

## Duhkha II

### The Second Arrow and Sympathetic Afferents

This is the second of four linked webpages concerning Duhkha (Dukkha). The other three related articles are:

- D4: Duhkha, Impermanence, & Inter-relatedness
- D9: Reducing Duhkha: *Experiential Modes, Mindfulness and Intuitive Working Memory*
- D11: Sukha: Paths of Well-Being, PSNS Afferents, and Inner Warmth: *from Duhkha to Sukha*

Duhkha is an eastern concept that embraces modalities such as suffering, our perceptions of life as being in some ways unsatisfactory, and the realisation of our own and others' mortality, and the impermanence of all things.

Mental Trainings such as Meditation, Mindfulness and / or Autogenic Training are skills that we can develop that can, among other things, help us to reduce our own duhkha (suffering) and that of others. If our effort / diligence in such training does not have this effect, then it is an inappropriate type of effort.

Practices that lead to increased bitterness, anger, or negative feelings are unwholesome practices.

A trainee monk was once very diligent and practised meditation for very long hours each day; and he was very proud of this. One day his teacher asked him why he was practising so hard; the student replied: "So that I can become a Buddha". The master then sat down beside the student and started polishing a tile. "What are you doing?" asked the curious student; the master replied: "I am making the tile into a mirror". The student laughed: "Don't be absurd; how can you make a tile into a mirror?" The master replied: "How can you become a Buddha by sitting?" [adapted from Hanh 1998 pp 99-100].

Appropriate Mental Training is a means whereby we can reduce our own and others' duhkha / suffering by developing skilful means such as mindfulness. This paper focuses on mindful approaches that can do this, and is largely based on an article by John Teasdale and Michael Chaskalson that looks at the way the Buddhist concept of duhkha permeates the lives of human beings – and how we can develop skilful means to reduce duhkha within ourselves and others (Teasdale & Chaskalson 2011).

These paths are then further explored in D9.

This paper is dedicated to Michael Ross, my brother, for all his work over the years with this series of articles on the human condition, neuro-science, and well-being.  
With love and thanks.

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*Notations used in this paper:*

- Notation of diagrams / figures follows the section numbers. For example, in Section 5.1 the figure is notated as Figure 5.1. In section 1, there is no figure, and so no Figure 1.
- Some words whose meaning may not be apparent can be found in the Glossary, and are notated [thus](#), at least when used for the first time. A more extensive Glossary is found in the related paper D11.
- Thematically linked articles (on the web-site) are notated by their prefix – e.g.: A9, which refers to the papers listed on page 28 (in this case: Emotions, Well Being and Immune Function: Awe and Shame as modulators of Being – for good or ill).
- Primary Process Emotions are notated, following Panksepp, in capitals: e.g. FEAR; CARE [Panksepp 1998].
- The Sanskrit term [Duhkha](#) is mainly used in this text. The Pali word is dukkha, which is often used by Teasdale and Chaskalson [Teasdale & Chaskalson 2011A].

Thanks to my brother Michael Ross for his most helpful comments and proof reading.

## 1. Preamble

In the first of these four linked articles, D4, we looked at Duhkha in terms of Impermanence and Inter-relatedness. Here we will look at it from a somewhat different perspective.

Our lives can fluctuate between great joy and happiness on the one hand, and feelings of sorrow, loss, general distress and suffering on the other hand. In some ways, life can be seen as fundamentally unsatisfactory, in that there is pain, suffering, loss – and ultimately death. This essentially unsatisfactory nature of life is described as duhkha (in Sanskrit; or dukkha - Pali<sup>1</sup>). It is a difficult word to translate, and so for this reason we will retain the Sanskrit term.

Sakyamundi, after years of wandering and meditation, came to the realisation that this duhkha is a fact of life. Yet he also came to the realisation that the degree and extent of our suffering, our duhkha, is very much influenced, and can be exacerbated, by certain activities of the mind<sup>2\*</sup>. In this sense, he saw a way, a path, that can transcend this fundamental conundrum of duhkha. His teachings are embraced in what can best be described as The Four Ennobling Truths<sup>3</sup> (Teasdale & Chaskalson 2011). He did not claim any divine or super-natural insights: and he suggested that we try his teachings – and if they work, take them up. Whether or not they work for us depends to a large extent on the degree to which we are motivated to practise various disciplines including mindfulness and some form of meditation. Teasdale & Chaskalson comment on the four truths:

These truths were presented very much as guides to action, something to be explored, tested, and checked out in our own experience, rather than to be believed as articles of faith (Batchelor 1997). It is for this reason that many people prefer to call them the Four Ennobling Truths – truths which will ennoble our being if we act upon them.

Teasdale & Chaskalson 2011 pp 89-90

Focusing on our own experience, rather than accepting second hand some “claimed truth”, is fundamental to our well-being [cf Kabat-Zinn, 1990, p 36]. A major problem we can run into as human beings is to become lost in negative ruminations, and one of the ways out of such downward negative spirals is to develop at such times an experiential mode [see Dobbin and Ross<sup>4</sup> 2011; and web-pages B10 & B11] in which we acknowledge / accept the feeling we are experiencing, rather than pretending it is not there.

We can look at the four ennobling truths as ways of dealing with, and facing, the ups and downs of life. Some people have the idea that Sakyamuni said that all life is suffering. This is not correct: he also acknowledged the existence of “joy and happiness” (Hanh 1998 p 11; 19-23), and the importance of being in the present moment (see, for example, Hanh 1993: “Present Moment, Wonderful Moment”).

In this paper, we focus on aspects of duhkha to get a clearer picture of the origins and nature of suffering and distress, so that we can develop skilful means to alleviate these negative and potentially toxic mind states. It is because of the profound psychological insights within the teachings of Sakyamuni that these have been integrated in such therapies as Mindfulness Based Stress Reduction (Kabat Zinn 1990 / 2006), and Mindfulness Based Cognitive Therapy for Depression (Segal et al 2002). For example, as we become more aware of the present moment, we may begin to savour many magical moments during the day; there are skilful means that allow us to become more present for such moments (e.g. Batchelor 2011;

<sup>1</sup> Sanskrit and Pali are ancient languages from the Indian sub-continent and Sakyamuni’s teachings were recorded in these languages [Keown 2003].

<sup>2</sup> Other activities of the mind, he suggested, provide a path that can transcend duhkha.

<sup>3</sup> Usually known as the Four Noble Truths; they become ennobling to the extent that we embrace them and enable ourselves to transform our own Duhkha suffering and that of others.

<sup>4</sup> No relation.

Segal et al 2002 with their “Pleasant Events Calendar” – see pp 145-146 & 155-156). This also overlaps with the research from the Positive Psychology domain (Bryant & Veroff 2007).

With these various skilful means, we will be better able to experience the countless wonders of life and the world – as we become more able to switch off the “negative ruminating mind” and be more present in each moment.

In this paper we focus primarily on the first two of the four Ennobling Truths<sup>5</sup>, and in particular on the Buddhist concept of the second arrow. The second arrow is the pain / discomfort we inflict upon ourselves, unconsciously, because of the way our brains respond to a distressing / disturbing event. There are skilful means by which we can reduce dukkha.

This present paper was started back in 2011, before the publication of Bud Craig’s “How do you feel?” [Craig 2015], which throws new insight into our understanding of the [Autonomic Nervous System](#) (ANS) and how the feedback from our ANS through the [afferents](#)<sup>6</sup> has a direct effect on our affect and emotions. The later parts of this paper take account of these afferent feedbacks from our body, and how this relates to the concept of the second arrow and dukkha.

## **2. Three basic Domains of dukkha** (*domains as described by Teasdale & Chaskalson 2011*)

When things go wrong for us, we can easily imagine that we ourselves are the only person that has a problem – and this can make us feel worse. Sakyamuni simply stated that dukkha is a fact of life – for all of us.

The Buddha cut through this personalisation of dukkha when he asserted quite simply ‘There is dukkha’ – that is just how it is for all of us. We do not need to take it personally – it’s not me, it’s not my fault but the normal unawakened human condition.

Teasdale & Chaskalson 2011 p 91

Dukkha is a fact of life – this is the first of Sakyamuni’s four fundamental truths.

This overlaps with Paul Gilbert’s neuro-physiological perspective when he says that our mental states are to a large extent dependent upon ancient (in the evolutionary sense) neural circuits that produce distressing feelings within us (e.g. FEAR; RAGE: Separation anxiety – Panksepp 1998); and that it is not our fault that we have such feelings (Gilbert 2009). It also resonates with ancient Toltec Wisdom that we refrain from taking things personally [Ruiz 1997: The Four Agreements].

Dukkha can be divided into (at least) three domains:

- i. Relating to change and impermanence. Everything is in a state of change and flux; nothing is permanent. This includes our children, rocks, stars, flowers and butterflies.
- ii. There is no certainty about anything – other than the eventual death of each living creature / plant. Because conditions are always changing, we are changing. Change is inherent in our cosmos, and inter-is with uncertainty and impermanence.

<sup>5</sup> The next paper in this series on dukkha (D9) focuses more on the third and fourth. [See Appendix for a summary of these four Truths].

<sup>6</sup> Nerves fibres from our body / organs to the brain.

- iii. As human beings we experience, sooner or later, physical pain and emotional pain; and hence we inevitably experience suffering. Such suffering can be equated to an arrow striking our body: such an arrow can of course be painful in both physical and mental ways – yet it is the second arrow (see below) that tends to be responsible for deeper Dukkha; and this second arrow is self-inflicted by ourselves unless we develop skilful means to prevent it.

When we experience great personal suffering, it is very easy to get into a negative downward spiral in which the upset (the first arrow) is embellished, distorted, and / or exaggerated because this is the way our minds tend to work. We are very good at making up stories. We may also begin to feel that we are the only person that has such terrible suffering.

If we step back a little, we become aware that in reality we are not alone with our suffering; rather, it is a fundamental part of the human condition; we all suffer – and all our ancestors also suffered.

We will now look at these three domains in more detail.

### 2.1 Domain i.

#### Change and impermanence

Heraclitus<sup>7</sup> is said to have commented; “You can never cross the same river twice” – meaning that if you cross it again five minutes or fifty years later, it will be a different river because there will inevitably be different water in it. All things in the cosmos are impermanent and subject to change – including those things that look permanent like a mountain, the moon and the stars.

As human beings we tend to assume that some things are permanent – and will not change. Yet all but our most recent ancestors have died – and we ourselves will one day die. None of us is exempt from this fundamental fact: there is no permanence. One of the causes of our suffering, of dukkha, is that consciously and unconsciously we often assume things are permanent. And when we find that this is not the case – that all organic matter eventually decays – we can easily become both despondent and upset: the upset in reality is because we have false assumptions about the nature of the world.

Change, in and of itself, is not necessarily a problem. It only becomes a problem, a basis for suffering, when we do not want it to happen.....

Teasdale & Chaskalson 2011 p 92

Each day when we wake up it is helpful not to assume anything: and accept whatever comes. If we experience a great upset or loss, that obviously is the result of change and the impermanent nature of all things. We may, as a result of the loss, feel physiologically mis-tuned – this is again natural, for as human beings loss sets in motion separation anxiety circuits that have their origins in our PANIC neuro-circuits [Panksepp 1998 and webpage B3]<sup>8</sup>.

One way of dealing with negative and distressing feelings is to accept them and not to pretend they are not there or that we do not feel them. As Rumi says in the poem “The Guest House”, we need to welcome all our feelings, whatever they are (Rumi 1995 translation p 109). Accepting the feeling, whatever it is, will help prevent a downward spiral (see Figur2.3A).

<sup>7</sup> Heraclitus was a Greek philosopher from Ephesus [c 540 – c 480 BPE]

<sup>8</sup> See also B19: Reflections on a Secure Base – *Bowlby, Ainsworth, Attachment and Well-Being*; and B20: Separation Distress and Well-Being – *Neuro-physiological reflections on developing a Secure Base*.

## 2.2 Domain ii.

### Uncertainty and “conditionality” – the fact that conditions are always changing

This overlaps to some extent with change and impermanence. Life and existence are extraordinarily complex. Each moment of our lives there are countless physiological / chemical reactions going on in our bodies that we are unaware of – and of course the same applies to the external environment and the earth’s eco-system. We attempt to simplify to help us not be overwhelmed by uncertainty – this at times can be wise; yet it is also important to appreciate the unpredictable nature of existence.

One day we may have an Autogenic or Meditation session that we feel went really well. The next day we may prepare for such a session in just the same way – yet our mind may keep wandering and we become upset that “today’s session is not as good as yesterday’s”<sup>9</sup>. This is of course just what our minds tend to do: comparing, craving, and scheming for something new or better; for this session, this experience, to be as good as or better than the last.

Just as with Heraclitus’s river, the conditions are actually always changing and different in some way: so it can be very helpful to begin to accept each moment as it is<sup>10</sup> [and see note on acceptance below], not as we would like it to be. Teasdale & Chaskalson comment on the mismatch between how we perceive things and the true nature of reality:

This fundamental mismatch between the way our minds want to see things and the true nature of reality is an aspect of what is called ‘[ignorance](#)’ in Buddhism, and it is a very deep rooted and all pervasive source of dukkha. It is what we had in mind when we said that dukkha is inevitable, given the way our minds are currently structured.

One of the most damaging aspects of ignorance is our tendency to identify with the varying and passing aspects of our experience, our moods, our feelings, our thoughts, the kind of meditation session we are having, as things that belong to or are parts of some underlying independently existing enduring self – me – these are *my* thoughts, *my* feelings, etc., the state of *my* meditation reflects who *I* am.

