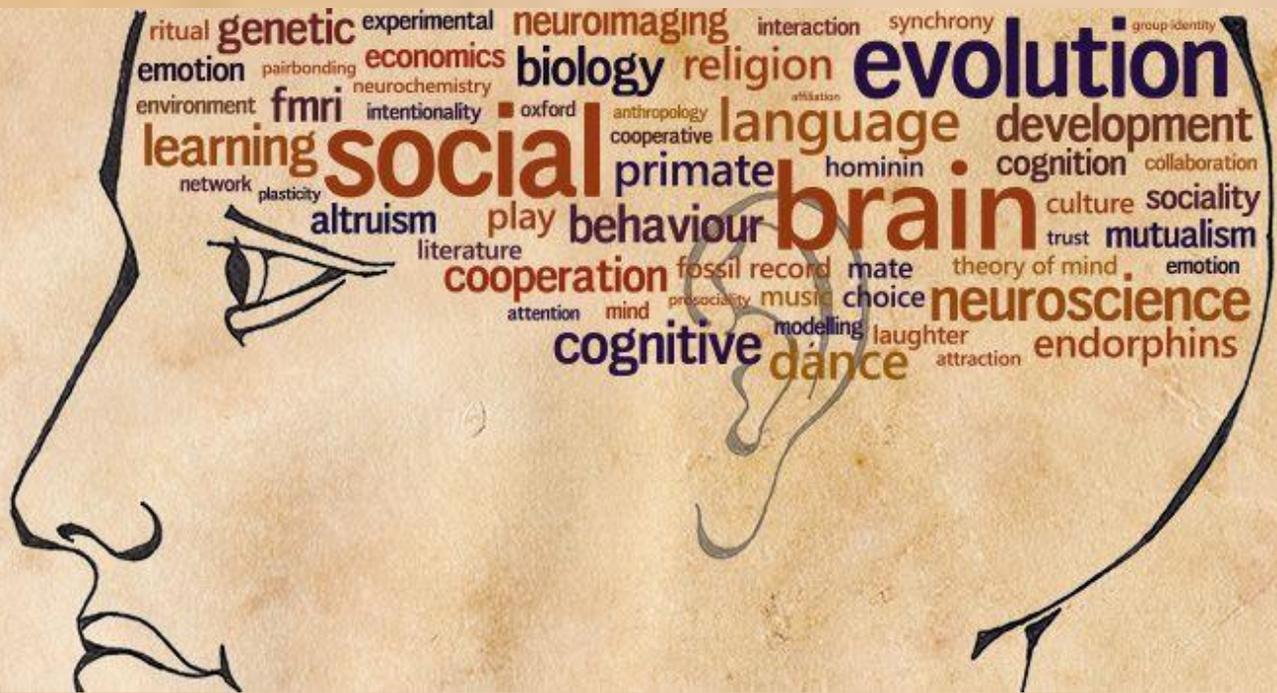


Leadership in Turbulent Times, Neurosciences and Evolutionary Psychology



*"I shall be telling this with a sigh
somewhere ages and ages hence:
Two roads diverged in a wood, and I ...
I took the one less travelled by,
and that has made all the difference"*
Robert Frost, 1915

by Katharine McLennan
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TimeToReflect.Today



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Amidst the Global Financial Crisis, fear prevails and plays havoc with our minds. Those of us in the workplace who can use our mind to recognise fear for what it is: False Evidence Appearing Real, are able to transform the emotional energy of fear into courage and create an organisation changing platform that sees us concentrating on moving forward despite the obstacles. CEO of Booz & Co., Shumeet Banerji, describes the response well¹: expansion in emerging markets, investment in new products, investment in talent, and the acquisition of assets and companies . . . right now. Those who cannot accept and convert their fear into courage will instead resort to hunkering down, conserving cash, and disposing assets—and these assets are often some of the organisation's best talent.

Because it's the "mind" that will determine which path we will take, a bit of neuroscience and evolutionary psychology go a long way for any leader to understand, particularly in an environment that has our employees overrun by the threat of their livelihood being taken away at any point. On the one hand, evolutionary psychology argues that the brain's hard wiring will naturally translate this as a life or death situation to which cannot be rationally, or courageously, responded. On the other hand, neuroscience argues that the brain is plastic and that we can build new pathways and "choose" to respond differently, especially if we have awareness around the way our hardwiring works. Understanding both "hands" is essential in choosing the path less travelled by.

What evolutionary psychology can teach us about our NATURE

Nigel Nicholson, evolutionary psychologist and professor of organisational behaviour at London Business School, writes most elegantly about our nature,² arguing that our brains have not fundamentally changed over the last 10,000 years when food and clothing were scarce and life-threatening hazards abounded daily. Being aware of the parts of our behaviour that are apparently hardwired in response to stress becomes even more important in this season of the recession:

Emotion before reason:

In an uncertain world, those who survive always have their emotional radar, their "instinct," turned on before their more rational spread-sheeting and forecasting ever delivers results. The implications of "trust your gut" insist that leadership in this current crisis attend to their instincts despite their fear, particularly instincts that show them the road to optimism. The fear in the environment means that our people will use emotions first to screen information. They will hear the bad news first and loudest, and the bad news will stick to them the longest. Leaders must constantly be aware of this and ensure that emotional reactions are being attended to very carefully.

Loss aversion when threatened:

In a "survival" environment, human beings focus their strategy on avoiding loss. Our ancestors who had just had enough food and clothing to survive "hunkered down" and

"Man is not disturbed by events, but by the view he takes of them."

- Epictetus, c.a. 100

False

Evidence

Appearing

Real

You can take the person out of the Stone Age, but can you take the Stone Age out of the person?



Early accounting scandals

From
ghoulies to
ghosties
And long-
leggedy
beasties
And things
that go
bump in the
night,
Good Lord
deliver us.

