and finally, the tests for brain death are incapable by themselves of confirming the condition they are testing for without the prior exclusion of a range of other possible causes of coma, such as barbiturate poisoning or hypothermia.

In other words, there is no fail-safe medical test (or group of tests) for brain death. In the last analysis the diagnosis of death by neurological criteria alone is difficult to support on the basis of scientific fact. Current methods used to diagnose brain death with a view to prompt transplantation, moreover, often involve haste and in many cases the proper protocols are not followed.<sup>127</sup>

The above concerns are of a kind that do not arise from metaphysical beliefs that are irreconcilable with science, but rather from the intrinsic weaknesses of a criterion for death that has become established in modern medical practice, largely, as many believe, in order to facilitate organ transplantation. Keown further notes that another reason commonly cited for accepting the brain death criterion is that it allows the discontinuing of life-prolonging measures without incurring possible legal sanctions. 128

#### 5.2.3 Two sets of vital criteria

**5.2.3.1** Why is the brain so important in the determining of death? There are 2 main reasons, the first medical and the second cultural. **The medical reason** is that the brain is thought to coordinate all vital bodily functions, such that when it ceases to function, a total "systems failure" is likely to bring about the collapse of the cardiovascular and respiratory system.

The **cultural** reason is one influenced by the Western philosophical notion thought identifies the mind with the self, a view summed up in Descartes' famous dictum, "I think, therefore, I am" (*cogito ergo sum*). 129 Those who accept a Cartesian or a Lockean 130 view of personal identity thus tend to see the loss of consciousness as being equivalent to the death of the human person. 131

<sup>&</sup>lt;sup>126</sup> See Keown 2010:16 f.

<sup>&</sup>lt;sup>127</sup> For a study of pediatric donors, see Verheijde et al 2008a:1-6, & Verheijde et all 2008b.

<sup>&</sup>lt;sup>128</sup> Keown 2010:30 n23.

<sup>&</sup>lt;sup>129</sup> On René Descartes (1596-1650), see SD 2.16 (3.1). On Cartesian dualism, see SD 26.9 (3.2.2+3.2.3).

<sup>&</sup>lt;sup>130</sup> Locke's idea is essentially that "a person is his consciousness." On John Locke (1632-1704), see SD 26.9 (1.6.2).

<sup>&</sup>lt;sup>131</sup> See Keown 2010:17 f. For the Buddhist perspective, see **The person in Buddhism**, SD 29.6b.

**5.2.3.2** Going beyond the current criterion of brain death, some bioethicists who hold this dualistic (a separate body and mind) view of human nature (in terms of which self-consciousness is the unique defining characteristic of a human being) would be prepared to declare *a permanently unconscious patient* dead even though the brain may still be functioning, the heart still beating, and respiration still continuing unaided.<sup>132</sup>

A leading proponent of this view is Robert M Veatch, whose paper appeared in the *New England Journal of Medicine*. Veatch claims that perhaps a third of Americans support a higher-brain or consciousness-based definition of death, and suggests that we need to amend the "dead donor rule" (the principle that organs should only be removed from a "dead" donor) to allow transplants from patients who are still alive but permanently unconscious. Some bioethicists even argue that there is a moral case for non-voluntary euthanasia to be performed on *conscious* patients diagnosed with "locked in" syndrome. <sup>133</sup> Such notions are clearly problematic, for the simple reason that we are basing our decisions on uncertainties.

**5.2.3.3** Often the medical and cultural reasons become blurred, and when the medical reasons are challenged, supporters of the brain death criterion fall back on a cultural or philosophical reasonings, conceding that the patient is not dead, but is "as good as dead," due to being in a state similar to coma or "persistent vegetative state" (PVS).

Indeed, there is often confusion in the minds of medical practitioners about what actually constitutes brain death, and many assume that it means simply a permanent loss of consciousness. Loss of consciousness, however, even if permanent, is simply an impairment, and is quite different from bodily death, which is the irreversible loss of organic functioning [5.2.2.3]. While no one would wish to exist in a state of unconsciousness, such a judgement presupposes that, at least, an unconscious patient is still alive.

It should be noted here that the diagnosis of coma and PVS is far from straightforward, and errors are frequently made when assessing a patient's level of conscious awareness. A recent study of "vegetative" patients using MRI scanners revealed brain activity in around 10% consistent with some level of awareness and cognition, as well as basic communication abilities. 134

**5.2.3.4** According to early Buddhism, our being comprises body and mind. In contemporary terminology, we have both **cognitive consciousness** (bodily consciousness)<sup>135</sup> and **existential consciousness** (that part of the mind that keeps us alive, and is reborn, that is, the subconscious) [3.4.2]. The medical term "brain death," as currently used, refers only to <u>cognitive death</u>, that is, "irreversible cessation of all functions of the entire brain" [5.2.2.3], or even of all bodily functions. There is no scientific way of measuring or knowing when the brain and the mind, too, has ceased function, such that death can be actually said to have occurred.

Concerned Buddhists and scholars, like **Damien Keown**, completely reject the cultural or philosophical reasons just mentioned (often used to support the position known "cognitive death"), since they are not compatible with Buddhist teachings [5.2.3]. Keown adds, with grave concern,

[M]y earlier reasons [5.2.3.1] for accepting the standard of brain death were of the medical kind, namely that the death of the brain, including the brain stem, seemed to mark the point at which the human organism loses the capacity for self-regulation (and not simply the capacity for

<sup>&</sup>lt;sup>132</sup> See eg Truog 2008.

<sup>&</sup>lt;sup>133</sup> See Kahane & Savulescu 2009.

<sup>&</sup>lt;sup>134</sup> M M Monti et al, "Willful modulation of brain activity in disorders of consciousness," 2010.

<sup>&</sup>lt;sup>135</sup> This refers to *all* of our senses collectively, and should be distinguished from "body-consciousness" ( $k\bar{a}ya,vi\tilde{n}-\tilde{n}\bar{a}\eta a$ ), which refers only to the mental experience of the physical body.

consciousness). However, I have had increasing doubts about the scientific reliability of this criterion for two main reasons.

The first is that it places too much emphasis on a single bodily organ, namely the brain. Vital though the brain is to the exercise of the higher cognitive capacities and the regulation of important bodily systems, it seems to be going too far to equate the life of a human being with the functioning of a single organ. In fact for one period of our lives—namely during the early stages of fetal development—we exist without a brain at all. An early fetus has no functioning brain, and is therefore not conscious, but is undeniably alive.

Another problematic example concerns the case of brain dead mothers who have subsequently gone on to give birth, in one case 107 days after brain death was diagnosed. It seems strange to describe a woman's body functioning as an organic whole in this way—even to the extent of producing breast milk for her unborn child are "dead," and if medical opinion is saying that dead patients can give birth it would seem to have lost touch with the ordinary common-sense understanding of what the words "life" and "death" mean. (Keown 2010:16 f)

#### 5.2.4 A unified mind-body life

**5.2.4.1** The bottom line is clearly that <u>we do not live two lives</u>—a brain life and a body life—<u>nor do we die two deaths</u>—a brain death and a body death. One and the same life manifests itself in our brain and body, and throughout the psycho-physical unity which is **a human being**. According to Buddhist teachings—especially the teaching on <u>non-self</u> or <u>anattā</u>—mental awareness or mind-consciousness (<u>mano, viññāna</u>) is <u>not</u> the essence of a human being, nor is there any such essence anywhere else.