Teasdale & Chaskalson 2011A p 93

Concept of  
Ignorance in  
Buddhist  
Psychology

One of the fundamental misperceptions that we have is that we have a permanent separate self<sup>11</sup> – this misperception is one of the “[toxic trio](#)” in Buddhist psychology (see webpage D4 and the discussion on the toxic trio therein).

### A Note on acceptance:

Acceptance can be a slippery concept. We are not saying that we have to accept things as they are if they clearly need changing. We can acknowledge that matters are as they are, yet not accept that this is how it has to be in the future. The central aspect of this essay, and the relevance of dukkha, is that we do not have to accept things as they are: we can change by developing skilful means.

<sup>9</sup> Our minds have this tendency to judge – this session as against that session; this person compared to that person. Judging in this sense can be unwholesome. If we are grounded in the present moment, we are less likely to judge – see webpage B6.

<sup>10</sup> The moment is as it is; if it is a feeling, then we accept that that is the feeling, rather than pretending it is not there.

<sup>11</sup> Our problem is that we do not see the essential nature of nature, the world, and the cosmos: “This essential nature is that not a thing has any fixed existence separate in itself, independent from the whole world around it. The work of wisdom is to see through the illusory self-other dichotomy.....” [Leighton 2012 p 109].

Kabat-Zinn is very helpful here:

“Acceptance does not mean that you have to like everything or that you have to take a passive attitude toward everything and abandon your principles and values. It does not mean that you are satisfied with things as they are or that you are resigned to tolerating things as they ‘have to be.’ It does not mean that you should stop trying to break free of your own self-destructive habits or to give up your desire to change and grow, or that you should tolerate injustice, for instance, or avoid getting involved in changing the world around you.....

- Acceptance as we are speaking of it simply means that you have come around to a willingness to see things as they are. This attitude sets the stage for acting appropriately in your life, no matter what is happening.”

Kabat-Zinn, 1990, pp 38 – 39  
Bullet point added

This note on acceptance was added after my brother Michael helpfully challenged me on this section. He says: “It seems to me there are times to accept things as they are, and times to let the seeking / inquisitive part of us lead us. For example, when my long form (in the context of Tai Chi) does not feel as powerful as yesterday’s, I can explore just how I am placing my foot or how far my mind is wandering. Simply accepting everything that comes along as inevitable would condemn us to the status quo ad infinitum” [Michael Ross – email on 04-01-2017.]

As a result of his comments, I have also added to the glossary [acceptance](#); this is extracted from web-page D1: *Reflections on foundations of Mindfulness*.

### 2.3 Domain iii.

#### Double Dukkha - the metaphor of the second arrow

We have established that there is dukkha. Dukkha reflects the way in which our brains / minds process distressing events / traumas. We can distinguish between a primary processing of dukkha and a secondary processing.

Primary processing: this reflects the original trauma, the original upset – for example:

- The pain we experience when physically hurt.
- The pain we experience when we are emotionally hurt.
- Loss and separation.
- Enduring difficult circumstances.

This suffering is inevitable, and reflects the existential situations that we find ourselves in from time to time. This can be called the *first* arrow of pain. Note that this is not normally what really causes profound suffering and distress.

*Secondary processing:* The real problem is what our minds then do with this hurt, this upset. We tend to ruminate negatively about the matter, and in Buddhist psychology it is this that is regarded as the second arrow and that causes real distress and suffering – i.e. dukkha; yet this second arrow is of our own making.

Primary processing is to do with how our brains respond to certain events (e.g. a nail entering the sole of our foot); whereas secondary processing really concerns what our minds do with the primary event. These mental machinations are well illustrated in an ancient text:

"Monks, an uninstructed run-of-the-mill person feels feelings of pleasure, feelings of pain, feelings of neither-pleasure-nor-pain. A well-instructed disciple of the noble ones also feels feelings of pleasure, feelings of pain, feelings of neither-pleasure-nor-pain. So what difference, what distinction, what distinguishing factor is there between the well-instructed disciple of the noble ones and the uninstructed run-of-the-mill person? .....

"When touched with a feeling of pain, the uninstructed run-of-the-mill person sorrows, grieves, & laments, beats his breast, becomes distraught. So he feels two pains, physical and mental. Just as if they were to shoot a man with an arrow and, right afterward, were to shoot him with another one, so that he would feel the pains of two arrows; in the same way, when touched with a feeling of pain, the uninstructed run-of-the-mill person sorrows, grieves, and laments, beats his breast, becomes distraught. So he feels two pains, physical and mental.....

"Sensing a feeling of pleasure, he senses it as though joined with it. Sensing a feeling of pain, he senses it as though joined with it. Sensing a feeling of neither-pleasure-nor-pain, he senses it as though joined with it. This is called an uninstructed run-of-the-mill person joined with birth, aging, and death; with sorrows, lamentations, pains, distresses, and despairs. He is joined, I tell you, with suffering and stress.

"Now, the well-instructed disciple of the noble ones, when touched with a feeling of pain, does not sorrow, grieve, or lament, does not beat his breast or become distraught. So he feels one pain: physical, but not mental. Just as if they were to shoot a man with an arrow and, right afterward, did not shoot him with another one, so that he would feel the pain of only one arrow. In the same way, when touched with a feeling of pain, the well-instructed disciple of the noble ones does not sorrow, grieve, or lament, does not beat his breast or become distraught. He feels one pain: physical, but not mental."

Sallatha Sutta<sup>12</sup>; translated from the Pali by  
Thanissaro Bhikkhu

<http://www.accesstoinsight.org/tipitaka/sn/sn36/sn36.006.than.html>; abbreviated.

Also partly quoted in Teasdale & Chaskalson 2011 p 91-92. In the Nyanaponika Thera translation – see appendix – the translator uses the word dart rather than arrow; both translations have their fine points.

"Sensing a feeling of pain<sup>13</sup>/

<sup>12</sup> Sutta (a thread) Pali; Sutra, Sanskrit: A discourse of the Buddha.

<sup>13</sup> This ancient text, as translated, may seem to lack compassion. My brother Michael comments: "What if this is considered somewhat callous? Surely a healthy response will include some natural grief and some mental as opposed to purely bodily feeling?" [Michael Ross; email 04-01-2017]. Certainly GRIEF [Panksepp & Biven 2012] is a natural emotion, and in itself is healthy. Neuro-physiologically, it is probably true to say that mental processes are intimately linked with bodily states. It may also be that this text, this teaching, was not originally intended for the wider public, but was specifically intended as a teaching method for monks in training.

“Sensing a feeling of pain, he senses it as joined with it”. This reflects how our minds can become attached to distressing events – and also reflects an unconscious attachment to concepts such as “me” and “mine” (“my pain, my distress” that we become “joined to”). This is the secondary mental processing.

Now of course these days, in neuro-physiological terms, we could say that all pain is mental. However, there is still a distinction to be made between the original pain – whether physical or emotional – and what we do with the pain mentally. In this sense the distinction made by Sakyamuni seems to be as valid now as it ever was<sup>14</sup>.

It may be that our use of the intentional Off-Loading Exercise reflects, to some extent at least, the degree to which we have not been able to free ourselves from this second arrow.

One particular and pertinent human tendency is to ruminate negatively about matters<sup>15</sup> – Hanh often describes this in terms of “pursuing the past or getting lost in the future” (e.g. Hanh 1990). This is also a common problem in recurring depression when we tend to ruminate negatively about matters and end up in a downward spiral – as illustrated in Figure 1C of B11. This downward spiral is actually a classic example of us allowing the second arrow to deeply penetrate our innermost being and psyche, as illustrated schematically in Figure 2.3A on the next page.

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<sup>14</sup> I am a less happy with some other aspects of Buddhist psychology. In the same sutra there seems to be an implication that all sensual happiness is a reflection of the un-instructed mind. The well-taught person will not descend to such sensual pleasure – possibly because this may lead to craving. We now know that an infant and child’s wholesome development depends on physical touch from the mother / parent: this physical touch sets off cascades of, for example, informational substances such as oxytocin both in the mother and the child – and this in turn will allow the healthy development of the brain and especially the pre-frontal cortex of the child. The ability of the parents to nurture their off-spring will be facilitated by the close bond between the couple – and in tender physical union oxytocin will be released in both the woman *and* the man [Panksepp1998]. In this sense physical touch and closeness are wholesome. Lack of physical touch in families tends to result in poor affect regulation in the children – and this lasts on into adolescence and adult life (Sunderland 2007). On the other hand, appropriate and heartfelt touch from the parent to child / teenager can lead to appropriate affect regulation, and in the long term will lead to the development of empathy / caring in the parents’ offspring (CARE circuits – Panksepp 1998). Furthermore, close emotional and physical bonding between the two parents will add to their and their children’s well- being.

<sup>15</sup> As human being we have a built-in discrepancy monitor [Segal, Williams & Teasdale 2013 p 66] which allows us to compare our present state with that of an earlier state or situation. This can be very helpful when the comparison of the present situation is deemed to be not good in comparison with the previous situation, if it results in appropriate action to remedy the situation. In the case of negative ruminations, the comparison can lead to a downward spiral with the further infliction of the [second arrow](#).

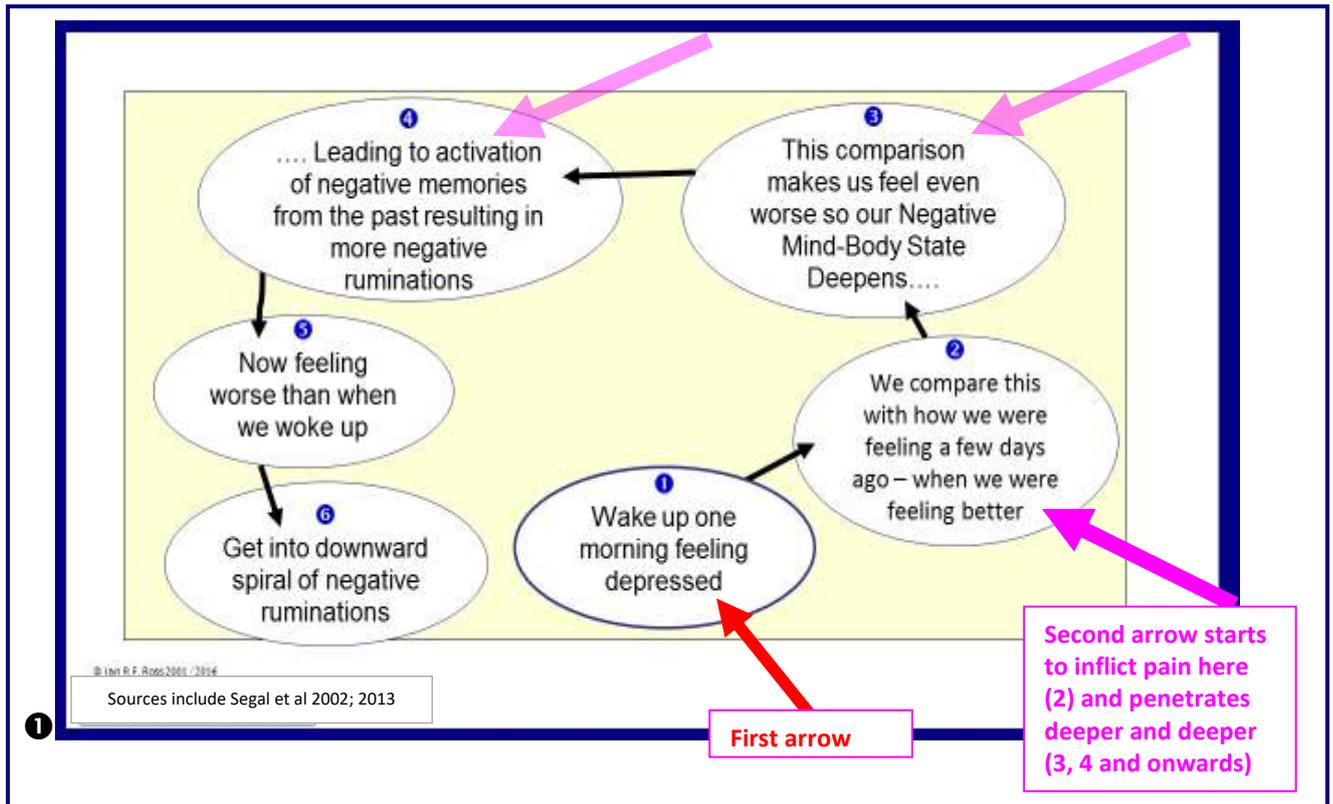


Figure 2.3A  
Negative ruminations in the context of depression  
as an example of the second arrow that does the main damage  
(This Figure is adapted from Figure 1C of webpage B11)

#### Comments on Figure 1

- The figure illustrates a not uncommon state of affairs in those who suffer from recurrent depression.
- We wake up one morning feeling low and depressed. This is like the first arrow.
- Instead of accepting that this is how we are this morning (as in the Rumi poem “The Guest House”) – we start to compare this state with how much better we were feeling a few days ago..... this is the start of the negative rumination, and it is these negative ruminations that inflict the second arrow.
- Each further negative rumination has the effect of letting the arrow penetrate deeper and deeper within us, as illustrated in sections 3 and 4 of the figure.