- Traditional
Scottish
prayer

refused to take risk. Those who were threatened fought furiously. In a recession environment, we are certainly not seeing the predicted Generation Y behaviour, where young people have a reputation for being reluctant to take on tasks that have no real meaning to them. When there are impending layoffs, people are instead putting their heads down, doing their job, but certainly not taking any risk. When specific layoffs are identified, some of the affected people then convert this conservatism to panic and aggression as their body is signalling to them that this is a life or death situation. A leader understanding this will know how to respond to the tendency to loss aversion, creating a culture that rewards well-managed risk and prudent optimism. They will handle any layoffs with great clarity and swiftness so that the people who need to stay and perform are not affected by loss aversion, nor by the panic of their exiting colleagues.

Confidence before realism:

The reason we exist today is because our ancestors were simply overconfident.

These optimistic ancestors assumed they were going to survive against all odds, and in doing so, they drew followers, resources and mates who were attracted to their confidence. Regardless of our inner human voice that says "there is no way I am going to pull this off," the leaders who will succeed in this recession environment outwardly radiate confidence to their people, comprehensively plan their contingencies, and push forward with their gut instinct, thus taking the path less travelled by.

Classification before calculus:

We learned 10,000 years ago to make snap decisions about who was friend and who was foe to ensure we would have food from friends and would not be swindled by foes. Sitting around and doing social calculus was not a recipe for a long and lasting life. We have inherited this notion to create our self-defined groups of "us" and "them" in our business cultures based

on labels, cultures, titles, age, sex, and culture. Because we are not fighting for our real survival but rather our organisation's creativity, we might miss our most innovative thinker, who simply does not look or act like us. Leaders must constantly respect their people. Respects means literally "to look again," from the Latin root *respecere*. "Sawu Bona," the Zulu greeting, is an excellent teaching point in this case. It means "I see you and all of your potential." In this environment, leaders must constantly look for the potential in employees and catch them doing things that are right and prudently innovative. The employee's response can then be "Sikhona," which means "Thank you. Because you have chosen to see me and all of my potential, I exist now in this world."

Gossip:

Along with a scarcity of shelter, clothing and food, the Stone Age was also characterised by an ever-shifting social scene. Leaders came and went and alliances came and went. Survivors were people who could read politics the most adeptly. These were the people who knew how to use gossip wisely. Leaders who know how to tap into the constructive gossip while not creating malicious gossip will have the pulse on the organisation and will be able to respond proactively.

Empathy and mind reading:

Survivors of the Stone Age whom people could trust were the receivers of the most gossip and were people who knew how to read people's minds in order to know what questions to ask them. The good news is that our minds are programmed for empathy and mind reading. The bad news is that we sometimes over-use empathy for people who are like us (hiring our clones) and under-use it for people who are not (not paying attention to our most constructive critics).



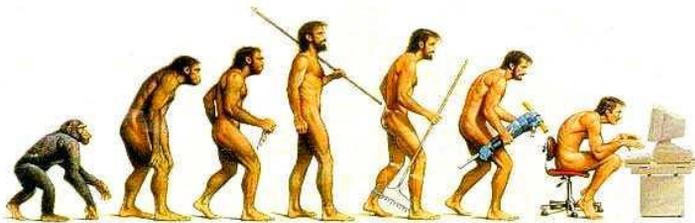


Contest and display:

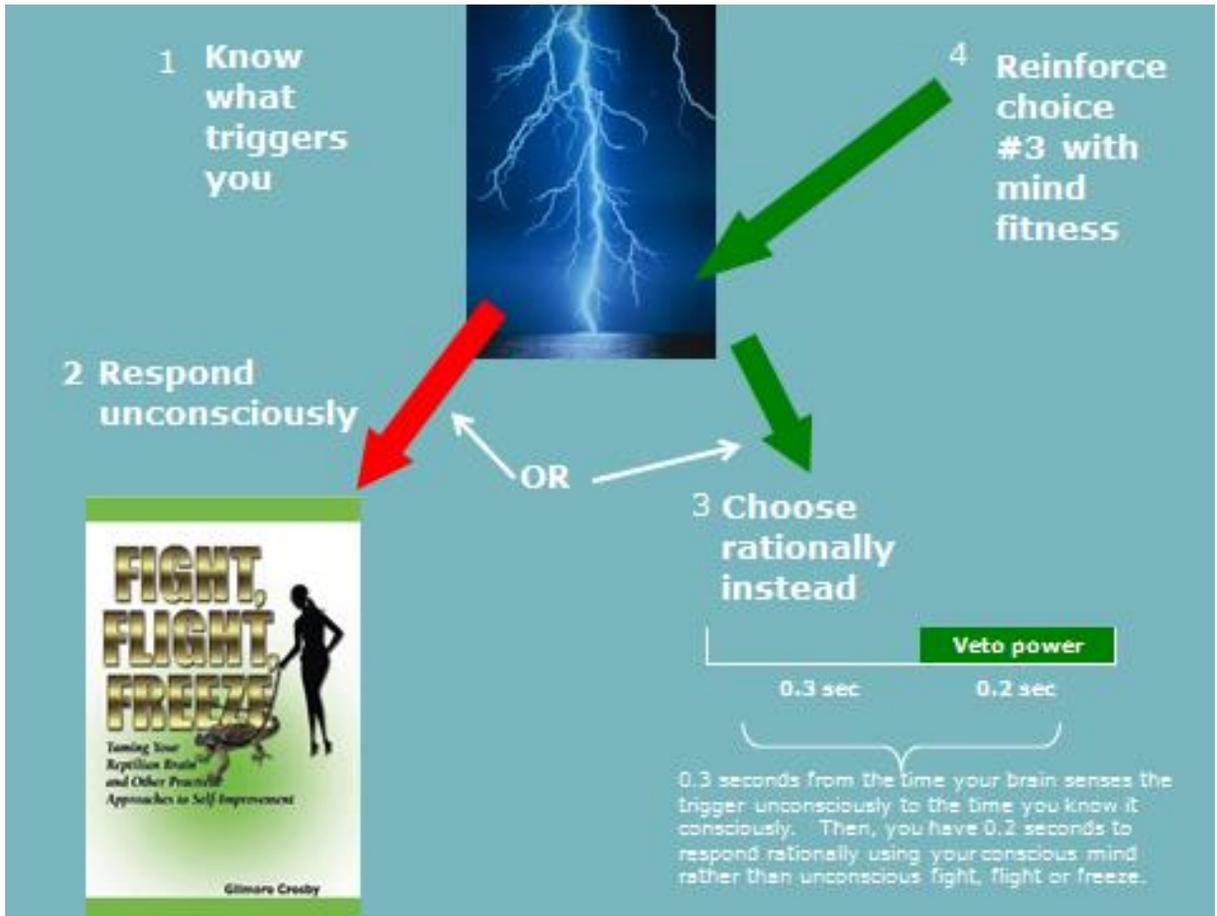
Status in tribes was usually given to men and won through competitions ending in the successor proudly displaying his status with elaborate public rituals. Although not as competitive, women would strive to be as attractive as possible to win over the highest status male in the drive to have the healthiest progeny. We see this in our culture as inordinate amounts of time and energy being spent in one-upmanship for status, regardless whether we are male or female. When we are unconscious, the contests and victory displays may consume precious resources from the necessary collaboration the organisation needs in response to the crisis.

