

1. Preamble:

Awe and Shame are good examples of contrasting emotions that can facilitate well-being, on the one hand (Awe); or send us in the direction of distress and potential ill-health on the other (shame).

It had been known for several decades that there is a link between stressors, negative affect and ill-health. More recently, evidence has been emerging that there is a connection between positive affect and Well-Being – and that this may be mediated, at least in part, by a reduction in interleukins [IL] such as IL-6 levels.

Background comments on interleukins and other immune system related molecules

In this article we will be referring quite extensively to informational substances that are part of our immune system's response to infection / inflammation. These include the interleukins [e.g. IL-1; IL-6] which are a "group of cytokines (secreted proteins and signal molecules) that were first seen to be expressed by white blood cells (leukocytes) [Brocker 2010]^[quote ex Wikipedia-III]". They include other cytokines such as Tumour Necrosis Factor alpha (TNF- α).

In brief, these cytokines:

- become elevated during infections and inflammation – and are thus part of an appropriate immune response;
- can also become elevated secondary to psychological stressors [Dickerson et al 2004 p 125]; over time, this can lead to persistent / chronic conditions such as diabetes, cancer, and heart disease (see below) and possibly Alzheimer's Disease [Swardfager 2010];
- result in modest reductions in elevated levels of interleukins, and can promote Well-Being.

On the other hand, severe reductions are associated with a catastrophic immune deficiency.

IL-6 is an informational substance connected with the immune response that increases in stressful situation and during infections. TNF- α is a cytokine whose primary role is to regulate the immune system.

In this article, we will first be looking at distressing emotions (mainly guilt and shame), before turning to positive and life-enhancing emotions including awe.

2. Research on Negative Affect and Dis-Ease

Evidence has accumulated over the years that stress (stressors) and negative affect can increase dis-ease, which may manifest itself in a mental or physical disease [Kiecolt-Glaser et al 2002; Jaremka et al 2013; Felitti et al 1998 – see also Ross 2010 pp 61-62]. If we are unable to deal with stress and stressors effectively, the negative feelings associated with them will be reflected in cascades of informational substances (hormones, neuro-chemicals etc.) that over time can lead from the dis-ease of the immediate situation to persistent (chronic) illness.

How can this be?

We know that the Stress Response [Selye 1956 / 1976] – which occurs when we are under threat (e.g. in war; in an abusive relationship; or when we have an infection) can mobilise the flight / fight pathways which, in evolutionary terms, were vital for our survival, both individually and as a species. Figure 2.1 summarises two of these pathways.

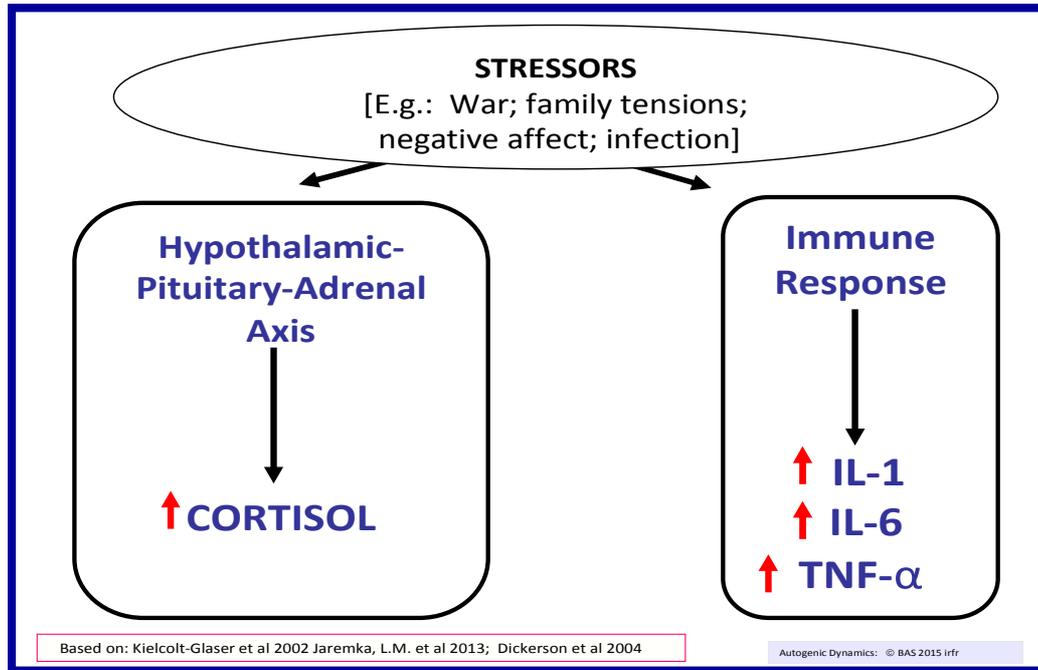


Figure 2.1

Stressors: and Cortisol / Immune Responses

Legend: I-L: interleukin; TNF- α: Tumour Necrosis Factor alpha.