The example given above refers to recurrent depression. However, the second arrow also inflicts its damage on us in the case of any toxic /destructive emotion if we allow it to play on our mind. We may become angry [activation of RAGE circuits] at someone; and then neo-cortically elaborate this which can result in hatred and a feeling of ill-will towards the person – associated with a desire for revenge on the other. This, the second arrow, can become very destructive to ourselves and others.

A further and third example is given in the story that I sometimes give to Autogenic students which I have called “Two ducks in a solution”. The source of the original story is Tolle 2005. The two ducks have a slight upset in a pond, and what follows is what they might say if they had human minds – and the one duck starts to inflict the second arrow on her / himself. This is illustrated schematically in Figure 2.3B.

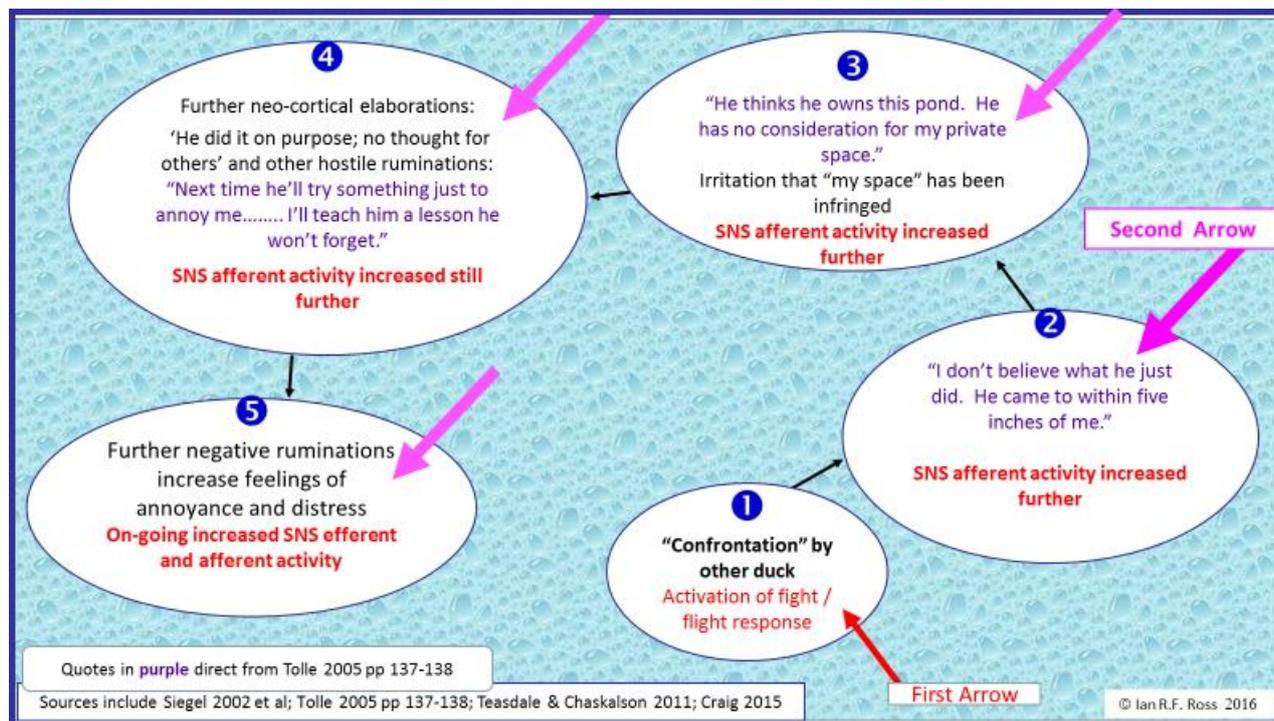


Figure 2.3B

The second arrow following a contretemps between two ducks – should they have a human mind

#### Comment on Figure 2.3B

I came across this story in Eckhart Tolle's "A New Earth" some years ago. When two ducks have a fight, it is brief: they quickly separate and then go off in opposite directions. Tolle comments on the situation: "Then each duck will flap its wings vigorously a few times, thus releasing the surplus energy that built up during the fight. After they flap their wings, they float peacefully, as if nothing had happened....." "If the duck had a human mind, it would keep the fight alive by thinking, by story-making."

The illustration above elaborates Tolle's description in the context of the second arrow and associated SNS pathways.

- The quotes in purple are direct from Tolle.
- The initial contretemps will activate a short-lived flight / fight response including the SNS response and adrenaline.
- These, however, become prolonged by the way our mind responds – with the infliction of the second arrow. This increases both SNS efferent and afferent activity; and the increased SNS afferent activity perpetuates the situation and leads to increased negative affect [Craig 2015].
- These neuro-physiological aspects are discussed further in section 5; and in the related webpage: C12:- Presence in Mind – *Autonomic Afferents and Well-Being*.

Ducks do not, of course, have a human mind. There is great wisdom in their response: "each duck will flap its wings vigorously a few times, thus releasing the surplus energy that built up during the fight. After they flap their wings, they float peacefully, as if nothing had happened....." The ducks get rid of the small upset by flapping their wings vigorously, thus removing the released adrenaline, and so minimising the neurophysiology of the first arrow. And in swimming away, there is no second arrow; no dukkha.

Quotes direct from Tolle 2005 pp 137-138

The pink arrows all represent aspects of the second arrow brought about by neo-cortical elaborations.

Let us take a further example. Say our beloved has a terminal illness that is long and drawn out. On days we may feel very despondent and miserable. We accept this as the existential fact of this moment: this is how we feel right now. This is the first arrow. We acknowledge and “welcome” (Rumi) this feeling. We do not make a story about it: “Why me? How long will it be? Why when we had just retired did this have to happen?” Such stories are inflicting upon us a second deep and painful arrow – that is made in our minds and by our minds – in other words, it is of our own making. Accept the present moment, without any embroidering.

Another way of looking at the metaphor of the arrow is to have a model in which there is just one arrow. Here, as before, the initial event is the arrow. Our negative rumination in effect is like stirring the arrow (and so the arrow head) in our body, and thus inflicting much greater damage and much greater pain at a deep tissue level. This analogy makes it clear that the original event is not the real problem – the real problem is due to our unskilful response that inflicts much greater damage.

#### 2.4 The three domains of dukkha

In this section 2 we have discussed three domains of dukkha; all three arise from our unconscious state of ignorance, and are summarised in Figure 2.4.

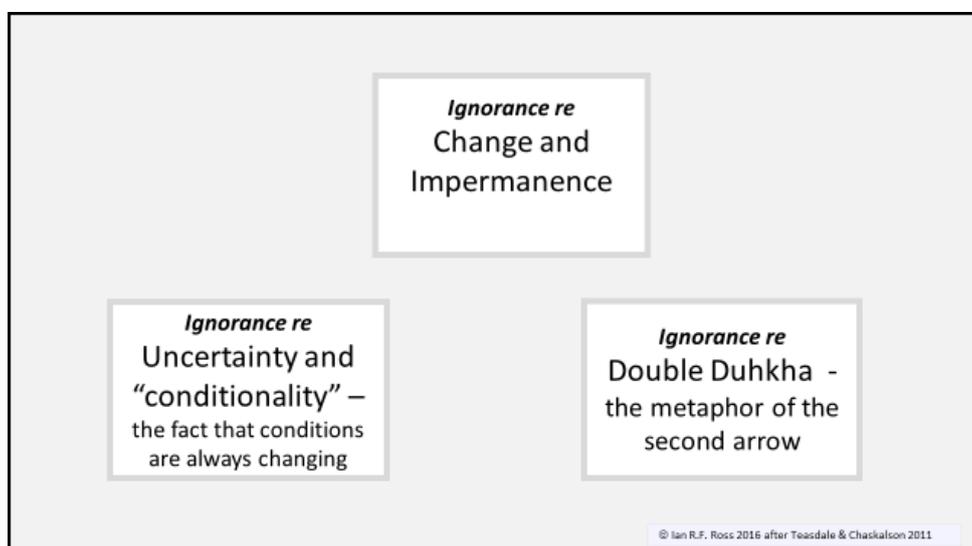


Figure 2.4  
Three Domains of Dukkha

We now move on to discuss further aspects of dukkha:

- Negative ruminations and the watering of negative seeds within us, contrasted with the watering of positive seeds.
- Further reflections on the causes of dukkha.
- Further reflections on the neuro-physiology of the second arrow.

### **3. Negative Ruminations – and the watering of negative seeds**

Our human brains seem to be constructed in such a way that the second arrow can penetrate us and cause great distress in many different situations. For example, we can get caught in various ways, including:

- i. Wishing things were other than they are – in the sense of aversion to what we do not want.
- ii. Wishing (craving) that we have things that we do not have that others do.

### 3.1 Aversion (dislike) to what we do not want

Waking up one morning and not feeling good, as discussed in 2.3 above (and highlighted in Figure 2.3A), is a good example of this. Loss of a job, relationship ruptures, illness and death are other examples. Such events, experiences, are not in themselves the real problem. It is more that they can set in motion a path of negative ruminations, of making up unhelpful stories around the event; in this way, we can very easily, for example, water negative seeds within us. In the case of loss of a job, we can become bitter with thoughts such as “Why me?” – and so the second arrow penetrates deep.

In the case of the breakdown of a relationship, negative ruminations can turn to feelings of anger, hatred and ill will towards another. The dislike for what has happened to us can fuel negative and destructive thinking. We may then become attached to the idea that it was all the other’s fault, and that we are never going to forgive them. We need to be mindful, and reflect with compassion on the matters involved, including:

- Am I sure it was all the other’s fault?
- If we have already decided to never forgive them, who is that damaging, them or ourselves?
- Without compassion, we will be going down a path of the second arrow going in deeper and deeper.
- When we entered the relationship, it is unlikely that we or the other was entering with ill-will towards the other.
- It is not necessarily anyone’s fault when a relationship breaks down; time changes us.
- When a relationship breaks down, both suffer.

### 3.2 Craving for what we do not have

There is nothing wrong in aspiring to something that we do not have at present; such as the skills to be a nurse or primary school teacher. Such aspirations can water our seeds of compassion; neuro-physiologically, they are driven by our CARE and SEEKING circuits [Panksepp 1998; see also B3 Part 1 and 2 on website].

On the other hand, to desire and crave something that someone else has can be associated with toxic mental states such as jealousy and ill-will towards others; this is a different matter. In western psychology, all emotional states are deemed to have some positive value; in ancient eastern (Buddhist) psychology this is problematic: some mental states are considered to be toxic and destructive in themselves<sup>16</sup> [Ekman et al 2005]. For example, we may become jealous / envious at someone else’s success at work; or a couple’s happy engagement (when we are single or estranged). Such negative feelings and thoughts act as the second arrow. It is as though we have become blinded to the good fortune of the other.

If we allow ourselves to step back from our comparing and judging musings, we can change the negative neuro-physiological state we are in (for example, by giving ourselves time to meditate / practise an Autogenic sequence). Such a neuro-physiological change is associated with developing mindfulness, activating CARE and nurturing circuits, and compassion. Our perspective can then be transformed to one of joy for the other person(s), and in this way, water our own positive seeds within us and those of the other.

Sharon Salzberg has a wonderful chapter in her book ‘Loving Kindness’ with the title: Sympathetic Joy.

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<sup>16</sup> The toxicity seems to arise from neo-cortical elaborations of the primary process emotions that are themselves sub-cortical [Panksepp 1998; Panksepp & Biven 2012; and B3 Part I & II]. For example, we may fear that we, in not having something, are not good enough; feelings of not being good enough may have originated in early childhood if we repeatedly suffered from Separation Distress.

It is a rare and beautiful quality to feel truly happy when others are happy. When someone rejoices in our happiness, we are flooded with respect and gratitude for their appreciation. When we take delight in the happiness of another<sup>17</sup>, when we genuinely rejoice at their prosperity, success or good fortune rather than begrudging it in any way, we are abiding in mudita, sympathetic joy....

Salzberg 1995 p 119

This is a great quality which can be difficult for us to develop, partly because our world often seems very competitive, and partly because this is how our minds often work, going down a destructive path of negative ruminations, comparisons, and judging: all of these can result in the watering of negative and unwholesome seeds within.

So much of our unhappy conditions as living beings comes from the constricting effect of negativity toward each other. We limit ourselves, and we limit others. We judge each other, compare ourselves to each other, demean and envy each other, and we ourselves suffer the strangling effects of these limitations.

Salzberg 1995 p 119

This all reflects what can be seen as the default position of our brains / minds, and this default position will fuel unwholesome neuro-physiological circuits, including an increase in Sympathetic Nervous System afferents [see also Craig 2015; and D10 and E-03; and section 5 of this essay]. However, mudita / sympathetic joy can act as an anti-dote to such default positions, and allow us to start watering positive and wholesome seeds within us.

### 3.3 Accepting the present existential moment as it is

One of the fundamental problems of negative ruminations is that in the ruminations we are axiomatically not accepting what is in this moment; in this sense, we are running away from our “in-this-moment” experience. Again, we return to the wisdom of Rumi’s poem ‘The Guest House’:

This being human is a guest house.  
Every morning a new arrival.

A joy, a depression, a meanness,  
some momentary awareness comes  
as an unexpected visitor.

Welcome and entertain them all!