What neuroscience can teach us: We have the power to override these hardwired circuits: the NURTURE argument

The rising interest in neuroscientific applications to business leadership introduces other views which complement and also challenge evolutionary psychology. The very awareness of the hardwired circuits that we have inherited from our Stone Age ancestors allows us to choose the creation of new ones with conscious intention. Neuroscientists are now telling us that our brain is "neuroplastic"—meaning that we have the ability to create new circuits (neuron connections) throughout our life, especially with attention and repetition. As we can catch ourselves in the act of "Stone Age" behaviour, we can use our more rational and most recently evolved frontal cortex to use reason in order to intervene and thereby carefully and optimistically take the road less travelled by.



Below is a four-step model that we will follow in this discussion:





The first step of the model of working with this hardwiring lies in understanding the stressors themselves. David Rock, founder of the NeuroLeadership Institute www.neuroleadership.org, has integrated the research of hundreds of neuroscientists into a model of hardwiring that supports the evolutionary psychologists' model.

Status
Certainty
Autonomy
Reality
Fairness

His SCARF model³ refers to the fact that we are hardwired to experience the life-or-death threat when we confront issues around a perceived loss of Status, Certainty, Autonomy, Relatedness and Fairness. In the recession environment we are currently experiencing, these life-or-death threats become even more prominent. When we are triggered by such threats, our more ancestral part of our mind—the emotional limbic system often characterised by an overactive amygdala—consumes the resources (oxygen and glucose) of the brain, making fewer resources available for the overall executive functions we use in our prefrontal cortex, the source of our rational mind and our creative, working memory.

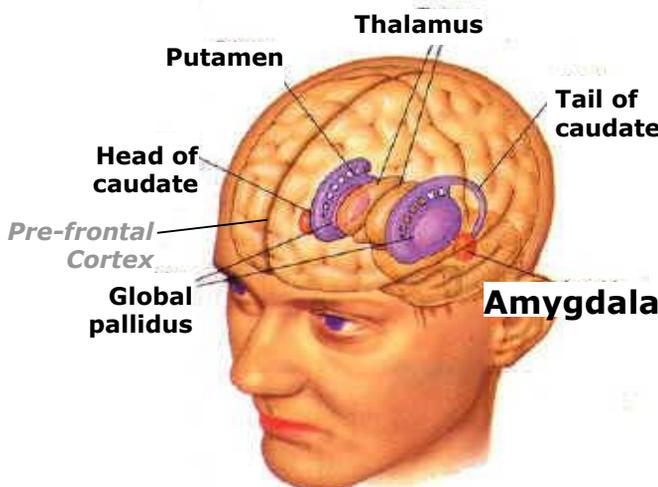
Daniel Goleman coined this process the “amygdala hijack” in his book Emotional Intelligence.⁴ Under threat, the brain is also “hyperactive,” resulting in us missing the subtle clues of opportunities of an “aha” in the market. This hyperactivation makes us generalise more, which increases the likelihood of accidental connections that don't reflect what is truly happening in the market. All told, the result is that

employees tend to err on the safe side, shrink from the opportunities that are perceived to be more dangerous, blow up small stressors into large stressors, and withdraw their participation in a team that may be threatening to their status. Essentially, what results is that all employees decide to take the road more travelled by and hunker down until they feel safe again.

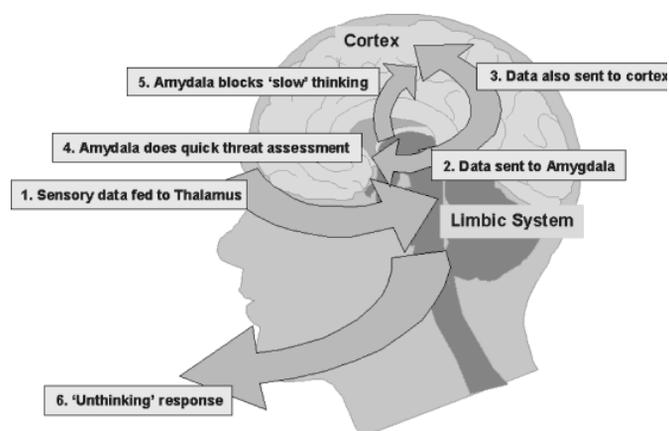
Status

Perceived status can be one of the most significant stressors we face. It is known to be one of the most influential determinants of human longevity and health. Our status is triggered all day long in the little conversations where someone might give us advice or suggest that our work could be improved. It flares when we are asked questions such as “Can I give you some feedback?” Status symbols such as titles, office sizes, having a secretary, or having a parking space also trigger status questions.

Now, imagine what happens to perceived status when an imminent job loss is present. For many of us, our job defines our status in life, which makes it a life or death situation in the current market. Leaders can combat this stressor by concentrating on watching status issues arise and quelling the issues before the noise in their people's minds gets too loud. They need to



THE AMYGDALA HIJACK





concentrate on giving positive feedback: catching their employees in the act of doing something right. Negative feedback only draws attention to circuits in people's minds that are not working and puts them into an even more survival mindset. Our people can't do anything with negative feedback, either; old habitual brain circuits don't disappear with more attention, particularly if it's threatening attention. It's like telling someone not to think of a pink elephant. Leaders can also reduce the competition that causes status games by getting their employees to reflect on how they each can better their own game rather than engage in one-upmanship.