Comment on Figure 2.1

1. The Stress Response includes what I have previously described as Type I (with the release of adrenaline) and Type II (through the HPA axis with the release of Cortisol) [see e.g. Ross 2010 page 50, Figure 2.4]. It is the type II response which is depicted here – and this is the Stress Pathway that becomes particularly problematic when the individual is faced with chronic / persistent / recurrent stressors.
2. In addition, stressors affect the immune system, boosting the levels of IL-6 – which in the short term is adaptive; but in the long term can cause havoc with our physiology.

As implied above, with acute stressors the above cascades are adaptive; however, persistent stressors such as persistent work stress, family disharmony, adverse childhood events [Felitti 1998] and recurring anxiety are risk factors for the conditions illustrated in Figure 2.2:

- Heart Disease
- Cancer
- Type II Diabetes
- Metabolic Syndrome and
- Frailty

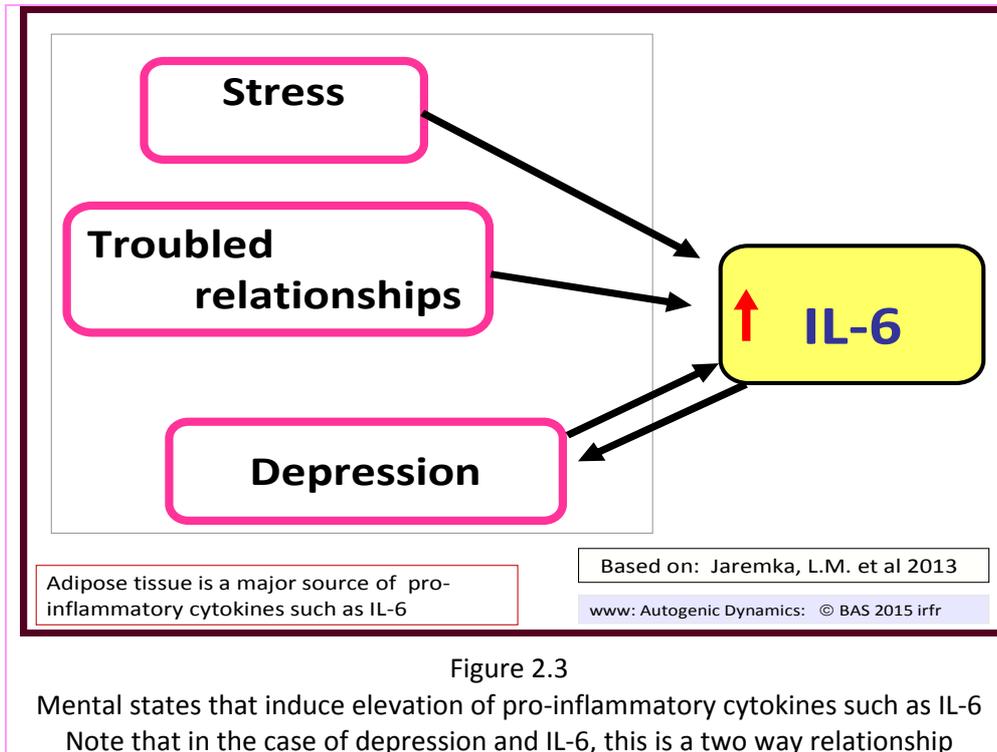
Figure 2.2

Some of the diseases associated with
Persistent stressors – *such as family disharmony*

[After Kielcolt-Glaser et al 2002; Jaremka LM et al 2013]

One of the physiological mechanisms by which these conditions develop is now thought to be through persistently elevated levels of IL-6. Furthermore: “loneliness, subclinical depression, and major depression enhance inflammatory responses to an acute stressful event” [Jaremka LM et al 2013 p 1]. This means that when we are already down, a given stressor will tend to have an even more negative physiological effect upon us.