Rumi: first part of the Guest House  
Translation: Coleman Barks & John Moyne

<sup>17</sup> If we are in a negative mind state, our perspective is clouded. One morning as a student I was walking over to medical school in a negative frame of mind; and I realised that this negative mental state resulted in me no longer being able to take delight in the May blossom of trees. In the same way, we are neuro-physiologically incapable of taking delight in another’s good fortune if we are being eaten up by sadness / distress / the second arrow. “When we are sad, it is difficult for us to be joyful even when we are looking at beautiful scenery. The landscape has been stained by our sadness. When we see someone, whether we feel happy or unhappy is mostly due to our own mind. You might see that person and feel happy; but when I see him I feel unhappy due to the unhappiness that comes from my mind” [Hanh 2001 p 150]. If our body state is disturbed, our mental state becomes disturbed; if our mental state becomes disturbed, our body state becomes disturbed – and this then stains and distorts our perception of the world; yet we cling to the illusion that our view is right.

What tends to happen is that we do not allow ourselves to experience the actual state, but immediately our defaulting brain system unconsciously goes into inserting the second arrow.

The key message of the Second Noble Truth is this: Experience itself is not the problem – the problem is our relationship to it – our need to have it be a particular way.

Teasdale & Chaskalson 2011 p 94

This very much overlaps with the view of Epictetus:

“Men are disturbed not by things, but the views they take of them.”

Epictetus; first century Greek Philosopher.

In other words, it is not the event itself but what we make of it; what we make of it depends on how we think about it; and how we think about it is to a large extent determined by our underlying emotion – e.g. do we have an underlying feeling of hostility / ill-will to the other person / event, or is our underlying modus operandi one of compassion?

Teasdale and Chaskalson go on to say:

.....for this (Second Noble) truth to be actually liberating, we have to embody that understanding experientially right in the moment that we encounter unpleasant feelings. And that can be really difficult when we are confronted with the reality of searing pain in the knee, or great tiredness, or deep sadness, it is just too easy to see the unpleasant experience itself as the problem.

Teasdale & Chaskalson 2011 p 94

It is at this stage that our defaulting brain<sup>18</sup> starts the secondary elaboration of the experience, rather than “exploring our relationship” [Teasdale & Chaskalson 2011 p 94 penultimate paragraph] to the experience itself. Appendix III discusses some further causes of dukkha.

### 3.4 Transformation at the base

I recently re-read Alan Paton’s “Cry the beloved country”, which was first published in 1948. It is an extra-ordinary book, depicting – with compassion and sensitivity – the plight of different ethnic groups in South Africa in the middle of the twentieth century.

During the course of the novel, the son of a farmer is killed; and it later transpires that this has been by the son of a clergyman. The second part of the novel depicts the suffering and personal journeys of both fathers. It gradually becomes clear that the farmer does not allow hate and ill-will to develop in him for the clergyman and the latter’s drought stricken community. Rather he (the farmer) gives great support to the community in several ways, including milk for a starving baby. It is a very moving (fictional) representation of how transformation at a very deep level can occur within us, in which CARE and nurturing transcend negativity and ill-will.

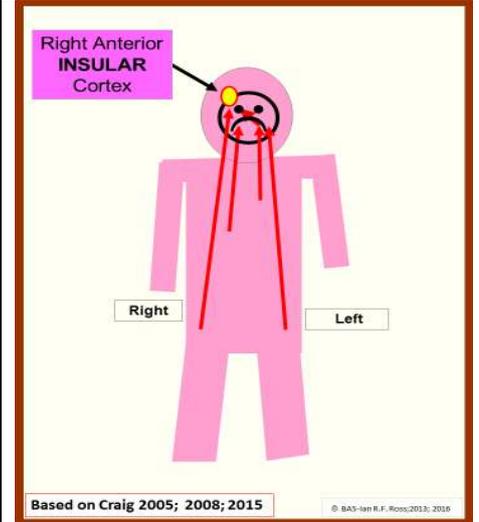
<sup>18</sup> Dukkha in the sense described by Sakyamuni is a function of our defaulting brain, which by neocortical elaboration causes the second arrow to pierce us. With mental training, such as Meditation and / or Autogenic Training, we have the potential means to transform this negative default position into a positive one, in which our default primary process emotion becomes one of CARE / nurturing and compassion.

## 4. The Second Arrow from a neuro-physiological perspective

### 4.1 Negative Rumination and toxic words

Negative experiences can easily set in motion negative ruminations; these negative ruminations will often be associated with a feeling of distress within us. In this situation, the negative experience will activate Sympathetic Nervous System (SNS) [afferents](#) within us which will result in us feeling uncomfortable, and that “everything is the periphery is not quiet, not settled” [E-03]. This affective feeling is one of the driving forces for our subsequent negative ruminations about the event; this is because once the SNS afferents are activated in the context of negative feelings, they inter-are with distressing emotions / affect [Craig 2015; also see web articles C12; D10; E-03].

Such increased SNS afferent activity is depicted schematically in Figure 4.1.

	<p>Comments on Figure 4.1</p> <ol style="list-style-type: none"> <li>A distressing experience has just occurred.</li> <li>This activates the Sympathetic Nervous System, and we become aware of this as a result of the consequent activation of SNS afferents – depicted in the diagram as red arrows.</li> <li>These afferent pathways from <i>both</i> sides of the body are lateralised to the <i>Right</i> Anterior Insular Cortex (AIC) [Craig 2015].</li> <li>Activation of the Right Anterior Insular cortex in this context is axiomatically associated with negative / disturbing affect (emotions) [Craig 2015].</li> <li>As a result of this, negative ruminations tend to set in – thus the piercing second arrow.</li> </ol>
<p>Figure 4.1 SNS afferents activated by negative ruminations following a distressing experience Figure 4A imported from E-03 on website</p>	<p>The above is a description of the sequence of events in the untrained mind; that is, the “uninstructed run-of-the-mill person”.</p> <p>Please note that the pathways of the SNS afferents (the red arrows) have been simplified, while still showing correctly the lateralisation of the pathways to the Right AIC.</p>

Toxic words and toxic speech will tend to be associated with activation of SNS efferents and afferents, and associated neo-cortical elaborations such as hatred and ill-will towards others, be they individuals or groups. Some consider the increasingly toxic language of politics and social media in recent decades to be debasing the world and societies [Bland 2016]; by its very nature, it tends to increase negative affect.

### 4.2 Embracing the primary experience with nurturing

The skilled practitioner of life will focus on the feeling of the experience itself – i.e. the primary experience – in a mindful way, and this experiential (“being”) mental mode prevents or greatly reduces negative neo-cortical ruminations developing. This means that the second arrow is deflected, or its effects greatly reduced; and so there is no or little activation of the SNS afferents depicted in Figure 4.1. (and 5.1).

If we focus on the experience per se with compassion and mindfulness, it is suggested that we will be activating CARE circuits which act as anti-dotes to negative affect that would otherwise arise. The neuro-physiology then axiomatically changes, as these skilful means will be associated with a switch from the SNS

to the Para-Sympathetic Nervous System [PSNS], with resultant activation of PSNS afferents, as depicted in Figure 4.2A.

PSNS afferents from both sides of the body are lateralised to the Left Anterior Insular Cortex; in this context, activation of the Left Anterior Insular Cortex is per se associated with positive / nurturing type emotions [Craig 2015].

#### Comments on Figure 4.2A

- i. The background to this figure is similar to Figure 5.1.
- ii. A distressing event has occurred.
- iii. However, the skilled practitioner of life does not allow the negative (neo-cortical) ruminations to develop.
- iv. Rather, by focusing on the experience per se she, or he, remains in the present moment.....
- v. .... and gently nurtures the primary distressing feelings just as a mother would nurture the distress of her child...
- vi. As a result, the CARE circuits can become activated, and this will be associated with increased PSNS afferent activity, as depicted in Figure 5.2B.

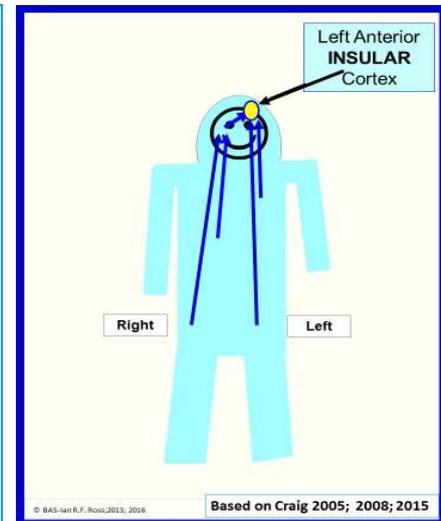


Figure 4.2A

Suggested activation of PSNS afferents by the trained mind

Figure 4.2A imported from E-03 on website

A nurturing mother will facilitate the activation of her child's PSNS afferents through touch and her own warmth, and this is shown schematically in Figure 4.2B.

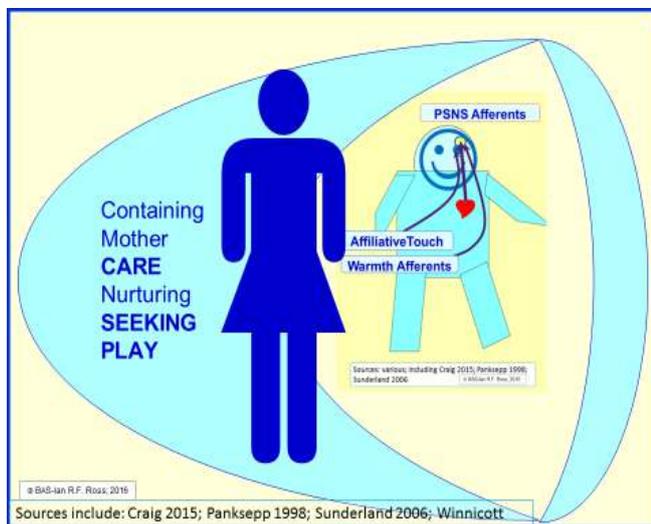


Figure 4.2B

The Nurturing Mother and activation of the child's Affiliative Touch and Warmth circuits.

Imported from E-04 on website

#### Comments on Figure 4.2B

- The mother has the ability to contain her child's distress and excitement appropriately.
- The containing mother is warm and physically and psychologically close.
- This activates the child's warmth, affiliative touch, and PSNS afferents.
- As a result, any distress in the child is quickly dissipated with a return to feeling secure and loved.

Mental training, including meditation and Autogenic Training, in neuro-physiological terms is the equivalent of the mother in the above Figure settling her child; that is, mental training can allow an activation of our own CARE and nurturing circuits to settle our distressed (hurting) inner child.

## 5. Some further neuro-physiological reflections on dukkha and mental training

### 5.1 Neuro-physiological dynamics of the Second Arrow

Section 4 above has linked the second arrow to the neurophysiology of the autonomic nervous system. To recap: the first arrow is caused by the event, the situation, or the memory. This in itself cannot be changed, yet it is not the primary cause of dukkha, of suffering. The main cause is what we mentally do with this information, this situation. We unconsciously inflict the second arrow into ourselves when we neo-cortically elaborate / embellish / make up negative stories about the event / memory. These negative elaborations will tend to activate our Sympathetic Nervous System and the further negative affect associated with the activated SNS afferents [Craig 2015]. The dynamics of the second arrow are summarised in Figure 5.1:

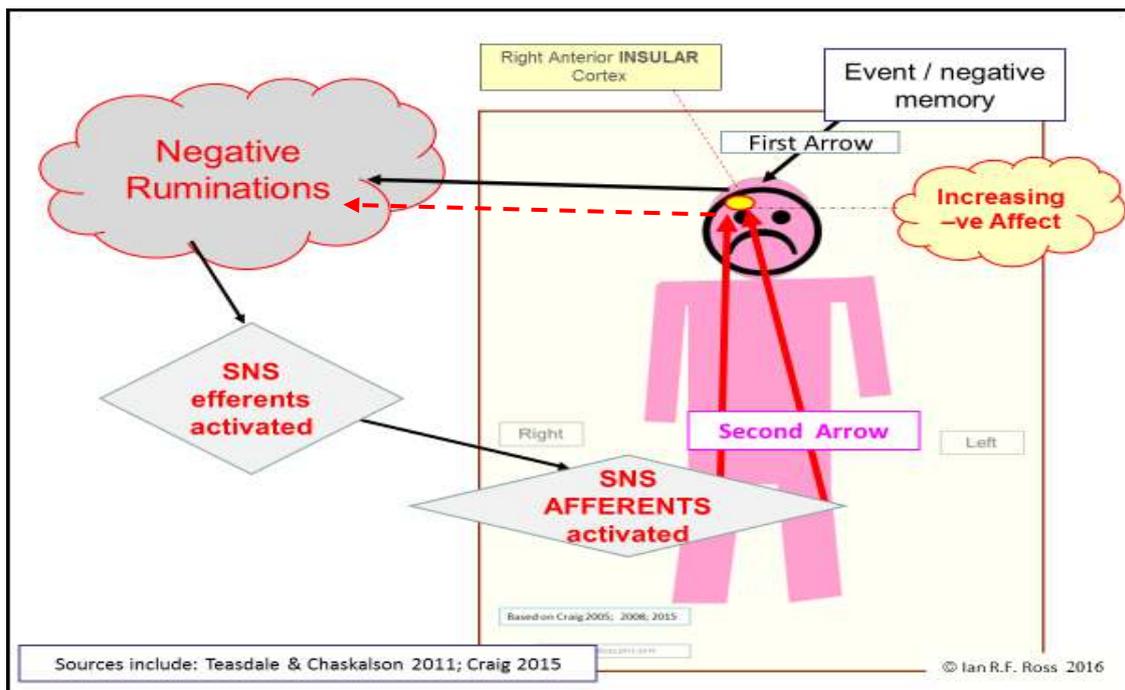


Figure 5.1

Fundamental neuro-physiological dynamics of the Second Arrow

#### Comments on Figure 5.1

- i. The event / negative memory is the essence of the first arrow.
- ii. In our unskilled mind, this then activates negative ruminations / stories / neo-cortical elaborations.
- iii. These are distressing per se, and activate our SNS efferent (nerves from brain to body) system; for example, speeding up of heart; dryness of mouth.
- iv. As a result, the body does not feel at ease, and this is reflected in increased SNS efferent activity from the body and organs back to the brain; specifically, to the Right Anterior Insular Cortex.
- v. This results in increased negative / distressing affect [Craig 2015], which causes further negative ruminations (depicted by dashed red arrow)
- vi. The increased SNS afferent activity can be equated with the second arrow, as it is this activation that then perpetuates the negative ruminations.