Certainty

The lack of perceived certainty will also trigger the fear response. Our brains crave certainty and operate only because of memorised patterns. Our fingers are able to open a car door not because of our conscious intent, but because of our memory of what a car door looks and feels like and our memorised patterns of arm, hand, and finger movement. Change the car door in any way, and the brain will sense an "error," which immediately triggers the automatic fear response. In contrast, the act of creating perceived certainty is rewarding in our brain. How soothing is it to enjoy the repeating patterns in music or doing something that comes naturally to us?



Now consider the complete lack of certainty in today's recession environment. It is absolutely essential that the leaders address this uncertainty both in their mind and in the minds of their followers.

Regardless of whether they can truly see a clear way through the morass, they must work to define roles, lay out expectations, define the tactics, and provide the vision to their people, whose brains are not settling in the turmoil. There is no doubt that their tactics and visions will completely adjust day in and day out, but without that perceived certainty, employees will simply fritter their days away in anxiety, when they could have been calmly seeing the market opportunities and going after those.

We can create certainty in every hour in just little ways: being clear about the meeting's purpose and when it will end, being clear about when and how decisions about jobs will be made, or about when we will come back to a client. "Tell people what you are going to tell them, tell them, then tell them what you told them."

Autonomy

Neuroscience also tells us that once we have the certainty, we then want the autonomy to go after our objective. People invading our autonomy by micro-managing take perceived control away from us, which also causes us to go into survival mode. Interestingly enough,

Two stories about positive feedback

Pygmalion in the Classroom

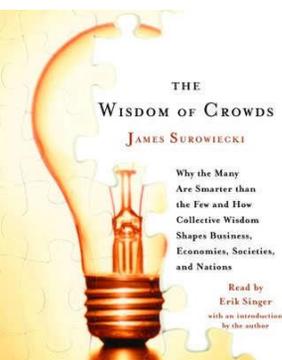
Although not ethical in this day and age, in 1963, American psychologists Robert Rosenthal and Lenore Jacobson⁵ showed us the power of both positive feedback as well as the mindset of a teacher/leader. They chose a primary school to work with and tested all the students at the school with an IQ test at the beginning of the year. They then informed the teachers who their "top 10" students were based on the IQ test. After the year was over, they measured the IQ's of the children again. Not surprisingly, the IQ increases for the "top 10" had been much higher than those for the rest of the class, particularly for year 1 (28 point increase vs. 12).

The twist was that the experimenters had actually randomly chosen the "top 10" students at the beginning. The conclusion was that the teachers had

created the conditions by which the randomly selected students were "observed into the reality of talent" – showing the power of positive feedback and the mindset of a leader.

Teaching Tennis

Tim Gallwey, author of the *Inner Game of Tennis* and many other similar books, talks about how he can teach anyone to play tennis in 20 minutes.⁶ He gets them on the court and simply swinging the racquet as they feel it should be swung. For every swing, he tells them technically what they did right: their eye position, their hip balance, their foot stance, the angle of their elbow, etc. He never mentions once what they are doing wrong (it's like telling someone not to think of a pink elephant). In 20 minutes, they are playing smoothly, with brain circuits already starting to form around the game of tennis.



working in teams is difficult for many of us because we subconsciously perceive a decline in our autonomy. We can override this when we recognise that our status, our certainty and our relatedness can all increase in teams – as well as the most important organisational objective: the innovation that only comes from the diversity of thought processes that you get from teams. There is, indeed, a Wisdom of Crowds, as James Surowiecki writes in his book.⁷ Leaders need to set the boundaries and objectives in order to provide certainty, but then they need to trust their employees to deliver with autonomy. Allow employees to set their own ways of working, their own hours, their own workflow, and you will be amazed at the results that you get as a result of this trust. Control them like children and you will get their survival instinct kicking in immediately.

Relatedness

Being part of the tribe is one of the critical ingredients to survival, and as soon as we feel that we are outside a group, our brain functioning will start to experience the fight or flight syndrome. Neuroscientists Matt Lieberman and Naomi Eisenberger work with functional MRI and a computerised simulation of a ball throwing game by several players.⁸ At a point in the game, the participant suddenly experiences not being thrown the ball, and the MRI picks up a response that is actually identical in strength and location in the brain to physical pain. Leaders need to watch the degree of relatedness in their people, as we all have different levels of need for it. When they begin to detect a person withdrawing from the group or the group creating an outcast, there will be serious performance declines in the work.

Trust is the basis of relatedness, but it's not a warm and fuzzy trust for the sake of it. David Maister, noted expert on the "trusted advisor," has a formula for trusting someone which is based on four components⁹: credibility of the person through their

talent and skills; reliability of the person; intimacy that you have with the person and your own self-orientation towards the world in general. Each of these four components can be strengthened by leaders to ensure that relatedness in their workforce is strong, which will be particularly essential in the recession.

Fairness

Lieberman has also shown that receiving 50 cents generated more of a reward response in the brain when it was out of a shared dollar between two people than getting \$10, when it was out of a shared \$50 between two people.¹⁰ Leaders need to watch the "rules" they set for some people over others such as the headcount decisions that may impair one division over others or the values that they talk about but then don't hold themselves accountable to displaying. Setting ground rules and sticking to them quiets our mind around fairness issues and lets us get on with our work.

Not surprising, pay discrepancies cause enormous tensions around fairness. Even a slight reduction in senior executive salaries during times like this will go a long way to creating a sense of fairness that will calm the madding crowds. Perhaps Obama is not as crazy as we think around the fairness of senior executive pay. The International Labour Organisation (ILO) just reported last year that CEO pay at the 15 largest US companies was 521 times more than the average worker (this is up from 369 times in 2003).¹¹ Across all public organisations, the US average is 183, and the Australian average is 135.