Research has also shown that depression increases IL-6¹; and increased levels of IL-6 (e.g. when we have flu) increase depression [Jaremka op cit]. Many of us are aware that when we are suffering from a virus infection, we may feel particularly low. That is, when we have flu, IL-6 levels are high, and this triggers depressive feelings; and depression per se increases IL-6 levels. Figure 2.3 summarises some of the above findings:



3. Emotions and IL-6 – certain emotions may stimulate immune system molecules

3.1 Introduction

As already discussed, certain negative emotions have been shown to have specific effects on immune informational molecules, of which cytokines are one example (e.g. IL-1;IL-6; TNF- α) [Jaremka 2013; Dickerson et al 2004] – potentially causing chronic conditions such as those referred to in Figure 2.2. These negative emotions include fear [FEAR], shame, anxiety and depression. Shame in particular seems to have a significant effect on TNF- α .

3.2 Shame

Shame is an emotion that we may all experience from time to time. As an adult, this may be a helpful emotion in that it can tell us that we have gone beyond a certain limit of what we inwardly feel to be acceptable; that is, it may indicate that we have breached our own moral / ethical code.

On the other hand, shame that originates from childhood may be quite different. In this we may feel shame as a result of inappropriate behaviour / words of a parent or other person towards us. This can result in persistent low esteem and shameful feelings (core shame – see 3.3 below) that are not of our making – and for which some form of counselling / therapy may be of great help and benefit.

Long term unresolved shame can result in adverse health outcomes [Dickerson et al 2004]. We will first have some brief reflections on shame and guilt.

¹ These matters are complex; cortisol itself has an anti-inflammatory effect and a model put forward by Watkins links depressed thinking (as a stressor) with stimulation of the HPA axis with a release of cortisol and so a depression in immune function [see Watkins 1997 page 16].

3.3 Shame and Guilt

Shame and guilt are overlapping emotions, and yet they are subtly different. Shame seems to be an emotion deeply connected with our core being and probably develops very early in the life of a child; so with this type of core shame we may feel: “I am bad” [Dickerson et al 2004]. Shame, subjectively speaking, can thus dis-equilibrate our core being, and this is reflected in recent research on its effect on our immune function – as will be discussed shortly.

Guilt, on the other hand, is to some extent less invasive of our being. We can feel guilty about something we have done: “I did something bad” [Dickerson et al 2004] without necessarily feeling we are a bad person.

Shame and guilt can both be healthy and appropriate emotions; however, they can also paralyse our ability to be whole. Children may develop what has been called core shame if they are subjected to dysfunctional / inappropriate parenting; this in time can play havoc with their ability to learn [Cozolino 2013]. Significant problems with guilt and shame may arise when we have not had a secure base [B19 – Reflections on a Secure Base].

3.4 Writing about shameful experience can increase TNF- α [based on Dickerson 2004]

Preface to the study:

In the research by Dickerson et al discussed below, the subjects were asked to write about a “traumatic experience in which they blame themselves”, or a neutral experience (the control group) for a total of twenty minutes each day on three separate days. When writing about the traumatic experience / self-blame, the researchers were able (from their previous research) to distinguish between those who were experiencing mainly shame, and those who were experiencing mainly guilt. Salivary samples were taken before and after each writing session, and the TNF- α levels subsequently measured.

Consciously inducing negative emotions can increase production of TNF- α ; for example, writing about shameful experiences on three separate days has been shown to increase TNF- α [Dickerson et al 2004]. In the short term, this may possibly be an adaptive response [Dickerson et al 2004 – p 130]; but in the long term, persistently elevated levels of cytokines may result in those conditions illustrated in Figure 2.2 above [Dickerson et al 2004 p 129]. We need to be aware of this when we decide to do an *Intentional* Off Loading Exercise; for example, a short series of *Intentional* Off Loading of Anger – either verbally out loud, or through writing – may be beneficial. But if we are still doing such exercises about the same anger issue months later, then this becomes problematic and potentially harmful [see also Ross 2005X pp 13-24]. In fact, it may be “inducing the second arrow” [Hanh 2012 pp 117-119; see also D8: “Duhkha II: One or two arrows?”]

Ekman’s research has shown that when we imitate a certain emotion with the appropriate facial expression, the neuro-physiology of that same emotion kicks in:

..... If you intentionally make a facial expression, you change your physiology. By making the correct expression, you begin to have the changes in your physiology that accompany the emotion. This was seen in both the work on the bodily physiology and some work by Richard Davidson on changes in the brain. The face is not simply a means of display, but also a means of activating emotion⁴.