<u>Mind-consciousness</u> is only one of six kinds of consciousness diffused throughout the human body. Even though mental awareness may be lost temporarily or "permanently," this does not mean that the deeper underlying forms of organic consciousness (*viññāna*)—which Keown prefers to translate as "**sentiency**"<sup>138</sup>—do not continue. For these reasons, it seems overly narrow, argues Keown, to determine life and death by reference to the brain alone, and we need to take a more holistic, organic view of the human individual in life if we are to understand what is lost in death. (2010:19)

**5.2.4.2** The second kind of reasons collectively constitute what might be termed **the problem of "vital signs,"** alluded to above [5.2.3.3]. This means simply that after a diagnosis of brain death many vital signs are still being registered, which casts serious doubt on the accuracy of the diagnosis. This problem arises because the brain does *not*, as commonly thought, coordinate all vital bodily functions.

For example, while <u>the brain stem</u> helps regulate heartbeat, it does not cause it: **the heart** has its own internal pacemaker and can continue beating for some time even when totally removed from the body (up to an hour in the case of some animal hearts).

In the case of **the lungs**, the ventilator simply introduces oxygenated air, while respiration (the exchange of gases with the environment) continues at the cellular level independently of the brain. A ven-

<sup>&</sup>lt;sup>136</sup> See, eg, Field et al. 1988. The only way this case can be at all compelling is if the mother in question was able to sustain life independently and she did not have a caesarian section performed on her. That is to say, if it is available, information about whether or not she was on a life support machine and the type of birth should be included. (I thank Aminah Borg-Luck for this suggestion.)

<sup>&</sup>lt;sup>137</sup> According to information on the anti-brain death website, KAO, "The production of breast milk depends on a signal sent from the anterior lobe of the pituitary that stimulates the secretion of milk, and possibly breast growth, thus requiring a functioning brain" (KAO.de). Recall that the standard definition of brain death requires the loss of all brain function[s]. (Keown's n)

<sup>&</sup>lt;sup>138</sup> Keown: "This is to avoid confusion with the notion of a 'stream of ideas' that the word 'consciousness' typically evokes."

tilator will only support life in a body that is already alive. Apart from respiration, the neural regulation of <u>body temperature</u> also continues, and **the spinal cord and peripheral nervous system** still function, implying some level of continuing organic integration.

Essential neurological functions also continue *in the brain itself*, such as the regulated secretion of hypothalamic hormones. EEG activity is detected in around 20% of brain-dead patients, when an incision is made to retrieve organs the "dead" patient displays a cardiovascular response to stress in the form of increased blood pressure.<sup>139</sup>

The continuation of multiple vital signs presents striking <u>counter-evidence</u> to a theory which claims that the loss of function in the brain is equivalent to death. This is experienced as emotional dissonance by relatives who are shown the warm body of a relative whose heart is beating while being told by doctors that the patient has passed away. (Keown 2010:20)

# 6 Early Buddhism and the value of life

#### **6.1 VALUE OF LIFE**

## 6.1.1 Life as the primary value

**6.1.1.1** In this section [6.1], we will briefly examine the early Buddhist **value of life** and its relevance to the notion of death. That life is of <u>primary value</u> is clearly evident in the fact that the very *first* of the 5 precepts<sup>140</sup>—based on natural morality—is that of the abstinence against taking any kind of life, especially human life. It is also the third of the 4 "defeat" ( $p\bar{a}r\bar{a}jika$ ) rules in the monastic code—the taking of any human life, or abetting suicide, is an offence entailing immediate and automatic expulsion from the order, one ceases to be a monastic.<sup>141</sup>

Here, <u>natural morality</u> ( $pakati,s\bar{s}la$ )<sup>142</sup> refers to what is universally true and right, and not merely a Buddhist teaching or a prescribed morality ( $pannatti,s\bar{s}la$ ), that is, a conventional rule ( $sammuti,s\bar{s}la$ ), such as the monastic rules dealing with personal decorum and monastic legal acts.<sup>143</sup>

- **6.1.1.2** The Buddhist moral system is best described as being <u>life-centred</u>. The very first fact we cannot deny is that we are alive, and no one, who loves life, would want to die (Dh 129 f) [cf 6.2.1.5]. We value <u>life</u>, meaning that life is good in itself, but it also has a moral purpose. Understandably, Buddhist ethics begins the value of <u>life</u>, expressed through our *being*. This is the value underpinning **the first precept**, which is against killing.
- **6.1.1.3** The moral precepts (*sīla*) or training-rules (*sikkhāpada*), especially the basic 5 precepts [6.1.1.1] are based on the golden rule, which is fully defined by the Buddha in **the Veļu,dvāreyya Sutta** (S 55.7), as follows:

Here, houselords, a noble disciple reflects thus:

<sup>&</sup>lt;sup>139</sup> Keown 2010:4 f, 20.

<sup>&</sup>lt;sup>140</sup> These 5 precepts—the training in abstaining from taking life, from taking the not-given, from sexual misconduct, from lying, and from drunkenness and addictive conduct—are incumbent on all Buddhists, lay and monastic. The monastics, however, observe a more elaborate version of these basic rules. See **Sīlânussati**, SD 15.11.

<sup>&</sup>lt;sup>141</sup> Pār 3 @ V 3:73,20-16.

<sup>&</sup>lt;sup>142</sup> On natural & prescribed moralities, see SD 37.8 (2.1). On conventional morality, see SD 40a.1 (13.2).

<sup>&</sup>lt;sup>143</sup> See *Sīla samādhi paññā*, SD 21.6, esp (2) & Right livelihood, SD 37.8 (1.4).

'I am one who wishes to live, who does not wish to die; who desires happiness, who dislikes suffering.

Since I am one who wishes to live and does not wish to die, who desires happiness and dislikes suffering, if someone were to take my life, that would not be pleasing nor agreeable to me.<sup>144</sup>

Now, if I were to take the life of another—of one who wishes to live, who does not wish to die, who desires happiness, who dislikes suffering—that would not be desirable nor agreeable to him, too.

What is undesirable and disagreeable to me [354] is undesirable and disagreeable to others, too. How can I inflict upon another what is undesirable and disagreeable to me?'

THREEFOLD PURITY OF BODILY CONDUCT. Having reflected thus,

he himself abstains from destroying life,

he exhorts others to abstain from destroying life, and

he speaks in praise of abstaining from destroying life.

Thus, his bodily conduct is purified in three respects.

(S 55.7,6), SD 1.5

Here, the sentence, "he himself abstains from harming life, exhorts others to abstain from harming life," means that we ourself keep the precept against taking life, and encourage others to do the same. This, according to the suttas, is "one who lives both for his own good and for the good of others." Furthermore, "[He] speaks in praise of abstaining from harming life," which refers to spiritual friendship<sup>146</sup> and the practice of gladness or altruistic joy (*muditā*).<sup>147</sup>

#### **6.2 SUICIDE**

#### 6.2.1 Why living is better than dying

**6.2.1.1** Since early Buddhism is against the taking of life, especially human life [6.1], it goes without saying that it is also against suicide. However, killing oneself is clearly different from killing another, as no other person is directly affected by a loss of life. However, those who are dependent on the one who committed suicide, or who love him, would be painfully affected by the loss. These may be said to be the social disadvantages of suicide.

Then, there is the problem of <u>karma</u>. The one who has killed himself still has to face his karma in his new life and subsequent ones. The last thought-moment of one who commits suicide— although we cannot be really certain about this—is likely to be negative. We can, however, concede that killing one-self, or dying for another, is not as bad as killing another.

**6.2.1.2** It is meaningless, at best merely rhetorical or ideological, to make such a claim as someone—like Christ of the Christians, or any other religious person—to die "for the world." What does the "world" here mean? Does it cover all those who were born before this person who died? Is it really meaningful to make such a statement? It is especially wrong to force such an idea on people who have nothing to do with the person, group, religion or culture who believe in such death claim.

Death here, then, reflects a dismal failure, an inability to complete a task which should have been accomplished. Even when disciples and theologians glorify such a failure, it still remains a death, a fail-

<sup>&</sup>lt;sup>144</sup> This is the locus classicus for the "golden rule": see SD 1.5 (1).