Your TRUST of other person =
Other person's:

Credibility + Reliability +
Intimacy

divided by

Your trust in the world in
general



The second part of the model consists of understanding that we each have different methods of fighting, fleeing and/or freezing once we are triggered. Understanding what triggers us and our patterns of the survival syndrome allows us to catch ourselves in the act. Australian executive leadership expert Peter Burow has worked over the last 20 years to integrate neuroscience, philosophy, and psychology to develop an elegant model of the different "types" of survival responses, which he calls "Core Beliefs."¹² In his definition, core beliefs are deep-seated subconscious perceptions that we all have about the world in which we live, work and play. Biologically, our Core Beliefs are there to help us in times of crisis, prompting instant decision-making and instant action when every second counts. Using them all the time, however, leads to burnout, stress, sickness and the feeling of being on constant alert. The adrenalin rush can be empowering for a day or so, but given that the recession is here to stay for a while, we are at risk of our minds and emotions beginning to run dry. Organisations and teams that are run by their survival patterns are stressed, tired, tactical and uncreative. Chemically, people feel unsupported and in a battle for their life.

Peter then talks about catching ourselves in our own Core Beliefs, and he identifies nine patterns of behaviour in response to crisis. Underneath of each of these nine is a basic belief about what we need in life for survival and satisfaction. When these beliefs are contradicted, especially in emotional times, the amygdala signals for some of us to become aggressive, some of us to withdraw, and some of us to put our heads down and do the job to the letter of the law. These are essentially fight, flight or freeze. We also respond emotionally from one of a possibility of three different needs: (i) acting out of approval from the need for attention (heart), (ii) acting out of anger from the need for autonomy (body), or (iii) acting out of fear/need for security (head).

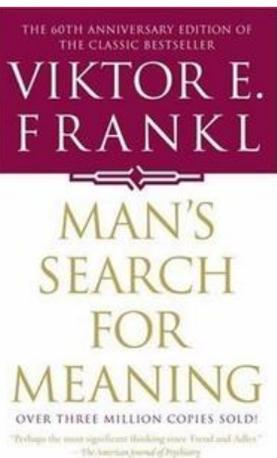
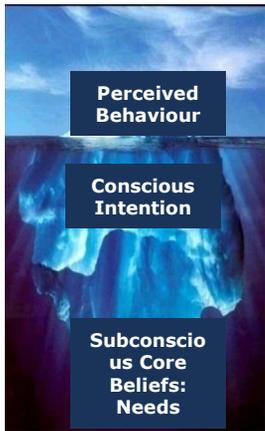
When three types of responses and three types of needs are combined, the result is a possibility of nine patterns of core beliefs. Each of us has one predominant core belief we rely upon when we are triggered. See next page for details.

These nine core beliefs are useful, as they form the patterns of what we will do in response to a hostile environment, particularly when we need to act in the immediate term. They are not useful when we pay attention to them to the extreme over our rational response.

We shouldn't just simply neglect core beliefs. The emotional energy created by our core beliefs can be used to get over our tendency to fight, withdraw, or comply. We can also use it to become incredibly powerful leaders once integration of emotion and rationality has taken place.

The third part of the model lies in realising that we indeed do have choice. We do not have to retreat automatically back into our Core Beliefs. Viktor Frankl, a surviving Jewish psychiatrist of the Holocaust concentration camps, taught us about this eloquently: "Everything can be taken from a man or a woman but one thing: the last of human freedoms to choose one's attitude in any given set of circumstances, to choose one's own way, to transform a personal tragedy into a triumph, to turn one's predicament into a human achievement."¹³

Neuroscientists argue that we can make this choice consciously, but that we have limited time after a stressor to do so. When confronted with a "perceived" threat to survival, the brain takes about 0.3 seconds to register it as a desire to fight, fly or freeze. It then has the following 0.2 seconds of "veto power" to decide consciously to create a new perception or a new story about the situation.¹⁴ Neuroscientists call this "reappraisal." Asking yourself whether it is really a life or death situation is the first step. This helps our brain label the situation as simply stress. Changing the story away from a stress story into an opportunity story is then a "reappraisal."





The Nine Core Beliefs¹²:

Most people have one predominant core belief and associated reaction when they get triggered emotionally.

Fight Flight Freeze	Heart Body Head	Gets core needs met by	Core Belief	How they are triggered	What they are like when triggered significantly
Fight	Heart	Outstanding Achievement – the Achiever	Must accomplish and succeed to beloved	When perceived as failing or not looking good or not getting credit	Inattentive to feelings of others, impatient and image driven
	Body	Being the strongest and keeping others in their place—the Protector	Must be strong to assure protection and regard in a tough world	When they perceive injustice; when others do not confront an issue; lack of candour; when other people do not take responsibility	Excessive, impulsive and suffer from too much lust
	Head	Being involved in lots of different things—the Epicure/the Entrepreneur	Must keep life up and open to assure a good life	Boredom; feeling that they are being taken seriously; receiving criticism they believe is unjust	Slothful and stubborn
Flight	Heart	Being special and unique, believing they must have the ideal relationship to be loved—the Romantic	Must obtain the longed for ideal relationship or situation to be loved	When they perceive any slight; or feeling like they are being ignored; or feeling envious or inferior	Quite moody, self-absorbed and envious
	Body	Seeing all points of view and keeping the peace at any cost—the Mediator	Must blend in and go along to get along	By anything that disrupts general peace and harmony; being confronted; others being rude or hostile	Feel incapable of facing problems: become obstinate, dissociating self from all conflicts. Neglectful and dangerous to others.
	Head	Having all the information that others need: the Observer	Must protect yourself from a world that demands too much and gives to little	By people sharing their information without permission; by receiving surprises; by situations not under control;	Uncommitted, self-serving and suffer from gluttony
Freeze	Heart	Meeting the needs of another: the Giver	Must give fully to others to be loved	By being taken for granted; being rejected; not having their efforts appreciated	Overly intrusive
	Body	Being perfect: the Perfectionist	Must be good and right to be worthy	By others not following through, another person not following the letter of an agreement; believing they have been deceived	Dominated by anger
	Head	By knowing where the danger is coming from; The Loyal Sceptic	Must protect themselves from a world they can't trust	By a lack of "truthful" communication; abusive authority; being under pressure; lack of commitment	Over-fearful and phobic



"The present conscious state when I say... 'I feel angry' is not the... direct state of anger...it is the state of saying-I feel-angry...."