Ekman; 2003; p 130

⁴ Davidson et al 1990

The beneficial effects of writing about distressing feelings and emotions have been shown to have positive outcomes in a number of studies [e.g. Pennebaker & Chung 2011; see also other Pennebaker references]. However, the research mentioned above about writing about shame is an indication that we need to be cautious in our assumptions and interpretations. Dickerson et al put it this way:

It is possible that persistent exposure to shame-inducing situations could translate into sustained activation of the TNF cytokine system, which could have long term health effects in the context of inflammatory disease – for example:

- Rheumatoid arthritis
- Cardiovascular disease.

However, this would be dependent on a myriad of factors, including the magnitude and chronicity of the circumstances, the individual's vulnerability (i.e. health status, personality), and the nature of the emotional experiences themselves. For example, when emotional expression is coupled with cognitive processing of the experience, it can lead to positive immunological effects [Pennebaker 1988A]. Therefore, acute laboratory induced effects cannot be extrapolated to infer long-term health consequences. It is unclear what the clinical significance of such changes would be.

Dickerson et al 2004 p 129-130

Bullet points added

They go on to indicate that further research in these areas is required. Most studies of psychological predictors of the immune system and health have focused on stress and depression. Dickerson's research suggests that "self-appraisals, such a self-blame, and basic emotions, such as shame, deserve additional attention." [Dickerson et al 2004 p 130].

3.5 Shame, Perceptions, and Reframing

Shame is an emotion that most of us experience from time to time; yet aspects of shame are clearly culturally determined².

We may grow up assuming that something that happened in our childhood was shameful – and that shame has been reverberating in our mind and our neuro-circuits ever since. As a result:

- We may have developed procedural learned tendencies which in our childhood were adaptive and appropriate, but as an adult are actually dysfunctional [Ogden 2006; 2009; and see web B17].
- On-going feelings of shame may well lead to elevated levels of *TNF- α* , and the resultant potential to induce inflammatory conditions such as Rheumatoid Arthritis, and Cardio-Vascular Disease (see above).
- We may tend to blame our parents / ancestors / others for what has befallen us.

Such tendencies and perceptions can lead to danger, and to us becoming stuck in the past ["pursuing the past" – Hanh 1990]. We can go through our lives believing that our pain and difficulties are not of our making – and end up being bitter and blaming others. In each moment of our lives we can ask ourselves: "Am I master of the situation?; of myself?" If we are not, then someone or something else has become our master – to which we may become enslaved.

Suppose we have a friend who is quick to anger. We can think there is something wrong with him, and try to suppress his anger. We can think that because he is raising his voice we have to raise ours. Or we can be the master of ourselves in that situation, feeling real compassion for the other person's difficulties. Sometimes it's not a person in the moment but a person in the past who we think is the master of our situation.

Hanh 2012 pp 151-152

² For example, the nerve to our genital regions is called the Pudendal Nerve; now the word pudenda (Latin) means "shameful (parts)" [Collins English Dictionary 2011 p 1330]; the nerve could have been called the "life giving nerve" – for without it we would not be. However, we may wish to consider the possibility that the fact that the word Pudendal was used for this nerve reflected a patriarchal society in which men (consciously or unconsciously) often treated women badly, and perhaps felt ashamed of the way they did treat women. Sexual hang-ups seem to be, to a large extent, culturally determined. (For example, some ancient eastern temples do not appear to have the restraints found in European churches / cathedrals.)

This raises interesting issues. If we perceive / assume that our difficulties are not of our making, but arise from past events / people, and this is bothering us, we will be in a negative mental state and this will neuro-physiologically induce cascades of mal-molecules³ that will tend to keep us fixed with this perception, so we are not and cannot be master of ourselves⁴. In effect, this means that we cannot be authentic or our true self [Winnicott 1965 pp 140-152] because we are avoiding taking on responsibility for our own Being. If we have been having psychotherapy and are aware we have a Negative Mother Complex, that in itself may be helpful; yet it can get in the way of our own development if this results in us continuing to blame our mother. This in turn can block the development of compassion for her and so we hold on to the Complex – rather than Letting Go. As Jung says, the complex can have us [Jung CW 8 (1934 / 1948; para 200)].

Hanh concludes the above quote with these words:

We say that we are behaving a certain way because of something our parents or someone else did to us as a child. But each person has their own karma and each person is the master of their own situation in the moment, not a slave to others past or present.