<sup>&</sup>lt;sup>145</sup> Atta,hita S 1 (A 4.96/2:96 f), SD 64.6; Atta,hita S 4 (A 4.99/2:98 f), SD 64.9.

<sup>&</sup>lt;sup>146</sup> See Spiritual friendship: Stories of kindness, SD 8.1 & Spiritual friendship: a textual study, SD 34.1.

<sup>&</sup>lt;sup>147</sup> Gladness (*muditā*) is the 3<sup>rd</sup> of the 4 divine abodes (*brahma*, *vihāra*), viz, lovingkindness (*mettā*), compassion (*karuṇā*), gladness (*muditā*), and equanimity (*upekkhā*): see *Brahma*, vihāra, SD 38.5.

ure to present and preserve the truth that truly frees us. The effects of such a religion or teaching is simply devastating and dehumanizing on the individual and the people, where death is glorified and life devalued and discounted, where this world and the present does not matter, but hoping for the love of a being beyond us and for a future place that we go to only after death.

**6.2.1.3** For purposes of the Dharma, living is clearly better than dying. Living, we can practise the Dharma. Living, through the Dharma, we can <u>live and work for the benefit of others</u>. To die, without good reason, can be construed as our lack of compassion and responsibility. How would we feel, what would become of us, if say, our parents or those we depend on were to die, instead of living and working for our benefit—especially if they should do so and have the choice to do so?

Clearly here, it is better that we live and work for our loved ones, and for others, as the Buddha has done for 45 years. If the Buddha had simply died without teaching the Dharma, we would still be caught up in the cycle of God-religions, with their fetters of faith, power and colonialism. Because the Buddha lived and taught, leaving his Dharma intact for our benefit, we can today free ourselves from craving and ignorance by practising the Dharma.

**6.2.1.4** Despite the teaching that life is better than death, there is a special exception, when death, indeed, reflects a spiritual triumph, that is, when a teacher or a saint dies for the Dharma under compelling circumstances. Such is the case presented by the great early saint and missionary, Puṇṇa, who brings the Dharma to Suṇāparanta, as recorded in **the Puṇṇ'ovāda Sutta** (M 145)

The climax of the Puṇṇa story in the suttas is clear when he informs the Buddha of his wish to return to Sunāparanta to spread the Dharma. The Buddha interviews him to see if he is really ready to face a "graduated scale of ill-treatment<sup>148</sup> [see quote below]. Puṇṇa is made aware of what may lie in store for him when he returns to Sunāparanta where the people are fierce and rough. Such people might scold or insult him; hit him with clods of earth; or with a rod; or attack him with a sharp weapon; or even take his life. His reply to the Buddha's final question—What if they were to take your life?—shows his total readiness for his mission:

Bhante, if the people of Sunâparanta were to take my life with a sharp knife, then I shall think thus: "There have been disciples of the Blessed One, who being repelled and disgusted by the body and by life, have resorted to a knife-bringer. Have not sought the knife: it is the knife that has sought me!" Thus will I then think of them, Blessed One; thus will I then think of them, Sugata [well-farer]. (M 145,5/3:268), SD 20.15<sup>150</sup>

**6.2.1.5** The Puṇṇ'ovāda Sutta (M 145) is a rare but powerful Buddhist testimony on martyrdom [6.2.1.4]. While not encouraging it, the Sutta attests to a compelling case when dying for the Dharma is a noble act indeed. Here, not only is life valued for its spiritual potential, but that potential is what makes life valuable. Hence, even if life is lost (such as in the challenging situation here), the potential for awakening or the value of goodness is never lost.

<sup>&</sup>lt;sup>148</sup> F L Woodward in S:W 4:35 n2.

 $<sup>^{149}</sup>$  Santi kho Bhagavato sāvakā kāyena ca jīvitena ca aṭṭiyamānā jigucchamānā yeva sattha,hārakaṁ pariyesanti. I have rendered **sattha,hāraka** literally as "knife-bringer," referring to someone who provides the opportunity for suicide, rather than the more specific "assassin," as sometimes tr. This passage alludes to the strange case of the suicide monks (V Pār 3 @ 3:68-70  $\approx$  S 54.9/5:320-322), SD 107.8: cf S:B 1951 nn299, 301. On Pār 3, cf MA 5:85 which cites it. For a list of these suicides, see **Chann'ovāda S** (M 114), SD 11.12.

<sup>&</sup>lt;sup>150</sup> Close parallel to S 35.88/4:60-63 @ SD 20.15.

The Sutta Nipāta records an even more dramatic case of the lone Bodhisattva battling Māra, in a sort of spiritual duel on the merits of life and death. In **the Padhāna Sutta** (Sn 3.2), the Buddha recounts how Māra discourages the Bodhisattva from his spiritual struggle, warning him that his physical strain would cost him his life, and that it is better to live a life of merits and religious rituals. The Bodhisattva replies:

Esa muñjaṁ parihare | dhi-ratthu idha jīvitaṁ saṅqame me mataṁ seyyo | yañ ce jīve parājito

This muñja I don. | Shame on life here!

Better is death in battle, | than to live vanquished!

(Sn 440)

This is a rare and inspiring battle imagery in early Buddhism. It is not a call to martyrdom or a condoning of suicide, but a reminder that, in our spiritual struggle, we need to courageously advance—like the ancient kshatriya warriors donning the muñja grass (Saccharum munja), signifying no retreat.

One useful import from this imagery is that if our life is controlled by some external agency, so that we cannot be free to work our happiness and salvation, then we have truly lost our life. Life's value comes from its potential for spiritual liberation through self-effort. There is no life without striving.

#### 6.2.2 Suicide in early Buddhism

**6.2.2.1** There is an enigmatic, even troubling, account of mass suicide in a community of monks. **The (Ānâpāna,sati) Vesālī Sutta** (S 54.9) records that once the Buddha spoke to the monks on the benefits of meditating on the impurity of the body (*asubha,bhāvanā*),<sup>151</sup> and then retires into solitude in the Great Forest (*mahā,vana*) for a fortnight. This account recurs closely in the Vinaya (Pār 3).<sup>152</sup>

The monks, overwhelmed by the idea of bodily impurity, feel a loathing for their bodies and many commit suicide. At one point, as many as 60 monks commit suicide in a day. When the Buddha learns of this, he summons the monks to the Pinnacled Hall ( $k\bar{u}$  $\dot{t}$ ag $\bar{u}$ ra, $s\bar{a}$ ala), and learns the reason. Upon  $\bar{u}$ randa's request, he teaches them the mindfulness of the breath and it benefits. Then, he introduces the "defeat" rule for monastics taking any human life, including their own and assisting or abetting suicide.

This unique account, by the very fact that it is likely to reflect badly on early Buddhism, but is still recorded in the Pali canon—following the principle of *lectio difficilior potior* ("the more difficult reading is the stronger")—attests to the fact that it is likely to be true. Moreover, this case involves only ordinary monks, those who have not attained any stage of sainthood.

**6.2.2.2** The mass suicide of the monks described in the Vinaya [6.2.2.1] involves unawakened monks. A more difficult problem concerns **the alleged suicide by arhats**. There are 4 other well-known suicide cases in the suttas and 2 more in the Commentaries. Three of these accounts relate to arhats or would-be arhats allegedly committing suicide, that is, **the Chann'ovāda Sutta** (M 144,12 = S 35.87) SD 11.12, **the** 

<sup>&</sup>lt;sup>151</sup> This is the meditation on the 31 (Comy 32) parts of the body (VA 393 f). The 31 parts (collectively called asubha) are given in **Mahā Satipaṭṭhāna S** (D 22,5/2:293), SD 13;  $\bar{\mathbf{A}}$ **nâpāna,sati S** (M 10,10/1:57), SD 13 = SD 7.13; **Girim-ānanda S** (A 10.60/5:109), SD 15.15, while the Comys list 32 parts, adding "brain (in the head" (Kh 3, Pm 1:6 f, Vism 8.42-144/236-266 & KhA 60), calling them  $k\bar{a}ya,gata\ sati$  (mindfulness of the body).