The act of naming [the state] has momentarily detracted from [its] force."

William James, Principles of Psychology (1890)

"The skilful use of labelling... introduces a healthy degree of inner detachment, since the act of apostrophizing one's moods and emotions diminishes one's identification with them."

Analayo, Buddhist Commentary

Reappraising or telling our brains another story of what it is perceiving is far more effective in terms of longevity and overall health outcomes than simply suppressing our anger or fear.¹⁵ The latter strategy simply forestalls the onset of disease, such as a bout with cancer or a heart attack. With suppression, there are still signals to release cortisol and adrenaline, which both signal our body to move nutrients to the extremities and away from our immune system, heart, and digestive systems. Suppression also decreases our memory functioning. Even if we attempt to distract ourselves away from the stress temporarily without reappraising the situation, the physical stress signals still return eventually.

That's not the end of the story. Our people feel the stress as well. The research shows that our people know when we are simply suppressing as opposed to reappraising the situation. Their bodies feel our stress in their own blood pressure, heart rate, and immune system functions, whether we express our suppression "out loud" or not.

Reappraising the situation through an optimistic lens is not as Pollyannish as it sounds. Renowned psychologist Martin Seligman has crunched millions of statistics to prove that optimistic organisations, sporting teams, and leaders succeed far more than their pessimistic counterparts.¹⁶ When pessimistic people run into obstacles in the workplace, in relationships, or in sports, they give up," he says. "When optimistic people encounter obstacles, they try harder. They go the extra mile."¹⁶ Seligman's research shows that businesses with the most optimistic environments also have the highest profit and customer satisfaction.

Neuroscientists can see optimism and pessimism at work in the brain through the functional MRI. When people are experiencing optimism, a part of the brain called the rostral anterior cingulate cortex, RACC, is activated, and it in turn moderates the fear response through the amygdala. Thanks to the RACC, our

past may already be written, but our future is a blank slate where we can happily distance ourselves from negative experiences and move towards positive ones.¹⁷ Pessimism, on the other hand, monopolises the prefrontal cortex to focus on oneself and one's emotions to the exclusion of others and the external environment, inhibits motivation and inhibits our ability to make decisions.

The fourth part of the model lies in the fact that we can keep our mind and body fit in preparation for any stress, so that there is more chance for us to make conscious choice to reappraise the situation. If current trends continue, mental health issues, particularly anxiety and depression, are predicted to be the single major burden of disease within the next two decades, and will certainly rise significantly in this recession atmosphere. By 2030, it is predicted that depression will easily surpass the burden of heart disease.¹⁸

One way to keep our mind fit is through developing a practice of "mindfulness." The term mindfulness is being referred to more and more in leadership studies now. It is a term that was translated more than 100 years ago from the Pali word "sati" by the British scholar T.W. Rhys Davids.¹⁹ Psychologist William James²⁰ was describing it when he wrote that:

the faculty of voluntarily bringing back a wandering attention over and over again is the very root of judgment, character and will. No one is *compos sui* [master of himself] if he have it not. An education which should improve this faculty would be the education par excellence. But it is easier to define this ideal than to give practical directions for bringing it about.

Mindfulness, simply defined, is nonjudgmental awareness and acceptance of the present. The mental process of mindfulness requires paying attention and self regulation. Research is showing that long-term meditators are able to



coordinate significantly more parts of their brain than non-meditators; they are able to take in more incoming data, able to make more conscious choices about their behaviour, and able to improve their mental abilities significantly.²¹ Even people that experienced meditation for the first time for just five days of training for twenty minutes per day showed higher abilities around attention. This means that they could select goal-relevant information and distinguish it from all the environmental noise. They also experienced less hostility, depression, fatigue, and tension and experienced a significant decrease in stress-related cortisol. They also experienced an increase in immunoreactivity.

The interesting reflection is that we actually all meditate. Many of us, however, meditate on resentment, anger, guilt about the past and anxiety about the future. Medicine is showing us beyond all doubt that this type of "guilt and anxiety rumination" meditation leads to increased inflammation, impaired immunity, hardening of the arteries, increase of type 2 diabetes, and an atrophy of nerve cells in the brain which are targeted by stress hormones.²² The specific places in the brain that appear to be affected most are areas that are important in learning, memory, decision making, reasoning, impulse control and emotional regulation. Stress and depression are risk factors for chronic illness, poor performance, cognitive decline and dementia.

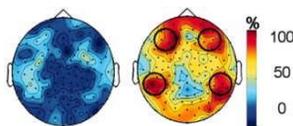
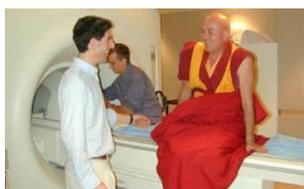
Mindfulness training helps us work with our attention to more healthy thoughts which literally impact us the in the moment we are having them. Mindfulness practice results in critical differences in brain function and combats many of the effects of ageing. It also prevents the classic "executive burnout" that we are seeing more and more often. This is associated with depersonalization, emotional exhaustion, lack of motivation and little personal accomplishment.

Anxiety leads to smaller working memory spans. Mindfulness practice reduces this anxiety, allowing us to

increase IQ and treat the new health crisis facing our executives: "attention deficit trait." "ADT" has now been coined²³ as our tendency to multi-task, to not pay attention to anything very well, and to lose enjoyment of what we are doing. ADT-affected people find it difficult to prioritise, stay organised and manage time; they adopt very black-and-white thinking, and they will definitely not be the ones to take us down the road less travelled by. Mindfulness therapies now abound and are teaching us that we don't have to control our thoughts, but that we don't have to be controlled by them, either. We can just observe them and let them go by without consequence.