## 5.2 Autonomic Afferent asymmetry and the effect on affect

In broad terms, as we know, the SNS is associated with flight and fight, whereas the PSNS is associated with rest, repair, recuperation, nurturing and social engagement [Craig 2015; Porges 2001; 2011]. SNS afferent fibres travel up to the Right Anterior Insular Cortex (forebrain) regardless of where they start from (i.e. whether from the left or right side of the body). PSNS afferent fibres travel up to the Left Anterior Insular Cortex regardless of where they start from (i.e. whether from the left or right side of the body). This results in very different outcomes, as illustrated in Figures 5.2A and 5.2B.

Right Forebrain
<b><u>SNS activity</u></b>
<ul style="list-style-type: none"> <li>• Arousal</li> <li>• Danger</li> <li>• <b>Negative Affect</b></li> <li>• Withdrawal behaviour</li> <li>• Individual-survival-orientated behaviour (e.g. Flight / Fight)</li> <li>• FEAR and RAGE circuits; Separation Distress / PANIC</li> <li>• Energy Expenditure</li> </ul>

Figure 5.2A  
SNS related forebrain dynamics  
that are related to the  
second arrow

Left Forebrain
<b><u>PSNS activity</u></b>
<ul style="list-style-type: none"> <li>• Nourishment</li> <li>• Safety</li> <li>• <b>Positive Affect</b></li> <li>• Approach type of behaviours (and Social Engagement** (e.g. Tend and Befriend***)</li> <li>• CARE / nurturing and PLAY circuits</li> <li>• Energy Enrichment</li> </ul>

Figure 5.2B  
Some PSNS forebrain dynamics  
related to wholesome mental training  
and mindfulness

Source: linked web-page E-04 Figure 5: Emotional Asymmetry due to Autonomic Asymmetry  
Based on Craig 2005; and \*\*Porges 2011; \*\*\*Salposky 2007 / Taylor et al (2000); Panksepp 1998

The second arrow plays a powerful role in the creation of dukkha, and thus in causing unrest in ourselves and others. Skilful means developed through mental training, meditative approaches and mindfulness can facilitate in a reduction of dukkha. These skilful means are discussed further in D11: Sukha: Paths of Well-Being, PSNS Afferents, and Inner Warmth – *from Dukkha to Sukha*.



Golden Moments

## Appendix A

**Four Ennobling Truths**

The central tenet of Shakyamuni's teaching is that we have within us the means to develop skilful means for dealing with the inevitable distress, sorrows and dukkha of life. The four noble truths succinctly summarise the foundations for Buddhist psychology, which are briefly reviewed below.

**1. There is dukkha**

There is no escaping pain, impermanence and death. These are facts of life. There are many temptations in modern life to ignore / deny that dukkha is intrinsic to life. There are of course also many joys and wonders in life – and these can be experienced potentially in each present moment. Yet it is essentially through acknowledging dukkha that we can grow in a spiritual sense by developing skilful means for dealing with it in ourselves and others.

**2. Having acknowledged that there is dukkha, the second ennobling truth is to realise that many aspects of dukkha are created by us / within us through ruminations and negative thinking; this is the essence of the second arrow**

The second arrow is not our fault in that this is the way our human minds tend to operate – yet once we become aware of the root causes of such suffering we are in a position to transform it by mindful means.

The Second Noble Truth is the origin, roots, nature, creation, or arising (*samudaya*) of suffering. After we touch our suffering, we need to look deeply into it to see how it came to be. We need to recognise and identify the spiritual and material foods we have ingested that are causing us to suffer.

Hanh 1998; pp 9-11

There are several fundamental aspects to this suffering, including:

- i. Basic misperceptions regarding the nature of life and reality – including our delusions regarding permanence.
- ii. We develop unconsciously negative [habit energies](#) from our ancestors which, until we recognise them, will add to our dukkha.
- iii. When we look deeply into our suffering we may begin to realise that some of it is the result of our own negative ruminations (about the “first” arrow). Note that the implication of what Thich Nhat Hanh is saying above is that while dukkha is a fact of life (1 above), it is we ourselves that often create the most distressing aspect of dukkha by allowing the second arrow to penetrate us (through negative ruminations). This is not our fault, in that this is the way our brains are wired; however, what we do about it is our responsibility.

**3. The third ennobling truth inter-is with the first two**  
**It is summarised by Thich Nhat Hanh as follows:**

The cessation of suffering by refraining from doing the things that make us suffer.

Hanh 1998; p 11

Here Sakyamuni is indicating that it is often we ourselves that create the most painful suffering, in essence because this is how our minds work. In making this deduction, we are gentle with ourselves and do not judge ourselves negatively [see also web-page D1 regarding Mindfulness and Mindful Living]; rather, we

acknowledge that this is the default position of the human mind. As indicated above, the basic Buddha teachings also embrace joy and wonder.

The Buddha did not deny the existence of suffering, but he also did not deny the existence of joy and happiness. If you think that Buddhism says, “Everything is suffering and we cannot do anything about it,” that is the opposite of the Buddha’s message. The Buddha taught us how to recognise and acknowledge the presence of suffering, but he also taught the cessation of suffering.”

Hanh 1998; p 11

There are many toxins in modern day life that we may well not realise are toxins, and yet they can cause deep suffering. This means that the skilful means for reducing our suffering and that of others requires looking deeply into our own lives and the very modus operandi of the society in which we live.

The four truths are of course all inter-linked, and especially the second with the third. Linked in with the second arrow are two closely related phenomena:

- a. The origin of dukkha can also be seen in terms of our human tendency of [Tanhā](#), which can be translated as craving [Teasdale & Chaskalson 2011 p 103]. This is in the sense of, for example, craving for things to be not as they are (e.g. waking up on a Monday morning feeling low); and of craving for unwholesome things that do not add to our or others’ Well-Being.
- b. Interlinked with dukkha is the inter-linking / inter-dependence of all things. This is sometimes described as Dependent Origination or [Interdependent Co-Arising](#).
- c. Dependent Co-arising [op cit p 104]. In the west, we have grown up to see ourselves as independent beings / agencies, and the world in terms of causation; of x resulting in y. The eastern view is based on the insight that everything inter-is<sup>19</sup>. You cannot make an apple pie from scratch without having first to create the cosmos.
- d. This inter-linking is beautifully captured by Francis Thomson:

All things my immortal power  
Near or far  
Hiddenly,  
To each other linkèd are,  
That thou canst not stir a flower,  
Without troubling of a star.

Francis Thomson  
c 1990

#### 4. The fourth ennobling truth /

<sup>19</sup> This is not to imply that the eastern or western view is better. The western classical view of causation is obviously important and crucial to an understanding of the world – and Bohm gives a good overview based on Aristotle’s perspective [Bohm 1980 Chapter 1: “Fragmentation and Wholeness” pp 1-33]. If we as a species cut down all the rain forests, it is established that this could have a catastrophic effect on the world climate; this is a specific example of cause and effect; it would of course have other effects such as destruction of the local flora and fauna.

However, it is implying that cause and effect are not always or necessarily sequential [Capra & Luisi 2016]; many phenomena have complex inter-relationships. A simple example is that if our body is disturbed / not at ease, our mind / affect becomes disturbed; and if our mind is disturbed, our body state becomes tense and not at ease; if our body state is disturbed, logical thinking becomes difficult.

**4. The fourth ennobling truth embraces  
the actual path /way that enables us to refrain from our in-built habit-energies  
that cause so much suffering**

In classic Buddhist teaching this involves an eightfold path, which embraces mindful / wholesome approaches to life. These are:

- Mindful View
- Mindful Thinking
- Mindful Speech
- Mindful Action
- Mindful Livelihood
- Mindful Diligence (effort)
- Mindfulness
- Mindful concentration

These eight are usually described in terms of “right” livelihood etc. However, the word “right” can be misleading. The essence of the above eight is an appropriate / wholesome approach to life that will facilitate Well-Being and reduce our and others’ suffering. This is the meaning of right mindfulness. Hanh indicates that in this context “right” implies “straight”, “upright” and “not bent or crooked”.

If the path we adopt is not helpful, then this implies that it is not the right path for us. It might or might not be at a later date. We are not saying or implying that “our personal practice is wrong” – simply that at this moment in time it is not appropriate. It is not a moral judgement; the meaning of wrong here is in the sense of unbeneficial.

This is made clearer I think in Hanh’s fuller comments on this matter.

The Pali word for ‘Right’ is *samma* and the Sanskrit word is *samyak*. It is an adverb meaning ‘in the right way,’ ‘straight,’ or ‘upright,’ not bent or crooked. Right Mindfulness, for example, means that there are ways of being mindful that are right, straight, on beneficial. Wrong mindfulness means that there are ways to practice that are wrong, crooked, and unbeneficial. Entering the Eightfold Path, we learn ways to practice that are of benefit, the ‘Right’ way to practice. Right and wrong are neither moral judgements nor arbitrary standards imposed from outside. Through our own awareness, we discover what is beneficial (‘right’) and what is unbeneficial (‘wrong’).

Hanh 1998 p 11 footnote 1

The Buddhist path is essentially experiential, not theoretical. That is, we each have to work out / discover our own wholesome path through our own experience. Otherwise we may be following a theoretical concept that is not wholesome for us.

Appendix B /

Appendix B

alternative translation from Sallatha Sutta

Nyanaponika Thera  
translation

"An untaught worldling, O monks, experiences pleasant feelings, he experiences painful feelings and he experiences neutral feelings. A well-taught noble disciple likewise experiences pleasant, painful and neutral feelings. Now what is the distinction, the diversity, the difference that exists herein between a well-taught noble disciple and an untaught worldling?

"When an untaught worldling is touched by a painful (bodily) feeling, he worries and grieves, he laments, beats his breast, weeps and is distraught. He thus experiences two kinds of feelings, a bodily and a mental feeling. It is as if a man were pierced by a dart and, following the first piercing, he is hit by a second dart. So that person will experience feelings caused by two darts.....

"But in the case of a well-taught noble disciple, O monks, when he is touched by a painful feeling, he will not worry nor grieve and lament, he will not beat his breast and weep, nor will he be distraught. It is *one* kind of feeling he experiences, a bodily one, but not a mental feeling. It is as if a man were pierced by a dart, but was not hit by a second dart following the first one. So this person experiences feelings caused by a single dart only..."

Sallatha Sutta; translated from the Pali  
by Nyanaponika Thera

Also partly quoted in Teasdale & Chaskalson 2011 p 91-9

<http://www.accesstoinsight.org/tipitaka/sn/sn36/sn36.006.nypo.html> ; abbreviated

Please also see footnote 13 on page 9.

Our minds feel personal to us, so much so that we feel this is an aspect of "me". Yet there is nothing that we can feel or think (other than creative acts of art or science, maybe) that millions of others have not also felt and thought. The feelings we have are based on our shared programming – our common humanity. All that is "just you" is your consciousness passing through time, moment to moment.

Gilbert 2009 p 137

## Appendix C

**Reflections on some further causes of dukkha<sup>20</sup>**

This section was originally added to the main text after Section 3. On reflection, I felt that it detracted from the main flow of the article which is about the Second Arrow. I was going to delete the whole section; and then decided to add it as an appendix. It is hoped that some parts of this Appendix III may be of some interest.

The *fact* of dukkha is the first ennobling truth; the second is to do with the causes. The Pali word for the main cause is Tanhā: this is usually translated as craving or ‘inappropriate desire’ (Keown 2003) – but as with dukkha, this translation can be misleading. It may therefore be best to simply accept and use the Pali term Tanhā (Teasdale & Chaskalson 2011). It can also be seen as “attachment to desire” that has a compulsive, driven type of quality [op cit p 94]. The inner language that we use for this includes “a sense of *must, should, ought, have to, need to, if only*” [op cit p 94].

Sakyamuni suggested that Tanhā has three main manifestations:

- Desire for sensory pleasure
- Desire to be (e.g. in certain state / affect)
- Desire not to be (e.g. in a certain state / affect)

Now in some ways craving and desire overlap with the SEEKING system (Panksepp 1998), for example: the desire for food, for shelter, and warmth. These desires can normally be satisfied through the SEEKING system which we share with other mammals, and are in themselves wholesome. What is the essence of tanhā? What is the central matter concerning Tanhā?

The central problem with tanhā is that we cannot let go – we cannot let go of our desire, our need for things to be a particular way, even though that very need is what is creating our suffering.

Teasdale & Chaskalson 2011 p 96

We will now look briefly at the three manifestations of craving.