<sup>&</sup>lt;sup>152</sup> Pār 3 @ V 3:73,20-16.

<sup>&</sup>lt;sup>153</sup> S 54.9/5:320-322 @ SD 107.8 = Pār 3.1.3 (V 3:70 f).

<sup>&</sup>lt;sup>154</sup> Pār 3 @ V 3:73,20-16. Cf Miln 195.

<sup>&</sup>lt;sup>155</sup> They are **the Vesalī monks** (Pār 3 @ V 3:68-71; S 54.9); **Channa S** (M 144,12/3:263; S 35.87); **Godhika S** (S 4.23-/1:120 f; DhA 1:431 f); **Vakkali S** (S 22.87/3:119-122); **(Ānāpana,sati) Vesālī S** (S 54.9/5:321 ≈ Pār 3); **Sappa,dāsa-t,-thera Vatthu** (DhA 2:256 ff); **Yamaka,paṭihāriya Vatthu** (DhA 3:208; J 483). For details, see SD 11.12 (1).

**Godhika Sutta** (S 4.23), SD 61.16 and **the Vakkali Sutta** (S 22.87), SD 8.8. These are interesting records of the early Buddhist attitude toward awakening and death.

The Samyutta story of Vakkali's suicide (S 22.87) is identical to that of the monk Godhika (S 4.23), both occurring at Kāla,silā (Black Rock) on the side of Isigili (today, Sona Hill). Godhika's reason for suicide is his falling away (6-7 times) from temporary release of mind due to his sickness. <sup>157</sup> So, when he attains release of mind, he commits suicide to gain liberation. <sup>158</sup> Vakkali, however, apparently kills himself out of his chronic depression, but just before attaining arhathood.

Interestingly, the Commentarial accounts do not say that Vakkali commits suicide (an account that could have spilled over from the Godhika story). The Commentaries only say he is merely contemplating suicide, when he leaps into the air out of faith and joy on seeing the Buddha (that is, his hologram) before him. It is said that he then gently floats downwards and settles on the ground, fully rejoicing in the Buddha. Understandably, he is declared to be the foremost of those monks who have faith (A 1:24). 159

- **6.2.2.3** One of the most interesting questions on suicide in Buddhism is this: **Did the Buddha himself commit suicide?** Let us first state the related issues here.
- (1) Firstly, in **the Mahā Parinibbāna Sutta** (D 16, ch 3), the Buddha is recorded as having "<u>mindfully and fully aware, relinquished his life-formation</u> ... . Delighting within and mentally concentrated, he broke the armour-like self-existence." <sup>160</sup> Could this be construed as an announcement for suicide?" [6.2.2.4]
- (2) Secondly, there is the problem of the Buddha's last meal,<sup>161</sup> offered by Cunda the smith. The Sutta seems to have us understand that the offering is not suitable for human consumption; for, no one else "could thoroughly digest it except the Tathāgata." <sup>162</sup> Yet, the Buddha accepted this offering for himself and ate it, bringing upon himself a severe attack of dysentery. [6.2.2.5]
- (3) Thirdly, the Buddha actually passes away at 80, just as he is recorded to have predicted exactly 3 months earlier. Could such an announcement be taken as referring to a "ritual suicide" like the *salle-kha* through starvation of the Jains? This is assuming that the duration between the Buddha's last meal and his passing away is only a day or so, and not longer, which suggests that he has fasted. [6.2.2.6]

We have elsewhere examined these questions in connection with whether the Buddha committed suicide, that is, in connection with a study of **the Mahā Parinibbāna Sutta** (D 16). <sup>165</sup> That relevant section should be read first before reading on here, as the points here build those already there. The answers here are geared towards our understanding of death in the light of early Buddhism.

<sup>&</sup>lt;sup>156</sup> Chann'ovāda S (M 144,12 = S 35.87), SD 11.12; Godhika S (S 4.23), SD 80.1; Vakkali S (S 22.87), SD 8.8.

<sup>&</sup>lt;sup>157</sup> "Temporary release of mind," *sāmayika ceto,vimutti*, which SA explains as the mundane meditative attainments (*lokiya samāpatti*), ie the absorptions and formless attainments, so called because at the moment of dhyana the mind is liberated from the opposing states and is resolved upon its object. He fell away from this liberation on account of illness, being disposed to chronic illness due to (the humours of) wind, bile and phlegm (SA 1:183). On humour-related illness, see **Sīvaka S** (S 36.21 @ SD 5.6), **Samaṇa-m-acala S 1** (A 4.87.5/2:87), and **(Samaṇa) Sukhumāla S** (A 5.104/3:131).

<sup>&</sup>lt;sup>158</sup> S 4.23/1:120-122 @ SD 80.1; SA 1:183; DhA 1:431-433.

<sup>&</sup>lt;sup>159</sup> See Vakkali Thera Vatthu (DhA 25.11), SD 8.8(1). On the alleged suicide of arhats, see SD 11.12 (4).

<sup>&</sup>lt;sup>160</sup> D 16,3,9/2:106 n (SD 9).

<sup>&</sup>lt;sup>161</sup> D 16,4.42/2:135 + SD 9 (9.6 + 13).

<sup>&</sup>lt;sup>162</sup> D 16,4.18-19/2:127 + SD 9 (9.6.2).

<sup>&</sup>lt;sup>163</sup> D 16,3.9/2:1:106, also §3.37/2:114 (SD 9).

<sup>&</sup>lt;sup>164</sup> On the <u>ritual suicide</u> (*sallekhana*) of the Jains, see **Upāli S** (M 56), SD 27.1 (2.1.2.1) & SD 40a.7 (2.1.2) n.

<sup>&</sup>lt;sup>165</sup> See SD 9 (9.6).

# **6.2.2.4** Is the Buddha, in relinquishing his life-formation, in effect, announcing his suicide? [6.2.2.3(1)]. The Buddha is no ordinary being, but the only one in a class of his own, a unique being in the whole universe, a fully self-awakened being, *sui generis*. His knowledge and vision surpasses all other sentiont beings, human or divine. If omnisciones is possible, or to the extent that it is magningful.

other sentient beings, human or divine. If omniscience is possible, or to the extent that it is meaningful, the Buddha knows all that which can be known.<sup>167</sup> One such knowledge is clearly that knowing when he will die, when that is helpful for others.

The Buddha's life—his life-faculty and consciousness—is radically different from ours. In a vital sense, once the Buddha awakens, his old self dies—just as when we ourself awaken, our old self dies, too. When the world speaks of death, it refers to the dying and rebirth of this old self that is shackled to samsara, under the power of Māra, the death lord [2.2].

In short, the Buddha does not die; he attains final nirvana (parinibbāna), never to be reborn again. What he is relinquishing is "a little more than a normal life-span" (kappâvasesa)—perhaps another 50 years or so beyond the normal 100 years prevalent amongst humans of his time. Since all the 4 assemblies —of monks, nuns, laymen and laywomen, who are streamwinners, once-returners, non-returners and arhats—are flourishing in the world for its benefit, the Buddha's work is done.

Notice here that there is no mention of countless millions of Buddhas and Bodhisattva, cosmic and transcendental in nature. Such an imaginative outburst betrays a prolonged denial of the Buddha who has passed finally away into nirvana. But the Buddha Dharma is always with us as long as we see impermanence, suffering and non-self as the Buddha has taught us. We need to stop denying his passing and stop the mourning rites and vows to countless Sand Buddhas and Paradise Bodhisattvas. The one buddha is all we need.