The added benefit to mindfulness training is a greater ability for our minds to use intuition and insight. Intuition is the faint presence of a widespread unconscious that we know the answer somewhere in our mind (and for some of us, our gut). Insight is the "aha" moment that follows when we actually break through difficult problems. Neuroscientists have observed the moment of insight as it occurs.²⁶ In the prior moment before the brain experiences the insight (seen as a very high-frequency "gamma" wave of activity), the brain experiences a very low-frequency "alpha" wave of quiet (a mindful state). This isn't surprising. Anyone can tell you that they often solve problems best after sleep or after a shower or a run. At these times, the brain is in prime condition to experience the "aha" surge that must be preceded by the quieting.

Besides the required mindful state necessary, scientists are also showing that people who are in better moods are much more able to solve problems with insight. Even watching comedy films helps people solve problems more effectively. Teams that laugh together will solve problems more quickly and more insightfully. Mindfulness about the problem itself also promotes a faster "aha" moment. This means asking about the problem: "How long has



The colour "brain histograms" above shows the percentage of subjects who showed a significant increase in gamma activity (associated with insight as described on this page) during meditation as measured by EEG located at various places on the scalp. The left brain is the histogram of 10 control subjects who underwent meditation training for one week before the experiment. The right brain is the histogram of 8 long-term Buddhist practitioners (ranging from 10,000 to 50,000 hours of meditation.²⁴ Much of this type of research has been done with Dr. Richard Davidson of the University of Wisconsin and Buddhist monk and world-renown author and speaker, Matthieu Ricard, shown in the photos above.²⁵



this been a problem? How often does this enter your thinking?"

In a parallel world to the business world but one from which we can learn, Dr. Craig Hassed, Senior Lecturer at Monash University's medical school,¹⁸ has become an ardent teacher of mindfulness to all of his medical students. He is seeing the same burnout in interns and residents as we are seeing in our executives. An Australian study found that eight months into their intern year, 75% of interns qualified as having burnout, characterised by depersonalization, emotional exhaustion, lack of motivation and little personal accomplishment. Another study of American hospital paediatric residents found that depressed doctors were six times more likely to make drug prescribing errors than their non-depressed colleagues.

Craig teaches mindfulness to all the medical school students and has seen significant improvements across all kinds of physiological and psychological reactions. He calls his program ESSENCE, which stands for the combination of education, stress management, spirituality, exercise, nutrition, connectedness, and environment. All executives should be aware about the profound implications of integrating these seven elements into the business workplace and into the lives of our employees in order to gain their best performance.

One needn't be new age to talk about spirituality. For most of us, spirituality can be more inclusively called our search for meaning, and we all yearn for that, as Nietzsche so elegantly argued, "He who has a why to live can bear with almost any how."²⁷

Implications and Summary: What leaders need to do and even more important, who they need to be

To keep in **mind** above all is Viktor Frankl's advice that we will always have the freedom to choose our attitude to any circumstance. Tell your mind to "remind" your brain constantly that this choice exists, even if it only does have 0.2 seconds to do so. Think about the four steps to seeing the world in a different way:

1. Become aware of the hardwiring our brain has inherited from our Stone Age ancestors, which is reflected in our tendency to see False Evidence Appearing Real when we are exposed to a perceived reduction of Status, Certainty, Autonomy, Relatedness, and Fairness (SCARF). Constantly be vigilant against these conditions for fear in the workplace.

2. Educate yourself about how you and your people specifically respond to various stresses, catching yourselves in the act of fighting, fleeing, or freezing.

3. Practice reappraising situations and find ways to develop optimism. This can definitely be learned and wired into your brain's circuits. Your people will take your cue; optimism is contagious. You can also help them to reappraise situations, instead of simply ignoring stress, suppressing fear and keeping their head down. This is the last thing you need for your organisation and the last thing your employees need for their own physical health.

4. Keep your mind and body fit through practising various versions of mindfulness. There are hundreds of ways to develop mindfulness – from meditation to sport to gardening to simply being quiet and watching your thoughts as you ride the bus into town. Develop methods for your employees to find quiet time in their day so that they can be inspired by intuition and insight. Encourage their senses of humour, which will support the optimism and actually inspire the insight even further.

Education
Stress management
Spirituality
Exercise
Nutrition
Connectedsness
Environment

"He who has a why to live can bear with almost any how."

Nietzsche



Leadership is consciousness

At the end of the day, leadership is truly synonymous with conscious intent. The art of being aware of your brain's machinations and how you can control these machinations with your mind is quintessential in the art of leadership. "It is the brain that puts out the call, but it is the mind that decides what to listen to, as neuroscientist Jeffrey Schwartz argues. "We have no control over the messages the brain sends you—we only have veto power about what we act on."¹⁴

Perhaps we can draw comfort from one of the greatest leaders in times of difficulty, Winston Churchill, who reminds us from the past that "an optimist sees an opportunity in every calamity; a pessimist sees a calamity in every opportunity." Pulling us out of recession will require our leaders to choose optimism.

Which road will you choose to travel by?

The Road Not Taken Robert Frost, 1915

Two roads diverged in a yellow wood
and sorry I could not travel both
And be one traveller, long I stood
and looked down one as far as I could
to where it bent in the undergrowth;

Then took the other, as just as fair,
and having perhaps the better claim
because it was grassy and wanted wear;
though as for that, the passing there
had worn them really about the same,

And both that morning equally lay
in leaves no feet had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I –
I took the one less travelled by,
and that has made all the difference

If by Rudyard Kipling, 1895

If you can keep your head when all about you
Are losing theirs and blaming it on you,
If you can trust yourself when all men doubt you,
But make allowance for their doubting too;
If you can wait and not be tired by waiting,
Or being lied about, don't deal in lies,
Or being hated, don't give way to hating,
And yet don't look too good, nor talk too wise:

If you can dream - and not make dreams your master;
If you can think - and not make thoughts your aim;
If you can meet with Triumph and Disaster
And treat those two impostors just the same;
If you can bear to hear the truth you've spoken
Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to, broken,
And stoop and build 'em up with worn-out tools:

If you can make one heap of all your winnings
And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings
And never breathe a word about your loss;
If you can force your heart and nerve and sinew
To serve your turn long after they are gone,
And so hold on when there is nothing in you
Except the Will which says to them: 'Hold on!'