Hanh 2012 p 152

This is quite a tough statement from a very compassionate man. Our perceptions are crucial for our Well-Being; if we remain stuck in the negative mental state of blaming our parents, this mind-state will be fuelled by “mal-molecules” [Ross 2005X Figure 3.1 p 5], which will then be the masters of our mental state which will stay disturbed.

On the other hand, if we change our perceptions and develop compassion for the other, and embrace the idea that we ourselves are the master of our situations, then eu-molecules [Ross 2005X Figure 3.6a on page 9] will begin to flow and we will begin to see reality as it is, and not refracted through troubled waters.

Breathing in, I become as a still lake;
Breathing out, reality is reflected truthfully

A recent Autogenic student in her feedback made the pertinent suggestion that in addition to writing / off loading about negative emotions, it might be helpful to also write about positive emotions⁵. Positive emotions have been shown to have positive effects on our Well-Being, and to this we will now turn.

4. Research on Positive Affect /

³ As discussed in Ross 2005X, molecules are obviously not in themselves bad [Mal-] or good [Eu-]; yet persistent elevations of certain molecules like cortisol can lead to adverse health effects; whereas the release of endorphins and oxytocin, for example, can have very beneficial outcomes for our Well-Being.

⁴ For example, such negative mind states may be associated with activation of our FEAR and RAGE Emotional Operating Neuro Circuits (Systems – EONS) [see Panksepp 1998; Panksepp & Biven 2012; and B3 Part I & II]; and our mental state in such conditions is not conducive to Mindfulness and / or clarity of thought.

⁵ Thank you Ingrida.

4. Research on Positive Affect and Well-Being [based on Stellar et al 2015]

4.1: Introduction

During the last several decades, much research has been focused on the damaging effects of stressors and negative emotions; and relatively little on the life enhancing modalities of positive affect.

Pioneers of the importance of meaning and positive thought towards / in relation to human Well-Being include Carl Jung and humanistic psychologists such as Abraham Maslow, Carl Rogers, and Erich Fromm. 1998 was a pivotal year in the positive psychology movement, when Martin E. P. Seligman gave the presidential address to the American Psychological Association [Seligman 1998]. Other key figures in recent decades have included Alice Isen [e.g. Isen 2008 / 2010] and Barbara Fredrickson [e.g. Fredrickson 2009].

Investigations into the neuro-physiological basis of how it is that positive affect and emotions can lead to better health outcomes – including overall Well-Being – have recently indicated that this is at least partly due to reduced levels in inflammatory cytokines such as IL-6 [Stellar, John-Henderson et al 2015]. Figure 4.1A below tabulates the specific positive emotions evaluated in this study.

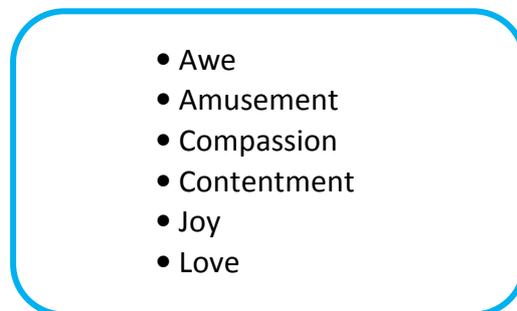
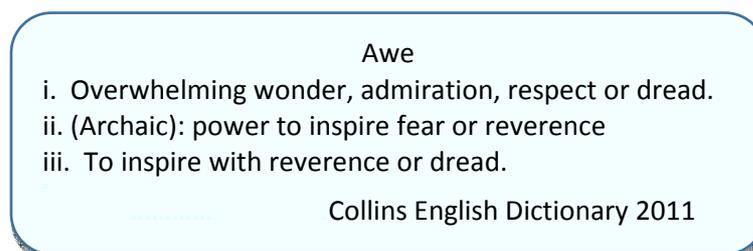
- 
- Awe
 - Amusement
 - Compassion
 - Contentment
 - Joy
 - Love

Figure 4.1A
Positive Emotions Evaluated
in Stellar et al study

In this research, of the emotions studied, awe was found to be the emotion that has the biggest impact on reducing IL-6 levels. Our SEEKING system energises us and gives us the motivation to explore, to look at deeply, and to wonder. Wonder in this sense is not an exclusively left brain modality. Being in the present moment and Awe inter-are.