**6.2.2.5** Did the Buddha die from taking his last meal, well knowing that it is food unsuitable for anyone else? [6.2.2.3(2)]. If the dish in question is contaminated so that it brought about the Buddha's death, it might seem to be a suicide-like gesture for the Buddha to consume—somewhat like Socrates in calmly drinking the hemlock and dying in a dignified way. <sup>168</sup> But the Buddha does not die right after taking that dish. In fact, all he is saying is that only he, of all beings, is able to digest such food. Enigmatic as this sounds, that is all we can make of the narrative.

The Buddha goes on to Kusinārā to lie down majestically on his deathbed between two sal trees, the very trees he is born under. He goes on giving his final instructions, even admitting a last renunciant into the community himself. He dies neither in pain nor in vain, but at the end of 45 years of public ministry, winning over countless monastics and laity of both sexes, all of whom have attained some level of awakening, if not the highest liberation, like he himself.

**6.2.2.6** Is the Buddha predicting his own death a suggestion of a suicide? [6.2.3.(3)]. It is hard to see any logic in making such a claim. All we can say here is that in making such a prediction, the Buddha *knows* when he will pass away. Knowing a fact is neither to cause nor to suggest it. Of course, we could argue why he does not prevent his death, or live on for a little longer, since he has the power to do so.<sup>169</sup>

**The Māha Parinibbāna Sutta** (D 16) records how Māra appears to the Buddha reminding him of his promise that he would pass away when all the fourfold assembly of disciples—that is, monastics and

<sup>&</sup>lt;sup>166</sup> Sadly, by inflating the number of Buddhas into the countless millions, and transcendentalizing, even deifying, them, the Mahāyāna tend to do injustice to <u>the uniqueness of the historical Buddha</u>. All we need is just *one* man to open the door to the death-free—that is, the Buddha. We do not need to clone door-openers or worship them. We only need to heed his call to walk through that door to liberation ourselves. On "<u>sui generis</u>," see SD 36.2 (2.1.2).

<sup>&</sup>lt;sup>167</sup> On the Buddha's omniscience, see SD 36.2 (5.1.1.2); **Kaṇṇaka-t,thala S** (M 90), SD 10.8 (2); **Sandaka S** (M 76,21+52), SD 35.7. On the Buddha's rejection of omniscience, see **Te,vijja Vaccha,gotta S** (M 71), SD 53.3.

<sup>&</sup>lt;sup>168</sup> See SD 9 (13.1.1).

<sup>&</sup>lt;sup>169</sup> For details on the Buddha's life-span, see SD 9 (9).

laity of all the 4 stages of sainthood—has been established. After working for 45 years, the 80-year-old Buddha has done his job. Essentially, Māra is trying to claim a Pyrrhic victory with the aging Buddha, reminding him that his work is done, his time is up.

In a sense, the Buddha thinks that, for once, Māra is right. After all, the Buddha teaches a universal truth of impermanence. Hence, he, too, is subject to that truth. If the Buddha were an eternal being of great all-knowing, then, ironically, there would be no Buddha-Dharma. His efforts would have been no different, no more effective, than the teachings of the God-religions.

The Buddha, in an important sense, is not predicting his *death*, but his "<u>final passing away</u>" (*parinirvana*). We can never do this, unless we are arhats. In predicting his own parinirvana, the Buddha is showing that he has mastered his life. Even when that life has reached its end, as all life must, he departs in triumph—not only leaving behind a great spiritual legacy—but by going through all the 9 abodes of being, and finally passing away on emerging from the 4<sup>th</sup> dhyana [3.7].

**6.2.2.7 Why is suicide morally wrong?** Here, we give a summary of some of the reasons, according to **Damien Keown**, as being some of the reasons why Buddhism might be opposed to suicide, namely:

- (1) It is an act of violence and thus contrary to the principle of ahimsa [non-violence].
- (2) It is against the first precept [against harming life].
- (3) It is contrary to the third pārājika [a monastic is prohibited from taking life]. [6.2.2.1]
- (4) It is stated that "Arahants do not cut short their lives." **Sāriputta** says that an arhat neither wishes for death nor wishes not to die: it will come when it comes (Tha 1002 f). 171
- (5) Suicide destroys something of great value in the case of a virtuous human life and prevents such a person acting in the service of others. The virtuous should not kill themselves to obtain the results of their good karma as this deprives the world of their good influence.
- (6) Suicide brings life to a premature end, instead of living out our natural life-span.
- (7) Self-annihilation is a form of craving for annihilation (*vibhava*, *taṇhā*).
- (8) Self-destruction is associated with ascetic practices which are rejected since Buddhism has better methods of personal development leading to self-awakening
- (9) There is empirical evidence provided by the Chinese pilgrim Yijing that Indian Buddhists abstain from suicide and, in general, from self-torture.
- (10) The Chann'ovāda Sutta (M 144,6) records <u>Sāriputta's immediate reaction</u> in dissuading Channa, in the strongest terms, from taking his life. Sāriputta's reaction suggests that suicide was not regarded among the Buddhist senior disciples as an option even meriting discussion. (Keown 1996:29 n55)<sup>172</sup>

#### **6.3** THE GIVING OF THE BODY

#### 6.3.1 No body-offering in early Buddhism

**6.3.1.1** Giving is the 1<sup>st</sup> good deed or act of merit in Buddhism. It is the first of the 3 bases of meritorious action (*puñña,kiriya,vatthu*), which is followed by moral virtue (*sīla*) and meditation (*bhāvanā*).<sup>173</sup> It is said to bring great blessings of long life, beauty, happiness and strength.<sup>174</sup> It is also the first of the 7 perfections (*satta pāramī*), expounded with stories in the Cariyā,piṭaka, and the 10 perfections (*dasa pār*-

<sup>&</sup>lt;sup>170</sup> See SD 9 (9.6.1).

<sup>&</sup>lt;sup>171</sup> See SD 48.14 (4.4.1).

<sup>&</sup>lt;sup>172</sup> For the full listing, see SD 11.12 (7.1). On a modern perspective of suicide, see SD 11.12 (6).

<sup>&</sup>lt;sup>173</sup> See **Puṇṇa,kiriya,vatthu S 1** (A 8.36/4:241-243), SD 22.17; also D 33,1.10(38); 1t 60.

<sup>&</sup>lt;sup>174</sup> A 4.57; cf Dh 109.

 $am\bar{\imath}$ ) in its Commentary. <sup>175</sup> Buddhaghosa states that cultivating the 4 divine abodes ( $brahma, vih\bar{a}ra$ ) is the basis for attaining these 10 perfections. <sup>176</sup>

The Jatāka stories, too, abound in stories on the benefits of giving. The most remarkable of these stories on giving is **the Vessantara Jātaka** (J 523), which celebrates the Bodhisattva's perfection of giving. This last Jātaka, the longest, recounts how Vessantara (the Buddha in his penultimate birth) gives away all his worldly belongings, that is, his kingdom (represented by the white elephant), his wealth, his horses, the royal chariot, even his children, and finally his wife.<sup>177</sup> In many other Jātakas, too, even when he is reborn as an animal, we would make great sacrifices to teach or help his peers, even to the extent of endangering his own life.<sup>178</sup>

However, in almost all of these stories, whether in the Canon or the Commentaries, we never see the Bodhisattva, whether as a human, a deva, a non-human or an animal, sacrificing his own life for others. His deeds are always noble, benefitting others in some way, even at the risk of his own life—but never as the deliberate sacrificing of his own life for others. However, there are occasions when he does die—but not of his own choosing, although well knowing the risks involved—for the sake of others, as we have noted in **the Mahā Kapi Jātaka** (J 407). 180

**6.3.1.2** Buddhaghosa, in his **Visuddhi,magga**, tells us an inspiring story on the value of life in connection with the practice of the 4 divine abodes. <sup>181</sup> This is the famous **parable of the 4 persons and the bandit.** The parable is here summarized.