If you can talk with crowds and keep your virtue,
' Or walk with Kings - nor lose the common touch,
if neither foes nor loving friends can hurt you,
If all men count with you, but none too much;
If you can fill the unforgiving minute
With sixty seconds' worth of distance run,
Yours is the Earth and everything that's in it,
And - which is more - you'll be a Man, my son!





1. Banerji, S. et al (2009). Recession Response: Why Companies are making the wrong moves.
http://www.booz.com/global/home/what_we_think/reports_and_white_papers/article/43825817
2. Nicholson, N. (1998). How hardwired is human behavior? Harvard Business Review, 76, 134-147.
3. Rock, D. (2008). SCARF: a brain-based model for collaborating with and influencing others NeuroLeadership Journal, 1, 44-52
4. Goleman, D. (1996) Emotional Intelligence: Why It Can Matter More Than IQ New York: Bantam Books
5. Rosenthal, R & Jacobson, L. (1992) Pygmalion in the classroom Expanded edition. New York: Irvington
6. Gallwey, W. T. (1974). The Inner Game of Tennis (1st ed.). New York: Random House
7. Surowiecki, James (2004). The Wisdom of Crowds: Why the Many Are Smarter Than the Few and How Collective Wisdom Shapes Business, Economies, Societies and Nations Little, Brown
8. Lieberman, M. and Eisenberger, N. (2008). The pains and pleasures of social life; a social cognitive neuroscience approach. NeuroLeadership Journal, 1, 44-52
9. Maister, D. (With Green, C.H. and Galford, R.M.) (2000). The Trustee Advisor. New York: Free Press
10. Tabibnia, G. & Lieberman, M.D. (2007). Fairness and Cooperation are Rewarding: Evidence from Social Cognitive Neuroscience. Annals of the New York Academy of Sciences, 1118, 90-101
11. Ebert, F. et al. (2008). World of Work Report 2008: Income Inequalities in the Age of Financial Globalisation, International Labour Organisation, International Institute for Labour Studies
12. Burow, P. (2008). NeuroPower. Victoria, Australia: Copernicus Publishing Pty Ltd
13. Frankl, V. (1945) Man's Search for Meaning. Boston: Beacon
14. Schwartz, J. (2008), presented at the first Asia Pacific NeuroLeadership Summit, Sydney, Australia
15. Oschner, K. (2008). Staying Cool Under Pressure: Insights from social cognitive neuroscience and their implications for self and society NeuroLeadership Journal, 1, 26-32
16. Seligman, M. E. P. (1990). Learned Optimism. New York: Knopf. (reissue edition, Free Press, 1998)
17. Sharot, T., Riccardi, M.A., Raio, C. M., Phelps, E.A. (2007) Neural Mechanisms Mediating Optimism Bias Nature. 450 (7166), 102 -105
18. Hassed, C. (2008). Mindfulness, wellbeing and performance. NeuroLeadership Journal, 1, 53-61
19. Rhys Davids, T.W. (1880) Buddhist Birth Stories (Jataka Tales), London : Davids
20. James, W. (1961). Psychology: Briefer Course, p. 424 New York: Harper Torchbooks
21. Tang, Y-Y. and Posner, M.I. (2008). The neuroscience of mindfulness. NeuroLeadership Journal, 1, 33-35
22. See Hassed and Tang for all references to the physiological and psychological effects of mindfulness and meditation
23. Hallowell, E.M. (2005). Overloaded Circuits: Why Smart People Underperform. Harvard Business Review, January 2005. 54-62
24. Lutz, A, et al. (2004). Long term meditators self-induce high-amplitude gamma synchrony during mental practice. Proceedings of the National Academy of Sciences, 101 (46): 16369-73
25. See the work that Richard Davidson is doing at the University of Wisconsin, <http://psyphz.psych.wisc.edu/>. Matthieu Ricard is author of such books as The Monk and the Philosopher as well as Happiness: A Guide to Developing Life's Most Important Skill . See <http://www.matthieuricard.org/en/index.php>
26. Jung-Beeman, M., Collier, A. and Kounios, J.(2008). How insight happens; learning from the brain. NeuroLeadership Journal, 1,
27. Nietzsche, F., as quoted in Frankl, V.

About the author

Katharine McLennan's combined career spans corporate strategy, operations, talent/leadership development and self transformation. Her most recent corporate roles have included Senior Vice President of People & Culture at Cochlear, Head of the QBE Global Leadership Academy and Executive General Manager, Talent and Business Unit HR for Commonwealth Bank of Australia.

Katharine is now an executive coach and psychotherapist for a range of corporate, government and non-profit leaders of organisations, where she focuses on corporate strategy, talent and psychology. She also works individual facing depression, anxiety, addiction, trauma, and career transition.

Prior to her corporate career, Katharine spent 10 years in leadership consulting, providing advisory services on behalf of three major organisations: Heidrick & Struggles, the Mettle Group and PricewaterhouseCoopers.

Before becoming the passionate leadership developer, Katharine's execution and pragmatic sense was fully developed in her role as head of operational planning and execution of the Sydney Olympic Games between 1996 and 2000, as well as her experience in the non-profit sector with her work with the YWCA NSW. In this role she led the operational planning process for the venue operations and was the main facilitator on all operational planning and contingency exercises within the Sydney organisation. She continues today to advise the IOC and all Organising Committees in their operational planning, workforce strategies and leadership development.

Her corporate strategy background is grounded in her formative years with Booz & Co driving corporate growth strategies, business reconstruction and process re-engineering across industries such as health care, banking, telecommunications and logistics. Clients included CBA, NAB, Tubemakers, TNT, Telstra, Royal Adelaide Hospital, the Alfred Hospital and Royal Prince Alfred Hospital.

Katharine has degrees with top honours in Biology/Neuroscience and History (Duke), Business (MBA, Stanford), and Political Science (MA, UNSW) .

Katharine is a qualified psychotherapist ([PACFA](#)), and an Industry Professor of the University of Technology Sydney. She is also a Director of Petrea King's [Quest for Life](#).

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