In the Stellar study, certain positive emotions were shown to have a particular effect on reducing IL-6; these include 'dispositional' joy, contentment, pride, and awe [Stellar 2015]. Awe was the emotion that had the most significant impact on reducing IL-6 levels. Wonder, interest, and curiosity are typical of children if they are enabled to grow up in a facilitating environment [Winnicott 1965]. They are also the emotions and behaviour characteristics that can be severely impaired in non-nurturing environments. As children grow up, this natural curiosity and sense of wonder can be eclipsed – in, for example, educationally restricting environments.

It may be a surprise that awe is the emotion that seems to have the biggest impact in reducing IL-6 levels. What do we mean by awe?

- 
- Awe
- i. Overwhelming wonder, admiration, respect or dread.
 - ii. (Archaic): power to inspire fear or reverence
 - iii. To inspire with reverence or dread.
- Collins English Dictionary 2011

Awe is a concept of polarities: on the one hand, the wonder of a child at a butterfly; on the other hand, a sense of fear or dread or deep respect that can occur in numinous experiences. And our word awful is, of course, derived from awe; while awe-inspiring has an essentially positive connotation.

Awe-inspiring:

- Causing or worthy of admiration or respect
- Amazing or magnificent

Collins English Dictionary 2011

Awful:

- Very bad, unpleasant
- Inspiring reverence or dread
- Overcome with awe; reverential

CED 2011

The implications of such studies are:

- Positive emotions can act as anti-dotes to negative affect;
- Positive emotions can lead to reduced physical and emotional dis-ease.

In the context of the use of the emotion “awe” in the Stellar study, this was in terms of “I feel wonder almost every day” [Stellar et al 2015p 131]. It is probable that such a sense of wonder is linked to Mindfulness and being in the present moment [see also D10 in this series: “Look at the Cypress Tree”].

Some Primary Process Emotions [PPE] are particularly linked to Awe. For example, as already indicated, our SEEKING system energises us and gives us the motivation to explore, to look at and to wonder – if we allow our SEEKING to be in the Present Moment. In this sense, SEEKING and Awe are inter-linked. Figure 4.1B summarises some of the key PPE that can facilitate our sense of wonder / awe:

- CARE (Nurturing)
 - PLAY
 - SEEKING
- [Panksepp 1998]

Figure 4.1B
Primary Process Emotions [PPE] that facilitate a
sense of wonder.

Note that these same PPE, and the neuro-chemicals associated with them, can act as anti-dotes to FEAR & RAGE [Panksepp 1998]

4.2 Panksepp, CARE, and Changing the Peg /

4.2 Panksepp, CARE, and Changing the Peg

Panksepp's research has indicated how CARE circuits (via oxytocin and endorphins ^[endogenous opiates]) act as anti-dotes to FEAR, RAGE, and GRIEF / PANIC [e.g. Panksepp 1998 e.g. p 201; 218-219; 257; Panksepp & Biven 2012]. This overlaps with the ancient concept of Changing the Peg, in which we overcome a negative emotion (the rotten old tent peg) with a positive affect (the new healthy tent peg). This is schematically illustrated in Figure 4.2:

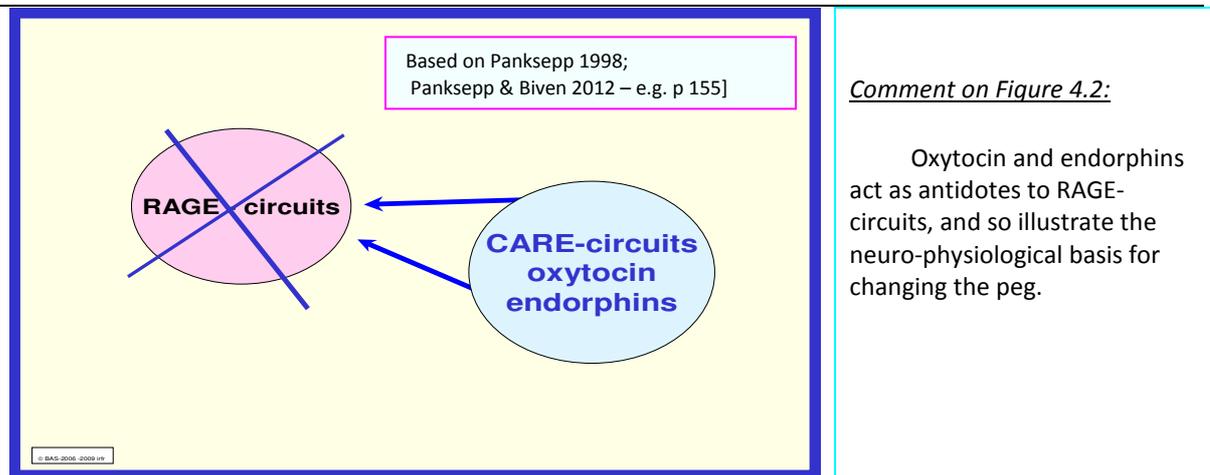


Figure 4.2

Schematic inter-linking of the concept of changing the peg with some aspects of neuro-physiology