Once, a monk was sitting with someone dear, a neutral person, and a hostile person. A bandit comes along and demands only one of them for a human sacrifice. If the monk says, "Take me," he lacks self-love; if he says, "Take this or that person," he lacks other-love. But, he says, "Let no one die," and he convinces the bandit not to kill anyone. He has the greatest love of all.

In fact, it is harder to <u>live</u> for those we truly love and things we truly cherish. The Buddha does not die for us: he *lives* for us. Even before becoming buddha, he has lived numerous lives, living again and again, experiencing every face and facet of suffering.

<sup>&</sup>lt;sup>175</sup> CA 276-332; tr Bodhi, *The Discourse on the All-embracing Net of Views*, Kandy, 1978:234-330.

<sup>&</sup>lt;sup>176</sup> Vism 9.24. For a monograph, see E B Findly, *Dāna: Giving and getting in Pali Buddhism,* Delhi, 2003; further details and refs, see *Buddhist Dictionary*: pāramī.

<sup>&</sup>lt;sup>177</sup> J 547/6:479-593. Traditionally, this is his last human birth before he is reborn as Seta,ketu in Tusita heaven, and then, his final rebirth as Siddhattha Gotama, our Buddha. Note also that such stories are culture-based: in our own times, we would note that our children and spouse are not "ours" to give. Clearly, as advised in **Neyy'attha Nīt'attha S** (A 2.3.5+6 @ SD 2.6b), we should not take such giving literally, but need to tease out the lesson of such a story. For the Bodhisattva's "5 great sacrifices" (*mahā pañca,pariccāga*) (BA 1; ItA 1:8; J 6:552 f), see SD 36.2 (4.2.2). For us helpful summary of J 547, see Princeton Dictionary of Buddhism: Vessantara; also DPPN sv.

<sup>&</sup>lt;sup>178</sup> Mahā Kapi J (J 407), eg, relates how the Bodhisattva uses his own body as a bridge across the river, his forearms holding onto the branches of trees on the far bank, and a bridge of bamboo with his hind legs, so that his fellow monkeys can cross the river over his own body to safety. A monk who hates him takes this opportunity to break his back and kill him. (J 407/3:369-375). This is perhaps the closest that the Bodhisattva is depicted as almost having to sacrifice his own life for others.

<sup>&</sup>lt;sup>179</sup> Except perhaps in the beautiful short **Sasa J** (J 316), where, as a hare, he vows to offer his own life should anyone ask for it (as food). Happily, he is only tested by Sakra in disguise, and is rewarded for his integrity (J 316/-3:51-56). The hare does not actually die. Such a story neither promotes nor condones suicide, but are instructive stories to inspire self-sacrifice to our best ability, and the notion that good is always rewarded with good, if not better. J G Jones, *Tales and Teachings of the Buddha* (a study of the Jātakas), notes "an almost Mahāyānist passion for self-sacrifice in this story" (London, 1979:71).

<sup>&</sup>lt;sup>180</sup> See prec n.

<sup>&</sup>lt;sup>181</sup> See *Brahma, vihāra*, SD 38.5.

With awakening, he is able to recall as many of these lives and experiences as he wishes. From this experiential wisdom, he teaches us, speaking in parables and plain language, in stories and teachings, for our benefit. No greater love has a man than this, that he lives for us, teaching us that we have the capacity and power to free ourselves from suffering.<sup>182</sup>

#### 6.3.2 Stories of body-offering

- **6.3.3.1** Stories of "body-offering" (*deha,dāna*), the actual self-sacrifice, including cutting off one's flesh to be offered to others, and ritual suicide, began to be found in later Buddhism, especially in such Sanskrit works as **the Jātaka,mālā**<sup>183</sup> by the poet Ārya Šūra (2<sup>nd</sup>-4<sup>th</sup> century CE). The very first story in this elegant literary work is the Vyāghrī Jātaka ("the female tigress birth story). In the version found in **the Suvarṇa,prabhāsottama Sūtra** (c 4<sup>th</sup> century CE), the Bodhisattva throws himself from a cliff before the tigress and her cubs. Another tale relates how the Bodhisattva, as king Candraprabha, gives his head to an evil brahmin.
- **6.3.3.2** Clearly, such accounts of the Bodhisattva giving parts of his body even his whole body (and so his life, too), are not to be taken as historical accounts, but edifying stories for us to practise generosity and goodness to the best of our ability. In many cases, it is Sakra, the king of the gods, who comes to the Bodhisattva to ask for such offerings. When the gift has been made, the Bodhisattva's person is restored and healed, so that he is none the worse for wear.
- **6.3.3.3** Invoking **the Neyy'attha Nīt'attha Sutta** (A 2.3.5+6) [2.0.4], we should carefully discern whether a teaching is using the <u>implicit</u> "story" language, whose meaning and moral has to be teased out, and the <u>explicit</u> "Dharma" language that uses words and terms to point directly to the true reality. Stories illustrating "body-offering" (*deha,dāna*) or where the interlocutor gives his life intentionally (which is against the first precept) should be understood *implicitly*. We need to ask ourself: What is this story trying to teach? What does it mean?<sup>184</sup>

#### **7** The future of death

#### 7.1 THE FUTURE OF DEATH

Death will always be with us; where there's life, death will exorably follow, just as light must cast a shadow. A shadow is formed when something obstructs the light from shining on. What prevents life from its goals, or from continuing, is <u>impermanence</u>. Just as an object and its shadow in the presence of light are not really separate, even so, life and death are two sides of the same coin of impermanence.

Death will always be with us, but how we view it will change as we understand life better. We start to decay as soon as we are born: this is the meaning of life. When we understand and accept this nat-

<sup>&</sup>lt;sup>182</sup> Vism 9.40-41/307 & 9.108/321. This reflection in the last para is inspired by **Spiritual friendship: Stories of kindness**, SD 8.1. See also Reflection, "Unconditional love," R66, in Piya Tan, *Simple Joys*, 2009:22-25 (4.1).

<sup>183</sup> The Chin version, *Púsà běn shēng mán lùn* 菩薩本生鬘論 (T160.3.341c18-19), a forgery, is one of the strangest tales in the annals of the translation of Buddhist texts. The Chinese "translators" had so much difficulty with the text that they simply put together a few random words from Šūra's that they could construe, lifted wholesale from other texts stories that happen to have the same words. Except for the title of some of the stories, there is almost nothing in the Chinese translation that corresponds to Šūra's Sanskrit. See Richard Bowring, "Brief note: Buddhist translations in the Northern Sung," *Asia Major*, 3<sup>rd</sup> ser, 5,2 1992:79-93; also Princeton Dictionary of Buddhism: Jātakamālā.

<sup>&</sup>lt;sup>184</sup> A 2.3.5+6/1:60 @ SD 2.6b.

<sup>&</sup>lt;sup>185</sup> See SD 48.1 (5.3.1).

ural process of life, we also see that decay can bring wholesome change, that is, to see the pattern of causes and effects and network of conditionality working in our lives, and in all things. The purpose of life, then is to grow and awaken to true reality.

Then, we begin to understand death as being only a temporary end, a turning point, a temporary phenomenon called "life." The learning builds up through the various lives we live. Understanding is wisdom, accepting it is compassion. We might feel that we do not deserve to die, or our loved ones deserve to live on. Life's natural value is that we do and cannot always have it the way we want it. When we see the wisdom in adjusting to this flow of things, we are closer to awakening.

#### 7.2 RE-DEFINING DEATH

**7.2.1** As medicine, science, technology and human knowledge progress, we will continue to better understand death, and so to re-define it. It is simply unlikely this we will be stuck in our present definitions of death for long. The electroencephalogram (EEG) has made it possible to monitor electrical activity in comatose patients and its application opened the way for the concept of brain death.