#### i. Desire for sensory pleasure per se

All sensory pleasures are transient, so in this sense cannot give us permanent satisfaction<sup>21</sup>. The idea that our desire for sensory pleasure, if fulfilled, will bring us lasting happiness is an illusion.

We can of course have wonderful experiences thanks to our senses of sight, smell, sound, touch, and taste. There is nothing wrong with the existential, present moment experience of any of these; indeed, they can allow us to have a sense of “the-thing-in-itself”, rather than becoming mere representations or images which can be the case when they are subjected to neo-cortical elaborations [Hanh 2001 pp 148-151].

<sup>20</sup> This section overlaps with Section 3 in the main text.

<sup>21</sup> Though sensory pleasures can give us intermittent and recurring pleasure and a sense of wonder.

- Also note that the infant’s and child’s “desire” for touch, and the fulfilling of this desire by the nurturing mother / parent, is vital for the development of the child’s brain, especially the Pre Frontal Cortex – and hence in the development of Affect Regulation [see e.g. Sunderland 2007]. This inter-is with the affiliative touch homeostatic afferents pathways from the skin to the brain [Craig 2015]. See also web-articles: B19, B20, and E-03 glossary including homeostatic emotions and affiliative touch.

The Buddha once commented to one of his close friends on the beauty of a particular sunset they were watching together (cited by Hanh). In other words, Sakyamuni was aware of the beauties and wonders of nature, and it is not these in themselves that are the problem. Indeed, such experiences are part of being in the present moment.

Tanhã, in the context of dukkha, is the sense of wanting to keep the present state, of wanting to keep this present experience, to make it last for ever, to sort of bottle it. Teasdale and Chaskalson (op cit) comment that it is our sense of self (or rather me) that gets mixed up in tanhã: for example, “I want this experience, this holiday, to last for ever”. The very thought intrudes on the unique experience. This is similar to us, during an Autogenic Session, thinking: “This is the best session I have ever had”. In that thought we lose the wonderful moments of that session – we are no longer in the experiential mode and have morphed into the analytical mode [see D9]. Tanhã is linked to the concept of a separate permanent self, and can easily merge with ideas linked to self-gratification. It (tanhã) is sometimes described as a sort of unquenchable thirst – for more and more. [The Sanskrit term for tanhã is trsnã (literally thirst – see also D9).

As already mentioned, it is not the pleasant sensation itself that is the problem. Accepting the bird sound in this present moment, the light falling on a flower, the crescent new moon – or “half” moon: these are all wonders that we can experience through some miraculous neuro-chemistry that in some extraordinary way then translates into our conscious awareness of the phenomena. We experience each moment, and then let it go [Figure Ap-C-i]. In this way we remain fresh for whatever is about to be.

It is the desire to hold onto the experience that we need to beware of. The fourth ennobling truth embraces the eightfold path to reduce suffering, Dukkha. One of these is Right View (or perhaps better, Mindful View). A view, a perspective, that craves for sensual pleasure – or any pleasure – at the expense of other people or the planet is not a Mindful View; our “happiness” at the expense of the well-being of others is an unwholesome form of happiness. [See also Hanh 1998 pp 28-40; and 51-58].

Being in the present moment with the moon is the antithesis of tanhã; a sense of wonder is sometimes linked to the numinous and awe [see also A9 on web].



Figure Ap-C-i  
Some sensory inputs can be a recurring source of wonder, such as the moon

## ii. Desire to be (or become)

The desire to be alive is natural, and seems to be inbuilt into our living organisms. This overlaps with Spinoza’s concept of conatus (Spinoza 1677). This in itself is wholesome, so long as it does not get mixed up with a desire to be alive at the expense of others.

In terms of tanhã, the desire to be more reflects the desire of ego: of “me” and “my” and “mine”. This includes unwholesome ambition; the desire to be best at the expense of others; the desire to be happy which may, we may claim, involve regular travel to distant (global) places; and the desire to be a person with material possessions beyond our needs<sup>22</sup>.

On the other hand, some aspects of tanhã may have nothing to do with others. For example, we may crave to be a good meditator; we may crave to enjoy a concert. Such craving can interfere with the experience itself – “is this the best song I have ever heard”, for example, implies that our analytical mind has taken over from the experience itself.

<sup>22</sup> There is no evidence that material wealth, once our basic needs are met, adds much to happiness (see for example Csikszentmihalyi 1992 pp 44-45).

Tanhã is an unwholesome form of craving which does not take into account the inter-linking and inter-dependence of all things; it may lead to actions and behaviours at the expense of others. Desires that lead to large carbon footprints are unwholesome and driven by ego. Speth asks:

“How serious is the threat to the environment? (from *Climate Change*). Here is one measure of the problem: all we have to do to destroy the planet’s climate and biota and leave a ruined world to our children and grandchildren is to keep doing exactly what we are doing today, with no growth in the human population or the world economy. Just continue to release green-house gases at the current rates, just continue to impoverish ecosystems and release toxic chemicals at current rates, and the world in the latter part of this century won’t be fit to live in.”

Speth 2008; p x and xi

As already indicated, tanhã also merges with the desire to keep hold of, and not let go of, present moment pleasant / enjoyable experiences.

### iii. Desire not to be (e.g. in this present mental state)

This can be a form of negative craving – the desire not to be our true (authentic) self – for example, for fear that we will be ridiculed. It can be linked with depression, and a negative interpretation bias (B10 & B11), and resultant low self-esteem. Downward spirals can lead to self-destruction (e.g. through excess alcohol) or suicide. More commonly, the desire not to be is to do with not wishing to be a particular type of person / self<sup>23</sup>.

.....More commonly, at the specific level, there is attachment to the desire not to be or become a particular self – not to be a self that has certain experiences – for example, not to be a self that lies awake in bed in the middle of the night, not to be a self that feels sad, fearful, or angry, not to be a self that screws up, not to be the self that has these pains in my knees and back, not be the self that has a mind that wanders incessantly when I am trying to meditate, not to be a self that still has ten things left on my to do list.....

Teasdale & Chaskalson 2011 p 96

Such desires ‘not to be ...’ often add to the problem. For example, the craving desire not to be someone who lies awake unable to sleep is a type of negative rumination that adds to our anxieties and is thus liable to induce insomnia. The resultant anxiety fuels our flight response of adrenaline and activation of our Sympathetic Nervous System (SNS). As in the example of waking up one morning with a return of depression (see for example Figure 2.3A in main text), it can be the very fighting of the feeling – rather than accepting the feeling as our present moment experience – that tenses our body up even more, with negative consequences (section 4 of main text).

The Rumi poem the Guest House can act as an anti-dote to not accepting present moment affect (see section 3.3 in main text).

<sup>23</sup> The word self is ambiguous. Teasdale and Chaskalson refer to it in its negative manifestations. This overlaps with concepts of Ego and ego-centric; and self and self-ish. The Self (note the capital S) that Jung talks about in the process of Individuation is a totally different concept, and overlaps with Schulz’s concept of [Self Realisation](#), Luthé’s concept of the Authentic Self and Maslow’s Self Actualisation. Individuation can itself be a misleading term as it has nothing to do with individualism.

**Glossary**

A more comprehensive Glossary can be found in the linked web-page D11

<p>Acceptance</p> <p><i>Note: the word 'acknowledge' may sometimes better express this concept.</i></p> <p>Extract from D11 on web-site</p>	<p>Life is as it is; not as we would sometimes like it to be. If we are always wishing things were other than they are, we can very easily expend energy unproductively – and we may end up feeling worse.</p> <p>For example, if one morning I wake up feeling a bit low, and compare that to how I felt say a month ago when I was feeling great, this comparison between how I was then and how I am now can make me feel even worse. It is important that we accept how we are right now; this does not mean that we cannot change things, but it does mean that we are not struggling to make things other than what they are.</p> <p>We may find that by simply accepting things as they are right now, this will itself gives us a sort of inner energy – and perhaps the motivation to change [see also The Guest House – Rumi].</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>“Acceptance does not mean that you have to like everything or that you have to take a passive attitude toward everything and abandon your principles and values. It does not mean that you are satisfied with things as they are or that you are resigned to tolerating things as they ‘have to be.’ It does not mean that you should stop trying to break free of your own self-destructive habits or to give up your desire to change and grow, or that you should tolerate injustice, for instance, or avoid getting involved in changing the world around you..... Acceptance as we are speaking of it simply means that you have come around to a willingness to see things as they are. This attitude sets the stage for acting appropriately in your life, no matter what is happening.”</p> <p style="text-align: right;">Kabat-Zinn, 1990, pp 38 - 39</p> </div> <p>In the context of an AT sequence, if our mind wanders, for example, we simply accept that it has wandered (non-judgementally), and then gently bring our attention back to where we were in the AT sequence – e.g. “Forehead cool and clear”.</p>
<p>Afferents (correctly speaking afferent nerves) [from D11 Glossary]</p>	<p>Nerves transmitting information from the body to the brain. This is in contrast to efferent nerves which transmit information from the brain to the body.</p> <p>In the context of Well-Being, the <b>Autonomic (Nervous System)</b> Afferents are of particular importance – see below.</p>
<p>Autonomic Nervous System [from D11 Glossary]</p>	<p>This is a part of the nervous system that controls bodily functions such as heart rate, digestion, respiratory rate and countless other processes at an unconscious level. So the body just gets on with these essential functions, which means that at a conscious level we do not have to bother about these crucial processes without which our lives would not be possible.</p> <p>The Autonomic Nervous System is divided into two main branches:</p> <ul style="list-style-type: none"> <li>• Sympathetic Nervous System (to do with “fight and flight”), and</li> <li>• Parasympathetic Nervous System whose modalities embrace rest, repair, recuperation and nurturing activities [e.g. CARE circuits – Panksepp 1998].</li> </ul> <p>Note that, in general terms,</p> <ul style="list-style-type: none"> <li>➤ Increased SNS (efferent) activity will axiomatically be associated with increased SNS afferent activity – and so with related negative / disturbing emotions, while</li> <li>➤ Increased PSNS (efferent) activity will be associated with increased PSNS afferent activity – and with the inter-related positive / nurturing type of emotions [Craig 2005; 2015]; and with positive social engagement [Porges 2011].</li> </ul> <p>The Vagus nerve is a particularly important nerve of the PSNS. Note that 70% of the vagal nerves are afferents. This means that the brain is getting an extraordinary amount of feedback / information from the body [Porges 2011].</p> <p>Mental Training such as Meditation / Autogenic Training facilitates an autonomic move from the SNS to the PSNS [e.g. Benson &amp; Klipper 1975].</p>
<p>Dukkha /</p>	

<p>Dukkha</p> <p>Note: Spellings depends upon source:</p> <ul style="list-style-type: none"> <li>• Sanskrit: Dukkha</li> <li>• Pali: Dukkha</li> </ul>	<p>Dukkha is often translated simply as suffering. This is not very helpful, as it may lead us to assume that the whole of Buddhist psychology is about suffering, and this is grossly misleading. Sakyamuni recognised what can be regarded as the unsatisfactory nature of life, our tendency to crave for things that we cannot have, and to negatively ruminate about what has happened in the past and what may happen or not happen in the future.</p> <ul style="list-style-type: none"> <li>○ If we are not careful / mindful, this sort of mental chatter can occupy us much of the time, so that we fail to be in the present moment; we fail to see the raindrops on the branch, the glint of sunlight on snow crystals, or the smile on a child's face.</li> <li>○ A mental doing mode takes over, and we become divorced from Being; and Being in the Present Moment.</li> </ul> <p>All this is part of Dukkha.</p> <p>Sakyamuni was perhaps the first Human Being to really recognise this; after having experimented with various very strict teachings disciplines, he realised that the way to <a href="#">Sukha</a> was through what he called the middle path of mindful practices, and that these practices could greatly reduce dukkha for ourselves and those we are with. These practices embrace the four Ennobling Truths (see appendix) and the Eight-fold Path.</p> <p>He suggested that we try these paths; and that if we find them helpful, then continue with them. If we do not find them helpful, this may be because our practice is not based on <a href="#">Right View</a>.</p>
<p>Efferent nerves</p> <p>Cf. <a href="#">Afferent nerves</a></p> <p><small>Extracted from glossary of E-03</small></p>	<p>Nerves whose impulses travel from the brain to the body / organs, in contrast to afferent nerves which travel from the body to the brain.</p> <p>In the present essay the terms afferent and efferent are particularly applied to the ANS and other homeostatically related modalities such as skin temperature, pain, and <a href="#">affiliative touch</a>.</p> <ul style="list-style-type: none"> <li>• <i>Etymology</i>: from Latin <i>efferre</i> – to bear off; from <i>ferre</i> to bear. “Carrying or conducting outwards .....especially from the brain or spinal cord” [CED] to the body / viscera / organs.</li> </ul> <p>In the present context, to bear off from the brain (to the body).</p>
<p>Habit Energy /</p>	

**Habit Energy**

See also Hanh 1998; e.g. pp 24-25; 45-48; 61-62;

Habit Energies can be neutral, negative, or positive

Extracted for D11 website glossary

As we grow up, we take on certain patterns of behaviour and attitudes from our parents, teachers, and ancestors. Some of these may be helpful, some may be neutral, and others may be dysfunctional. In Buddhist psychology, these are termed Habit Energies, and overlap with Procedural Learned Tendencies and Complexes.

In the context of habit energies, the image is sometimes given of a man on a horse; the man does not know where he is going because the horse has a will of her / his own. The horse in this context is our habit energy [Hanh 1998 pp 24-25]. They can influence us at an unconscious level and so lead to volitional actions that may later perplex us – that is, we can be driven by these unconscious forces.