[Imported from Figure 4.10** of Ross 2010 page 154]

(**Figure 4.10 itself adapted from Ross 2005X Figure 7.4A page 32)

Antonio Damasio has commented on the sophistication of Spinoza's philosophy in that Spinoza anticipated 300 years ago the neuro-physiological findings of the late 20th century.

..... An affect cannot be restrained or neutralised except by a contrary affect that is stronger than the affect to be restrained.

Spinoza 1667
Ethics, Part IV; Proposition 7;
Translated by Edwin Curley

Damasio, commenting on Spinoza's proposition, says:

In other words, Spinoza recommended that we fight a negative emotion with an even stronger but positive emotion brought about by reasoning and intellectual effort. Central to his thinking was the notion that the subduing of the passions should be accomplished by reason-induced emotion and not by pure reason alone. This is by no means easy to achieve, but Spinoza saw little merit in anything else.

Damasio; 2003; p 12

This is in keeping with the idea /

This is in keeping with the idea that a purely cognitive approach to counselling / psychotherapy is inappropriate in that it does not work⁶; rather, it is the emotions and feelings experienced in the one-to-one nurturing relationship that brings about healing and transformation. A good example of this is intimated in Dibs [Axline 1964].

It is also in keeping with the notion that negative and destructive ideologies that have recently re-appeared in the wider world with such vengeance cannot be overcome with pure reason and logic. In the long run, compassion, nurturing and CARE are needed to transform these suffering and possessed minds⁷.

5. Shame and Awe as examples of polarities of Emotions and their effect on Well-Being

As already indicated, Shame can be associated with the production of *TNF- α* ; while Awe is associated with reduced levels of IL-6. Figures 5.1A and 5.1B summarise some of the matters raised in this paper.

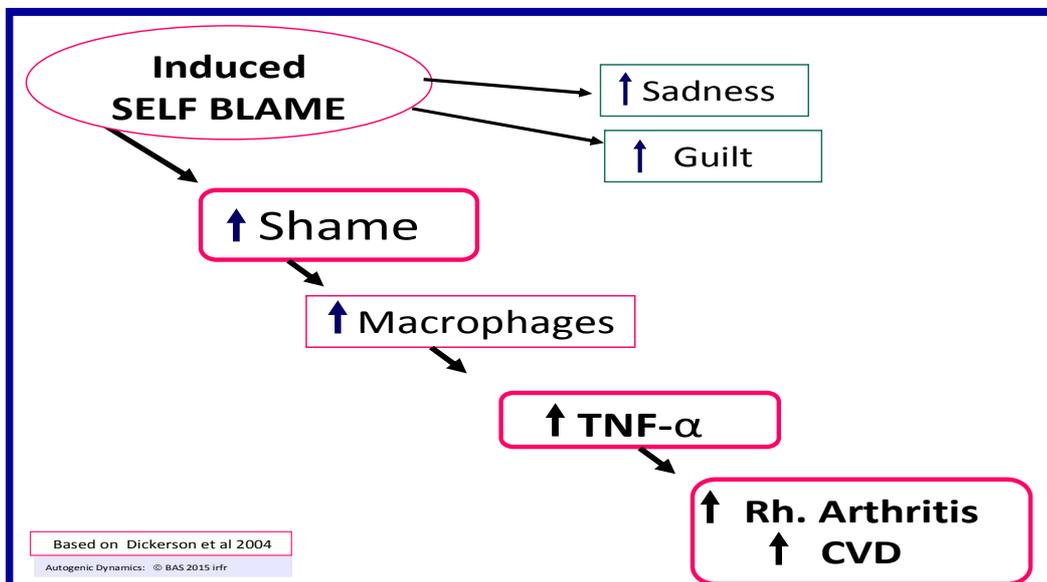


Figure 5.1A

Self-Induced Shame and *TNF- α*

A model suggested by the research of Dickerson et al 2004

Comments on Figure 5.1A

- i. Induced Self Blame resulted in increases in Sadness, Guilt and Shame.
- ii. However, only the emotion Shame was associated with increased levels of *TNF- α* , which itself is released by macrophages.
- iii. Separate research has indicated a link between raised pro-inflammatory cytokines and conditions such as Rheumatoid Arthritis and Cardiovascular Disease.