Advances in life support systems have allowed us to maintain the vital functions of those with severely impaired or absent mental functioning. This raises questions about the ethics and need of such interventions. Organ transplantation became a vital and lucrative enterprise that is often attended by tension and frustration in the effort to match demand with supply.

**7.2.2** In the last half-century, with modern science discovering and exploiting the ancient wisdom of Buddhist teachings and practices relating to the body, mind and meditation many scientists have radically changed the way they conceive consciousness, mental health, and even spirituality itself. All this new learning and openness will only incite continuing efforts to redefine death.

Better medical techniques and this new understanding are likely to provide significant new ways of monitoring severely impaired patients. This, in turn, might open us to clearer life-centred concepts and methods that go beyond current ideas of brain death. A simpler and cheaper method of providing life support can also help us re-define death, one that is less pressured by economic priorities.

**7.2.3** Organ transplants might be, indeed, must be, replaced by materials developed through new methods, such as gene technology. This reduces the pressure to resort to a definition of death for the sake of an earlier access to organs.

Changes in religious belief and growing openness must continue to influence the definition of death. Since life is in us all, and death affects us all, their definitions cannot be monopolized by medical specialists. All sensible such considerations must not be dictated by how we measure them, but be secondary to our personal experience and growing understanding of consciousness and death. The cybernetic fantasies about virtual life and death today may contribute to remarkable new visions of our very being, opening us to redefinitions of life and death that are yet to come. <sup>186</sup>

<sup>186</sup> See Macmillan Encyclopedia of Death, 2003:228.

# **Bibliography**

Further see Bibliography of SD 48.1

Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death

1968 "A definition of irreversible coma." *Journal of the American Medical Association* 205, 1968:337-340. Aggacitta Bhikkhu

[PMD] "Preparing the mind for death. The Theravada approach." Accessed 13 March 2008:

http://www.what-buddha-taught.net/Books7/Aggacitta Bhikkhu Preparing-the-Mind-for-Death.pdf.

Ankeny, Rachel A; Ross Clifford, Christopher F C Jordens, Ian H Kerridge & Rod Benson

"Religious perspectives on withdrawal of treatment from patients with multiple organ failure," Medical Journal of Australia 183,11/12 2005:616-621. Online: http://www.mja.com.au/public/issues/183 11 051205/ank10614 fm.html.

An Yang-Gyu

2003 (tr) *The Buddha's Last Days: Buddhaghosa's Commentary on the Mahāparinibbāna Sutta.* [Tr of DA 2:516-615] Oxford: Pali Text Soc, 2003.

Bishop, Jeffrey P

2011 *The Anticipatory Death: Medicine, power, and the care of the dying.* Notre Dame, IN: Univ of Notre Dame, 2011.

2015 "Why 'brain death' is contested ground." Harvard Divinity Bulletin, Winter/Spring 2015:49-56.

Bishop, Laura Jane; & Mary Carrington Coutts

"Religious perspectives on Bioethics, part 1." Scope Notes 25. National Reference Center for Bioethics Literature, The Joseph and Rose Kennedy Institute of Ethics. Washington, DC: Georgetown University, 1994. http://bioethics.georgetown.edu/publications/scopenotes/sn25.pdf.

Blum, Mark L

2004 "Death," Encyclopedia of Buddhism, ed Robert E Buswell, Jr. Vol 1. NY: Macmillan Reference USA, 2004:203-210. With topical biblio.

Bond, George D

1977 "Theravada Buddhism's meditations on death and the symbolism of initiatory death." *History of Religions* 16,4 1977:237-258.

Brahmavamso, Ajahn

2007 Simply This Moment! A collection of talks on Buddhist practice. Perth: Bodhinyana Monastery, 2007. http://www.holybooks.com/wp-content/uploads/Simply-This-Moment.pdf.

Coma Science Group

"Coma, vegetative state and minimally conscious state," University of Liege. <a href="http://www.coma.ulg.ac.be/papers/coma">http://www.coma.ulg.ac.be/papers/coma</a> vegetative state.html.

Daniélou, Alain

1964 Hindu Polytheism. NY: Pantheon Books, 1964.

Dowson, John

1974 *A Classical Dictionary of Hindu Mythology and Religion, Geography, History, and Literature* [2<sup>nd</sup> ed 1888], 12<sup>th</sup> ed. Ludhiana: Lyall Book Depot, 1974.

Engelhardt, Jr, H Tristram

1988 "Reexamining the definition of death," in *Death: Beyond Whole-brain Criteria*, ed Richard Zaner. Dordrecht: Kluwer Academic Publishers, 1988.

Field, DR; EA Gates, RK Creasy, AR Jonsen & RK Laros, Jr

"Maternal brain death during pregnancy, medical and ethical issues," *Journal of the American Medical Association* 260 1988: 816-822.

Gervais, Karen Granstrand

1986 Redefining Death. New Haven, CT: Yale Univ Press, 1986.

Grof, Stanislav

1985 Beyond the Brain: Birth, death, and transcendence in psychotherapy. Albany, NY: State Univ of New York Press, 1985.

Hardacre, H

1994 "Response of Buddhism and Shinto to the issue of brain death and organ transplantation," *Cambridge Quarterly for Healthcare Ethics* 3, 1994:585-601.

Hillebrandt, Alfred

1990 *Vedic Mythology.* 2 vols. Delhi: Motilal Banarsidass, 1990.

Hongladarom, Soraj

"Organ transplantation and death criteria: Theravada Buddhist perspective and Thai cultural attitude." Presented at the International Symposium—Dialogue and Promotion of Bioethics in Asia, Kyoto, September 20-14, 2003. <a href="http://homepage.mac.com/soraj/web/Organ Transplantation-Buddh.pdf">http://homepage.mac.com/soraj/web/Organ Transplantation-Buddh.pdf</a>.

Hughes, James

2007 "Buddhist bioethics." In R E Ashcroft, A Dawson, H Draper, & J R McMillan (edd), *Principles of Health Care Ethics*, 2nd ed, Hoboken, NJ: John Wiley, 2007 ch 17. http://ieet.org/archive/buddhistbioethics.pdf

Kahane, Guy; & Julian Savulescu

"Brain damage and the moral significance of consciousness," *The Journal of Medicine and Philosophy* 32,1 2009:6-26. Online abstract: <a href="http://jmp.oxfordjournals.org/cgi/content/abstract/34/1/6">http://jmp.oxfordjournals.org/cgi/content/abstract/34/1/6</a>.

Kahane, Guy; & Julian Savulescu

"Brain damage and the moral significance of consciousness," *The Journal of Medicine and Philosophy* 32,1 2009:6-26. Abstract: <a href="http://jmp.oxfordjournals.org/cgi/content/abstract/34/1/6">http://jmp.oxfordjournals.org/cgi/content/abstract/34/1/6</a>.

KAO.de

KAO Online. <a href="http://initiative-kao.de/KAO-Brain-death">http://initiative-kao.de/KAO-Brain-death</a> is not death.htm.

Keown, Damien

1992 The Nature of Buddhist Ethics. London: Macmillan, 1992.

1995 Buddhism and Bioethics. NY: St Martin's Press, 1995. Reissued by Palgrave, 2001

1996 "Buddhism and suicide: The case of Channa." Journal of Buddhist Ethics 3 1996:8-31.

2001 See 1995.

2005 Buddhist Ethics: A very short introduction. Oxford: Oxford University Press, 2005.

2000 Contemporary Buddhist Ethics. Curzon Critical Studies in Buddhism 17. London: Curzon, 2000.

2008 Review of *Into the Jaws of Yama, Lord of Death: Buddhism, Bioethics, and Death* by Karma Lekshe Tsomo. *Journal of Buddhist-Christian Studies* 28, 2008:157-161.