Complexes, in the Jungian sense, are a form of habit energies. These can be passed down to us by our ancestors, and in turn we can pass down habit energies to our off spring. These may manifest in terms of [Procedural Learned Tendencies](#) [Ogden 2009]. Negative habit energies can very easily be transmitted to our children, starting when the baby is in the womb. Hanh suggest pre-marriage classes to reduce such negative transmission.

Bringing a new life into the world is a serious matter. Doctors and therapists spend up to ten years to get a licence to practice. But anyone can become a parent without any training or preparation. We need to create an “Institute of the Family” where young people, *before they have children*, can go for one year to practice looking deeply into themselves in order to see what kind of seeds in them are strong and what kind of seeds are weak. If the positive seeds are too weak, prospective parents need to learn ways to water them in order to make them stronger. If the negative seeds are too strong, they should learn ways to transform them, to live in a way that those seeds will not be watered so much.

One year of preparation for getting married and starting a family is not too much to ask. Mothers-to-be can learn how to sow seeds of happiness, peace, and joy, and avoid unhealthy seeds in their babies’ store consciousness. Fathers-to-be also need to be aware that the way they act sows seeds in the store consciousness of their unborn child....

Hanh 2001; p 32 *with minor adaptation*

For an introduction to the concept of watering seeds and store consciousness, see also: D3: Store Consciousness and Watering our Positive Seeds

Some Habit Energies drive us into the doing mode, so we are for ever doing, planning, ruminating – and so miss the present moment: the moon dancing behind clouds at night, or the cypress tree in the courtyard [see web-article E-03].

Mindful approaches, which all embrace some form of meditation / mental training, can facilitate us in addressing our habit energies: “Hallo Habit Energy; I know you are there”; we then can simply smile at the negative Habit Energy and this will begin to de-potentiate its power over us [Hanh 1998 p 26].

Mental Training such as Meditation and Autogenic practice can become positive habit energies; and we may then feel incomplete / something not right if we miss a session. The Partial Exercise “neck and shoulders heavy”, and walking meditation, can become positive habit energies. These are linked in with the experiential mode / Being Mode, and are interlinked with increased PSNS afferent activity.

Happiness is also a habit energy. When we practice walking meditation, every step we take brings us peace and joy. When we first begin to practice walking meditation, we may have to make an effort. We are not yet skilled at it. But one day we begin to feel peace and joy quite naturally. We wonder, “Why was I always in such a hurry?” Once we feel at ease with walking meditation and other ways of moving mindfully, they become a wholesome habit.

Hanh 2001; p 47

A woman in an Autogenic Training group some years ago came up with the Personal and Motivational Formula of: “Nature Grounds Me”\*\*. Allowing ourselves to be in the present moment, to be grounded in nature, becomes a positive habit energy.

Forms of psychotherapy and Mental Training can facilitate a re-wiring of our brains – and as a result of this we can become less driven by such negative habit energies.

\*\* Thanks to KC, a member of a 2013 group, for this lovely formulation.

<p>Ignorance I</p> <p>[From D11 Glossary Ignorance I ]</p>	<p>In Buddhist psychology, it is considered that the default outlook of human beings, if we can put it that way, is based on a mis-perception of reality – and in this sense we are living in a state of ignorance. The basic misperception is the assumption that we, that is each individual, has a separate permanent self. Furthermore, we may assume that other animals, plants, and objects in the world and cosmos have a permanent separate existence.</p> <p>This assumption was seen as being false by Sakyamuni, who realised that flora and fauna, the ecosystem, and the whole cosmos inter-is. That it, it can only really be understood in term of an understanding of <a href="#">Interdependent Co-Arising</a>.</p> <p>This mis-perception means that axiomatically most of us grow up living and thinking with false assumptions. This in turn results in a distorted view of the world; we can only develop <a href="#">Right View</a> when we real-ise Interdependent Co-Arising.</p>
<p>Ignorance II</p> <p>[From D11 Glossary Ignorance II ]</p>	<p>Ignorance is regarded as one of the toxic trio, the other two being craving and hatred / ill will towards others. Ekman et al, in the context of the three toxins of the mind, have put it this way:</p> <div style="border: 1px solid #FF00FF; padding: 10px; margin: 10px 0;"> <p>The third, most fundamental affliction of the mind is the delusion of grasping onto one’s reified personal identity as real and concrete. According to Buddhism, the self is constantly in a state of dynamic flux, arises in different ways, and is profoundly interdependent with other people and the environment. However, people habitually obscure the actual nature of the self by superimposing on reality the concepts of permanence, singularity, and autonomy. As a result of misapprehending the self as independent, there arises a strong sense of the absolute separation of self and other. Then, craving naturally arises for the “I” and for what is mine, and repulsion arises toward the other. The erroneous belief in the absolute distinction of self and other thus acts as the basis for the derivative mental afflictions of craving, hatred, jealousy, and arrogance. Such toxins of the mind are regarded, in Buddhism, as the sources of all mental suffering.</p> <p style="text-align: right;">Ekman, Davidson, Ricard &amp; Wallace 2005</p> </div>
<p>Inter-Being</p>	<p>A term coined by Thich Nhat Hanh [Hanh 1998 e.g. pp 24-27; 2012 pp 55-61]. The following extensive quote gives a good feeling of the term.</p> <div style="border: 2px solid #00AEEF; border-radius: 20px; padding: 20px; margin: 10px 0;"> <p>If you are as poet, you will see clearly that there is a cloud floating in this sheet of paper. Without a cloud, there will be no rain; without rain, the trees cannot grow; and without trees, we cannot make paper. If the cloud is not here, the sheet of paper cannot be here either. So we can say that the cloud and the paper <i>inter-are</i>.</p> <p>“Interbeing” is a word that is not in the dictionary yet, but if we combine the prefix “inter” with the verb “to be”, we have a new verb, <i>inter-be</i>.</p> <p>If we look into this sheet of paper even more deeply, we can see the sunshine in it. If the sunshine is not there, the forest cannot grow. In fact, nothing can grow. And so, we know that the sunshine is also in this sheet of paper. The paper and the sunshine inter-are.</p> </div> <p>The concept of inter-being is fundamental to Buddhist psychology. The realisation of the inter-relatedness of all things acts as an anti-dote to the <a href="#">toxic trio</a>. A modern realisation of inter-being can be found in the Systems view of life [Capra &amp; Luisi 2016].</p>
<p>Interdependent Co-Arising /</p>	

Interdependent Co-Arising	<p>Also known as Dependent Origination; Dependent Co-arising.</p> <p>A Buddhist term indicating that everything is inter-linked, and that nothing actually has a permanent, separate self – including human beings.</p> <ul style="list-style-type: none"> <li>○ Everything in the cosmos is inter-linked, and thus is dependent upon many interlinking factors for its existence (see also <a href="#">inter-being</a>).</li> </ul> <p>Ignorance, in the Buddhist sense, arises primarily because we are not aware or mindful of this fact. A fundamental aspects of Right View<sup>24</sup> is the recognition of the truth of Interdependent Co-Arising [Hanh 1998].</p> <p>“When this exists, that arises” [Keown p 221]. Hanh uses the formulation (paraphrasing): “When conditions are sufficient, x manifests; when conditions are no longer sufficient, x ceases to manifest in the form it has been”. Yet the altered form, after x ceases to exist, means that the altered form has arisen as a result of the Dependent Co-arising that occurs when x can no longer manifest. The understanding of inter-being as a fundamental dynamic of the cosmos has, in recent times, been called “The Systems View of Life”; and contrasts with the mechanistic paradigm that from time to time has become the cultural zeitgeist of the time [Capra &amp; Luis 2014].</p> <ul style="list-style-type: none"> <li>✿ Inter-Being is intimately linked to a realisation of impermanence; and that all humans, all life, and all objects are empty. Empty of what? Empty of a separate permanent existence. We are co-dependent on the sun, the moon, the clouds, the air, and the earth; and long extinct suns from which the heavy elements in our bodies (such as iron) were created.</li> </ul>
Mudita	<p>Sympathetic Joy [Salzberg 1995 p 119].</p> <p>A Pali term, the root of which means: “to be pleased, to have a sense of gladness”; in the context of mudita, this is directed at the positive state of the other person.</p> <p>“Rejoicing in the good fortune of another” [Keown 2003].</p>
Right View	<p>One of the eight modalities of the Eightfold Path that the Buddha suggested can lead us towards Sukha.</p> <p><a href="#">Dukkha</a> to a large extent arises because our perspective is distorted and we believe that objects have a permanent and enduring existence – and that we ourselves have a permanent separate self. This is a delusion, and fails to take into account the inter-related nature of all things (see <a href="#">Interdependent Co-Arising</a>).</p> <ul style="list-style-type: none"> <li>✿ Right in the sense used in the Eightfold Path means wholesome and Mindful. The realisation that all is inter-related and impermanent can act as a great anti-dote to ego (and ego-inflation); and enables us to see that we are part of the whole. Just like the primrose, we have our season and then return to mother earth.</li> </ul> <p>For a comprehensive review of Right View, see Hanh 1998 pp 51-58</p>
Second Arrow	<p>As human beings we experience, sooner or later, physical pain and emotional pain; and hence we inevitably experience suffering. This suffering can be equated to an arrow striking our body; and of course, such an arrow can be painful in both physical and mental ways. This initial discomfort is caused by the “first arrow”.</p> <p>Yet it is the second arrow that tends to be responsible for deeper <a href="#">Dukkha</a>; and this second arrow is unconsciously self-inflicted unless we develop skilful means to prevent it [Teasdale &amp; Chaskalson 2011B].</p> <ul style="list-style-type: none"> <li>○ The second arrow will include negative ruminations; and ruminations in which we compare our (negative) present state to a desired state – and this involves what has been called a discrepancy monitor [Segal, Williams &amp; Teasdale 2013 p 66], which gives us the ability to compare our present state to a previous state or a desired state. It can be that this comparison will lead to appropriate action to reduce or abolish the discrepancy, and in this context the discrepancy monitor is very useful.</li> <li>○ However, in the case cited in section 2.3 of us waking up one morning and feeling low and depressed (compared with how we were a week ago), the resultant can be negative ruminations; we enter a downward spiral in which we keep comparing our low feelings now with the better feelings of last week. This exacerbates our negative feeling and low mood.</li> <li>○ In this situation, the discrepancy monitor triggers negative affect and the second arrow.</li> </ul> <p>See Figure 2.3A.</p>
Self-Realisation /	

<sup>24</sup> One of the Eight-fold Noble Path; see glossary of D11.

**Self-Realisation**

A term used by Schultz which seems to very much overlap with Luthe’s<sup>25</sup> concept of the Authentic Self.

[Sources: Glossary of D11; and Ross 2016; see also E-03 on website.]

In the context of Autogenic Training, Schultz said:

- o “In this sense our work leads towards the highest goal of psychotherapy (the highest stratum of existential values), to self-realisation.” [Quoted by Wallnöfer 2000 – see also appendix C in website article E-03].

This implies an ethical dimension, and overlaps with Jung’s concept of Individuation – and with the concept of Mindfulness.

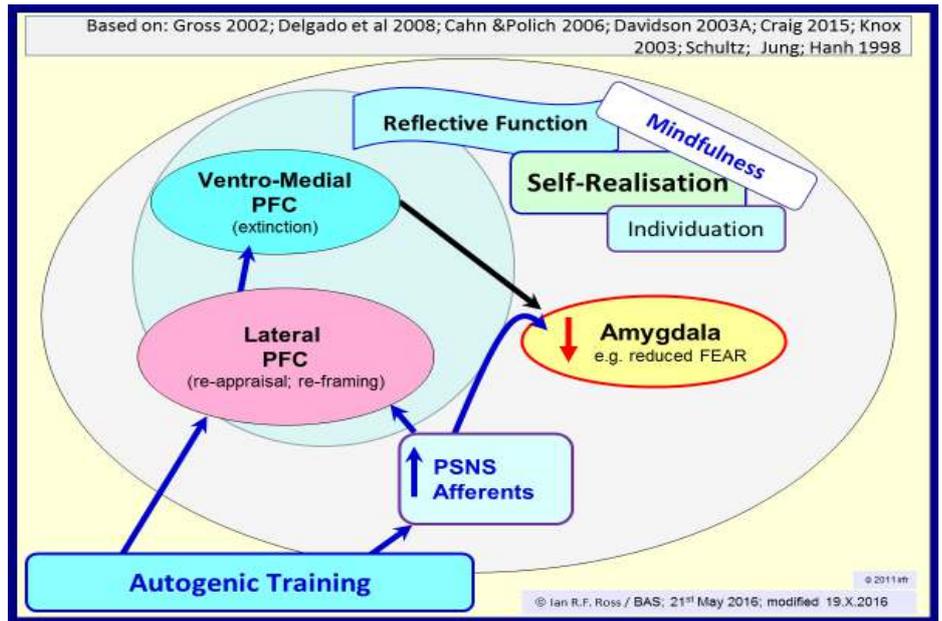
Glossary Figure GF-01 illustrates the development of Self-Realisation in the context of neuro-physiological aspects of Autogenic Training.

\*\* Or perhaps the two concepts overlapped; according to O’Donovan, Schultz and Luthe met back in the 1930s [O’Donovan 1989 p 8].