⁶ Especially when we are dealing with traumatic childhood events that may include core shame

⁷ Thich Nhat Hanh has said that a man with a gun can kill tens or possibly hundreds of people; whereas a man with a toxic ideology can result in millions being killed [Hanh 1993 p 38]. See also Kumar 2004: "The Buddha and the Terrorist – *The Story of Angulimala*". Angulimala, a local multiple murderer, is a threat to the whole community. Satish Kumar's sensitive book illustrates how such situations can best be approached and transformed

enough” (no blame) [Winnicott 1965; Bettelheim 1987 p 145; cf. Sunderland 2006 / 2007]. In such situations, some forms of in-depth psycho-therapy can be of great benefit.

Young children often have an amazing sense of wonder about every aspect of life, and in many ways this seems to be our natural default position if our SEEKING, PLAY and CARE systems are appropriately developed through positive nurturing. The pressure of education and schooling can eclipse this natural sense of wonder in teenage and adult life. If this has happened to us, then we can work in various ways to regain our natural wonder. For example, in the evening when we are going to bed we can reflect on the moments of the day when we may have been having a sense of wonder and / or positive life enhancing experiences. This is similar to reflecting with gratitude several evenings a week on positive events of the day [Fredrickson 2009; pp 186-187].

6 Awe and the Cypress Tree

In Eastern Philosophy, for over two thousand years, there has been a perspective that as human beings we can become enlightened / awakened. Zen is part of this tradition, as exemplified in the following story concerning Bodhidharma. (Bodhidharma was an Indian monk who brought what became known as Ch’an Buddhism to China⁸ [Keown 2003 p 37]).

A monk asked Zen Master Chao-Chou:
 “What was Bodhidharma’s intention in coming to China?”
 Chao-Chou replied: “Look at the cypress tree in the courtyard.”
 Hanh 1973 pp 50-51

What can we make of such a remark? The monk, in common with many of us, was trying to understand Zen cognitively. The essence of Zen is non-cognitive; rather, it is experiential [Hanh 1973/74 p 49]. Mindfulness is to do with being in the present moment. John Kabat-Zinn, who has carried out extensive research on those suffering from major stressors (including having experienced some personal catastrophe), was once discussing his work with a reporter. “She said, ‘Oh, you mean to live for the moment.’ I said: ‘No, it isn’t that; that has a hedonistic ring to it. I mean to live in the moment’ “. [Kabat-Zinn, Jon 1990 /2006 p 19].

Thich Nhat Hanh gives a lovely introduction to Being in the Moment in his “Present Moment, Wonderful Moment” [Hanh 1993].

“Look at the cypress tree in the courtyard”; “Look at the clouds in the sky”; “Look at the moon rising above the houses”. Whatever events may befall us, there remains the wonder of life; of a bird singing – if we allow ourselves to experience this present moment. The Zen Master was suggesting to the monk that Chao-Chou’s reasons for coming to China cannot be reduced to concepts or cognitive thought.....

The wonder, the awe, that a child or any of us may experience is not understandable cognitively; nor is Beethoven’s opus 111.

*** **

⁸ He (Bodhidharma) is often regarded as “The First Ancestral Teacher of Zen Buddhism in China” [Hanh 1973/1774 p 33]. Zen is the Japanese “pronunciation of the word Ch’an, meaning ‘Meditation’ ” [Keown 2003 p 346].

Articles with linked themes in this Autogenic Dynamics Section:

A1	The Stress Response, the Relaxation Response, and the Tend-and-Befriend Response
A5	Autogenic Training, Psychotherapy / CBT, and Depression based on research by Krampen 1997 / 1999
A7	Porges and the Polyvagal Theory – <i>reflections on clinical and therapeutic significance</i>
A8	The Polyvagal Theory <i>and a more sympathetic awareness of the ANS</i>
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: a brief introduction to Panksepp's model
B17	Windows of Affect Tolerance Reflections on Childhood Distress, Procedural Learned Tendencies, and the Therapeutic Dyad in the context of Primary Process Emotions and the Polyvagal Theory [based on Ogden 2006 / 2009]
D1	Reflections on foundations for mindful living (after Kabat-Zinn)
D10	Look at the Cypress Tree

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