2008a "Buddhism, Death and Organ Transplantation." *Journal of the International Association of Buddhist Universities* 1 2008:57-70. Rev & exp as 2010.

2010 "Buddhism, brain death, and organ transplant." *Journal of Buddhist Ethics* 17, 2010:1-35. Rev & exp version of 2008a.

Kosambi, D D

1956 An Introduction to the Study of Indian History. Bombay: Popular Book Depot, 1956.

Laureys, Steven

2005 "The neural correlate of (un)awareness: lessons from the vegetative state." *Trends in Cognitive Science* 9,12 Dec 2005:556-559.

http://www.coma.ulg.ac.be/papers/vs/2005 VS TICS.pdf.

2007 "Eyes open, brain shut." Scientific American 4, May 2007:32-37.

http://www.coma.ulg.ac.be/papers/vs/sci am 07.pdf.

Laureys, Steven; Adrian M Owen; Nicholas D Schiff

"Brain function in coma, vegetative state, and related disorders." Lancet Neurology 3.2004:537–546.

Also as "Brain function in brain death, coma, vegetative state, minimally conscious state and locked-in syndromes." Download from <a href="http://www.coma.ulg.ac.be/papers/vs/PVS\_MCS\_LIS\_LancetN04.pdf">http://www.coma.ulg.ac.be/papers/vs/PVS\_MCS\_LIS\_LancetN04.pdf</a>.

Lazar, Neil M; Sam Shemie, George C Webster & Bernard M Dickens

2001 CMAJ: Canadian Medical Association Journal 164,6. Bioethics for clinicians: 24. Brain death. Ed Peter A Singer, 20 March 2001:833-836. <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC80882/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC80882/</a>. See Shemie 2008.

Lecso, Phillip A

"The bodhisattva ideal and organ transplantation." *Journal of Religion and Health* 30,1 1991:35-41. http://www.springerlink.com/content/r170356213843q60. Lommel, Pim van; Ruud van Wees, Vincent Meyers, Ingrid Eifferich

"Near-death experiences in survivors of cardiac arrest: A prospective study in the Netherlands."

Lancet 358, 15 Dec 2001:2039-2045. Accessed 21 Nov 2006 from

http://www.zargon.co.uk/Lancet.pdf; see also http://www.iands.org/dutch\_study.html.

Lommel, Pim van

2004 "About the continuity of our consciousness." Advances in Experimental Medical Biology 550 2004:115-132. Orig in (edd) C Machado & DA Shewmon, Brain Death and Disorders of Consciousness. New York, Boston, Dordrecht, London, Moscow: Kluwer Academic/Plenum Publishers, 2004. Accessed 21 Nov 2006 from <a href="http://iands.org/research/vanLommel/vanLommel.php">http://iands.org/research/vanLommel/vanLommel.php</a>.

Macdonell, Arthur A

1897 Vedic Mythology [Strassburg, 1897]. Delhi: Motilal Banarsidass, 1973.

Merh. Kusum P

1996 Yama, the Glorious Lord of the Other World. New Delhi: DK Printworld, 1996.

Miller, Franklin G; & Robert D Truog

2012 Death, Dying, and Organ Transplantation: Reconstructing medical ethics at the end of life. Oxford: Oxford Univ Press, 2012.

Monti, Martin M; Audrey Vanhaudenhuyse, Martin R Coleman, Melanie Boly, John D Pickard, Luaba Tshibanda, Adrian M Owen, Steven Laureys

2010 "Willful modulation of brain activity in disorders of consciousness," *New England Journal of Medicine* 362, 18 Feb 2010:579-589. http://content.nejm.org/cgi/content/full/NEJMoa0905370.

Nature

2009 *Nature* 461, Oct 2009:570; editorial "Delimiting Death." Online: <a href="http://www.nature.com/nature/journal/v461/n7264/full/461570a.html">http://www.nature.com/nature/journal/v461/n7264/full/461570a.html</a>.

Nyanatiloka Mahathera

1955 Karma and Rebirth. Kandy: Buddhist Publication Soc, 1955.

Oderberg, David S

2008 "Bioethics Today," The Human Life Review 98, (Fall 2008) 98-109.

Pallis, Christopher

1985 ÁBC of Brain stem death." British Medical Journal 285, 13 Nov 1982:1409-1412.

Pernick, Martin S

"Back from the grave: Recurring controversies over defining and diagnosing death in history." In Raymond M Zaner (ed), *Death: Beyond Whole-Brain Criteria*. Boston, MA: Kluwer, 1988.

Potts, Michael; Paul A Byrne & Richard G Nilges

2000 (eds) Beyond Brain Death: The Case Against Brain Based Criteria for Human Death. Dordrecht: Kluwer, 2000.

Prayudh Payutto, Phra

"Aging and dying." [Talk to an international medical symposium on death and dying, 22 April 1997.] http://www.geocities.com/Athens/Academy/9280/aging.htm.

President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research → US Government

Promta, Somparn

2004 "A concept of person in Buddhism." [The ASEAN-EU LEMLIFE Project: A Collaborative International Training Programme in Law, Ethics and Management in the Life Sciences.] Bangkok: Center for Ethics of Science and Technology, Faculty of Arts, Chulalongkorn Univ, 2004. Download: www.stc.arts.chula.ac.th/A Concept of Person.pdf.

Reich, W T

1995 Encyclopaedia of Bioethics, rev ed W T Reich, NY: Simon & Schuster Macmillan, 1995.

Shemie, Sam D; C Doig, B Dickens et al

2006 "Severe brain injury in neurological determination of death: Canadian forum recommendation." Canadian Medical Association Journal 174 2006:S1-12.

Shemie, Sam D; Neil Lazar & Bernard M Dickens

2008 "Brain death," ch 13, *The Cambridge Textbook of Bioethics,* ed Peter A Singer, Cambridge Univ Press, 2008:85-91. Update on Lazar 2001.

#### Simpson, Bob

2004 "Impossible gifts: Bodies, Buddhism and bioethics in contemporary Sri Lanka," *Journal of the Royal Anthropological Institute* 10 2004.

#### Truog, Robert D

2008 "The Dead Donor Rule and organ transplantation," *New England Journal of Medicine* 359,7 2008. Tsomo, Karma Lekshe

2006 Into the Jaws of Yama, Lord of Death: Buddhism, bioethics, and death. Albany, NY: State Univ of New York Press, 2006.

#### **US Government**

1981 Defining Death: Medical, Legal and Ethical Issues in the Determination of Death. President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research. Washington, DC: US Govt Printing Office, 1981.

2008 Controversies in the Determination of Death: A white paper by the President's Council on Bioethics. Washington, DC: US Govt Printing Office, 2008.

#### Veatch, Robert M

2008 "Donating hearts after cardiac death—Reversing the irreversible," *New England Journal of Medicine* 359, 7 2008.

Verheijde, Joseph L; Mohamed Y Rady & Joan L McGregor

2008a "Growing concerns about brain death and organ donation," Indian Pediatrics 45, 17 Nov 2008.

Verheijde, Joseph L; Mohamed Y Rady & Joan L McGregor

2008b "Organ procurement after cardiocirculatory death: A critical analysis." *Journal of Intensive Care Medicine* 23 2008:303-312.

#### Wilkins, W J

1973 *Hindu Mythology, Vedic and Puranic.* 2<sup>nd</sup> ed. Calcutta: Rupa, 1973.

Youngner, Stuart J; Robert M Arnold, Renie Schapiro (eds)

1999 *The Definition of Death: Contemporary Controversies.* Baltimore, MD: Johns Hopkins Univ Press, 1999. Zaner, Richard M (ed)

1988 Death: Beyond whole-brain criteria. Symposium, 18-20 Oct 1984, Vanderbilt Univ, Nashville, TN. Dordrecht: D Reidel, 1988.

080214 150311 150327 151212r 160202r 170117 180529 190825 210525 220517