Comments on Figure GF-01

- Mental Training such as Meditation / Autogenic Training activates the Lateral PFC and the Ventro-Medial PFC.
- These are involved in re-framing / reappraisal and “extinction” (of old memories) respectively.
- The activation of the above circuits results in inhibitory messages being communicated to the amygdala with resultant reduction in FEAR and RAGE type defensive (flight and fight) circuits.
- At the same time, there is activation of our Reflective Function [Knox 2003] and Mindfulness, which facilitates Self-Realisation [Schultz / Wallnöfer 2000] and Individuation [Jung].

PFC: Pre-Frontal Cortex  
PSNS: Para-Sympathetic Nervous System



Glossary Figure GF-01  
Autogenic Training and Self-Realisation

[Adapted from Ross 2016 G-12C]

Sukha /

<sup>25</sup> \*\* Or perhaps the two concepts overlapped; according to O’Donovan, Schultz and Luthe met back in the 1930s [O’Donovan 1989 p 8].

<p>Sukha</p> <p>A State of Flourishing</p>	<p>In many ways, this can be seen in terms of the opposite, or anti-dote, to dukkha. In western psychology, it has been assumed that all emotions are normal in the sense that they have developed during evolution, and – in that sense – have a valid role to play in our lives. In Buddhist psychology, no such assumptions are made in that certain emotions are regarded as being inherently toxic (see for example the <a href="#">Toxic Trio</a>).</p> <p>The Dalai Lama suggests that Happiness is the state that all humans seek [Dalai Lama &amp; Cutler1998]. As discussed in the relevant sections of the glossary, happiness is perhaps best seen in terms of <a href="#">Well-Being</a>.</p> <p>Sukha can be developed through mindfulness and watering the positive seeds within.</p> <p>Ekman et al have this to say about happiness:</p> <div style="border: 1px solid black; border-radius: 20px; padding: 10px; margin: 10px 0;"> <p>Buddhists and psychologists alike believe that emotions strongly influence people’s thoughts, words, and actions and that, at times, they help people in their pursuit of transient pleasures and satisfaction. From a Buddhist perspective, however, some emotions are conducive to genuine and enduring happiness and others are not. A Buddhist term for such happiness is sukha which may be defined in this context as a state of flourishing that arises from mental balance and insight into the nature of reality. Rather than a fleeting emotion or mood aroused by sensory or conceptual stimuli, sukha is an enduring trait that arises from a mind in a state of equilibrium and entails a conceptually unstructured and unfiltered awareness of the true nature of reality.</p> <p style="text-align: right;">Ekman et al 2005; pp 59-60</p> </div> <p>Behind this statement is the Buddhist concept that suffering, especially in terms of the <a href="#">second arrow</a> (see also D-8) comes about through <a href="#">ignorance</a> of the true nature of reality and life – the overcoming of such ignorance embraces a realisation of the inter-connectedness of all things; which also implies that no one thing or person has a “permanent separate self”. Such ignorance dissolves with a growing awareness of the inter-being nature of all things.</p>
<p>Sutta <sup>(Pali)</sup></p> <p>○ Sutra <sup>(Sanskrit)</sup></p>	<p>“A thread”, which in this context came to mean “A discourse of the Buddha” (i.e. a teaching).</p>
<p>Tanhā /</p>	

Tanhā (Pali) | This is often translated as craving, or as unquenchable craving – which leads suffering.

The crucial essence of tanhā is capture by the notion of unquenchable thirst – a thirst which can never be fully satisfied or quenched but which, tragically, we, nonetheless, feel compelled to keep trying to satisfy. It is this fatal combination of the unquenchability of the desire, coupled with our unwillingness to simply let go of it that creates suffering.

Teasdale & Chaskalson 2011 p 94

We become attached to desire; to craving. As a result, we suffer.

Neuro-physiological background:

One of the driving forces in mammals is our SEEKING system, that is the motivating system. It can have both positive and negative manifestations. The SEEKING system is one of the seven primary process emotions that we share with mammals [Panksepp 1998], and in itself is a wholesome affect. However, neo-cortical elaborations of the basic seeking urge can lead to tanhā – and thus negative manifestation of SEEKING. Tanhā can be a coveting type of craving.

I: Positive Manifestations:

- a. The SEEKING system gives us the energy to seek shelter, food, warmth, companionship etc. [Panksepp 1998]. Without this primary process emotion, mammals would not have developed in the way they did<sup>26</sup>.
- b. In humans, the SEEKING system also gives us the energy and motivation to seek meaning in life [e.g. Panksepp 1998 e.g. p 145]. A common accompaniment of depression is loss of meaning.

II: Negative Manifestations in the sense of unhelpful craving:

- a) Craving for fame, popularity, money may drive ambition in an unwholesome way. They do not in themselves bring about well-being [Csikszentmihalyi 1992].
- b) Craving that what we enjoy / find pleasure in will last. The reality is that nothing lasts; nothing is permanent.
- c) Craving that things are not as they are.
  - e.g. feeling that we will only be happy when we retire / have more money / find another partner.

These modalities can result in on-going mental activity in which we are ruminating negatively about the past or getting lost in the future [Hanh 1990].

Tanhā is to do with the negative manifestation of craving (SEEKING) as summarised above. Such craving can induce [Dukkha](#).

.....given that the Second Noble Truth identifies dukkha as the attachment to desire [i.e. tanhā], it then goes on, reasonably enough, to the instruction that: "Attachment to desire should be let go of." Similarly, the essence of the Buddha's teaching can be summarised as: "Nothing whatever should be grasped or clung to as "me" or "mine" (Buddhadāsa 1989, 138). In other words: "Do not take anything personally."

Teasdale & Chaskalson 2011 p 99

Buddhadāsa, B. 1989. Me and Mine, selected essays of Bhikkh Buddhaddsa. Edited and with an introduction by Donald K Swearer, Albany: State University of New York Press.

The paper by Ekman et al gives a good insight into the danger of the concepts of "me" or "mine" [Ekman et al 2005 "Buddhist and Psychological Perspectives on Emotions and Well-Being"].

The concept and perspective of "do not take anything personally" is a great wisdom, and is one of the Four Agreements in the Toltec tradition; the four are:

- ⊗ Be impeccable with the truth
- ⊗ Do not make assumptions
- ⊗ Do not take things personally
- ⊗ Do your best

Ruiz 1997

A recognition of the [interdependent co-arising](#) of all things helps us to free ourselves from concepts such as "me" and "mine" and so free us from craving / Tanhā.

See also [Toxic Trio](#).

Toxic Trio /

<sup>26</sup> The SEEKING system is inter-linked with the other six primary process emotions: CARE (nurturing); FEAR; RAGE; PANIC / GRIEF (arising from Separation Distress); LUST (sexual neuro-circuits); and PLAY [Panksepp 1998; Panksepp & Biven 2012].

<p>Toxic Trio (from D11 Glossary)</p> <p>Based on various sources including Ekman, Davidson, Ricard &amp; Wallace 2005 Toxic Trio continued</p>	<p>In Western psychology, all emotions are regarded as having their rightful place in the totality of affects. In Buddhist psychology, certain affects / emotions are regarded as inherently unwholesome / toxic [Ekman et al 2005 – p 60].</p> <p>These include the toxic trio, which “are considered to be fundamental toxins of the mind” [op cit p 60]. These are:</p> <ul style="list-style-type: none"> <li>i. Hatred / Ill Will towards others. <ul style="list-style-type: none"> <li>➤ With hatred, we tend to exaggerate the ‘bad’ / negative qualities in the other, while downplaying / discounting the positive qualities in the other. In addition, we fail to realise the <a href="#">Interdependent Co-Arising</a> nature of reality (and thus “but by the grace of Dao go I”).</li> </ul> </li> <li>ii. Craving <ul style="list-style-type: none"> <li>➤ In the context of Buddhist psychology, craving can be considered to be an unwholesome aspect of the SEEKING system. For example, craving for power, prestige, fame and money are false gods in that they do not result in true <a href="#">well-being</a> or happiness. They are linked to feelings of me and mine, in which we see ourselves as separate entities with a tendency to discount other people or their feelings.</li> <li>➤ In craving we exaggerate the positive qualities and discount the negative / toxic elements of what we crave</li> </ul> </li> <li>iii. The idea that we have a permanent separate self. This leads to concepts of me and mine that can then lead to the development of hatred / ill-will towards others / craving. <ul style="list-style-type: none"> <li>➤ In Buddhist psychology much play is made on the concept of empty and emptiness. Thich Nhat Hanh would say: “We are empty; empty of what? Empty of a permanent separate self. We are made up of non-self elements – including large chemical elements such as iron from long extinct stars” [à la Hanh 1998].</li> </ul> </li> </ul> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; margin: 10px 0;"> <p style="text-align: center;">Look into the self and discover that it is made up of non-self elements. A human being is made up of only non-human elements. To protect humans, we have to protect the non-human elements – the air, the water, the forest, the river, the mountains, the animals. The <i>Diamond Sutra</i> is the most ancient text about how to respect all forms of life on earth, the animals, vegetation, and also minerals. We have to remove the notion of humans as something that can survive by itself alone. Humans can survive only with the survival of other species. This is exactly the teaching of the Buddha and also the teaching of deep ecology.</p> <p style="text-align: right;">Hanh 1998 pp 126-127</p> </div> <p>The Toxic Trio come about fundamentally as a result of misperceptions of the world (i.e. <a href="#">ignorance</a> at a fundamental level) that fails to grasp the <a href="#">Interdependent Co-Arising</a> nature of things and reality. In this sense, the toxic trio are not our fault [[à la Gilbert 2009; Gilbert and Choden 2013]; however, once we become aware of these matters it is our ethical responsibility to overcome them by skilful means.</p>
Well-Being /	

<p>Well-Being</p> <p>From E-03 Glossary</p> <p>[Adapted from Ross 2010 Glossary]</p>	<p>Dr Martin Seligman, a psychologist at the University of Pennsylvania, has been one of the key players in the development of <u>Positive Psychology</u> in North America.</p> <p>Seligman suggests that we can regard happiness as embracing three components. Angela Clow, Professor of psychophysiology at Westminster University, suggests that the concept of Well-Being may be a better word than happiness for British (as compared with North American) citizens (Professor Angela Clow in a talk on "Stress, Health and Happiness" at the Edinburgh International Science Festival on 09.04.2006). So Dr Seligman's definition on happiness can be reframed as Well-Being as follows:</p> <ul style="list-style-type: none"> <li>• Pleasure / positive emotion;</li> <li>• Engaged, goal directed pursuits / occupations. i.e. we are involved in, and committed to, various pursuits / activities; the construct of Well-Being is not one of a passive "happy" state, but one that also embraces engaged – and I would add mindful – activity.</li> <li>• <u>Meaning</u>; and / or having a connection to some larger purpose. (This might be, for example, the ecology of our planet in the context of climate change.) [See also Frankl 1946; 1952.] (Based on and paraphrased from Davidson 2005; with some additions).</li> </ul> <p>Thus Well-Being, in its deeper sense, is clearly far more than an individual matter. It also links in with the concept of the inter-relatedness of all things, and thus mindfulness. In this sense the Well Being of each individual is intimately linked with the wellbeing of all.</p> <p>See also A3 on website: <a href="http://www.atdynamics.co.uk">www.atdynamics.co.uk</a></p>
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### Linked themes in this Autogenic Dynamics section

A9	Emotions, Well-Being and Immune Function – <i>Awe and Shame as modulators of Being – for good or ill</i>
B1	Bears, Imagination, and Well-Being
B3 Part I	The Origins of Affect and Affective Neuroscience – and the misplacing of Affect in the Neo-cortex
B3 Part II	Emotional Operating Neuro Circuits – <i>a brief introduction to Panksepp's model</i>
B6	Perceptions, Flowers, and Reality
B10	Snakes, Conditioned Stimuli, and Equanimity – <i>Approaches to treating mind-body disturbances</i>
B11	Distressed Mind-Body-States to Inner Tranquillity – <i>from Negative Ruminations towards Well-Being</i>
B19	Reflections on a Secure Base – <i>Bowlby, Ainsworth, Attachment and Well-Being</i>
B20	Separation Distress and Well-Being – <i>Neuro-physiological reflections on developing a Secure Base</i>
C12	Presence in Mind – Autonomic Afferents and Well-Being
D1	Reflections on foundations for Mindful Living
D4	Dukkha, Impermanence, and Inter-relatedness – <i>Some Reflections on Sakyamuni, Inter-relatedness, and Well-Being</i>
D8	Dukkha II: The Second Arrow and Sympathetic Afferents (this paper)
D9	Dukkha III: Reducing Dukkha: <i>Experiential Modes, Mindfulness and Intuitive Working Memory</i>
D10	Look at the Cypress Tree
D11	Sukha: Paths of Well-Being, PSNS Afferents, and Inner Warmth: <i>from Dukkha to Sukha</i>
E-03	Look at the Cypress Tree – <i>Autonomic Afferents and Well-Being [Background Research Paper for talk given to the British Autogenic Society Annual Lecture 21st May 2016]</i>
E-04	Look at the Cypress Tree – autonomic afferents and well-being – a four page summary of E-03 outlining some of the more important concepts

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<sup>28</sup> This is an excellent book: I was initially put off by the title because I did not understand it. It refers to those people who have had a major catastrophe in their lives – such as cancer, a heart attack, or profound loss. These people were invited to attend Jon Kabat-Zinn's Mindfulness Based Stress Reduction clinic, and as a result of this many of them were then able to go on to live full and meaningful lives, despite what had happened to them.