People are strange...

and what you can do about it

A brain-based approach to improving communication

Part One: About your brain

Strange Fruit (Australia) artists at festival Bright People in Gorky Park, on August 18, 2012 in Moscow, Russia.

People are strange…
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WHAT'S THIS ALL ABOUT?

Have you ever told a story to friends, or maybe made a presentation which you were sure would resonate with the audience only for it to fall flat?

Have you come home from work with a piece of good news only to find it unappreciated?

Have you tried to communicate something that you thought was blindingly obvious only for it to be completely misunderstood?

Or have you been on the reverse side of these situations, just looking on with a bemused expression. "You just don't get it, do you…", is a phrase either thought or spoken by many people interacting with each other around the world every day.

The simple truth is: people really are strange. Some appear to be always happy, some always sad; some are more predictable than others, some less so; some you feel you always got on with and some you're pretty sure you'll never be able to relate to. But if you want to co-exist with others really successfully (or to be more accurate; if you choose to do so), at home or at work, you need to first take a magnifying glass to their 'strangeness'; to why they are different. Then it's up to you to decide whether you want to make the effort to become less strange in their eyes. Yes, you too are strange… at least to some people!

Certain relationships are tricky. A finance director who is only looking at the bottom line can get on with a communications manager whose task is to improve customers' feelings about a brand but it will not be easy. They rarely talk the same language with a heady blend of facts and emotional responses muddying the waters between them; but if at least one of them makes the effort, it can be done. Or take a person who appreciates order, routine and procedure, and try and get them to accept major change. It's never going to be easy, yet if it is presented and dealt with sensibly and correctly from their point of view, it becomes possible.

In the following pages, you will find ways of analysing the person or people you want to better connect with and then, as a consequence, discover how best to approach and influence them. You will learn to appreciate where others are coming from and as a direct result, be able to express yourself with more clarity and conviction.

But, the thing is; you cannot truly gain clarity and conviction about the way you express yourself without first, getting a clearer picture of why others think and act as they do when they interact with you. And that's a learning process which begins with first, holding up a mirror to yourself.

INTRODUCTION

How happy and relaxed you feel about life has to do with many things, some of which are under your control and some which are not. After many years of working with individuals and teams, sometimes as the boss, sometimes as a team-member and sometimes as a trainer, presenter or moderator, I am now more and more convinced that communication and the way in which we are able to communicate with others plays a leading role. The ability to express yourself appropriately and effectively just when you want to do so will make you happier. What's more, the internal frustrations that build up within you when you are unable to do just that are stressful and can even be harmful over time.

You've probably experienced that feeling when you come up against someone who is naturally gifted rhetorically. And if you know that their facts are wrong or maybe that they are exaggerating unnecessarily, it just makes things worse for you. It affects how at ease you are with yourself; how comfortable you are when reacting in a particular way to a certain situation.

Life is full of misunderstandings and misinterpretations. Something which is just plain obvious and taken for granted by one person is not at all the case for another. The seeds of miscommunication and potential conflict are sown all too easily. Maybe you've come up against those who succeed in business or in their social lives, not because they are the most talented or suited to their role, but because they have the ability to express themselves well and clearly; their unique combination of words and body language seem to fit in wherever they are, even getting them out of awkward situations when necessary.

Teachers that I have known (and some of them were strange!), present some of the best and some of the worst examples of communication, that being described by Merriam Webster as: "the act or process of using words, sounds, signs, or behaviours to express or exchange information, ideas, thoughts, feelings, etc. to someone else". In their book, *Made to Stick*, the brothers Chip and Dan Heath speak of the 'curse of knowledge' that all teachers and communicators face. When you know your subject inside out, they say, and the salient points or scientific rules are so blindingly obvious to you, how on earth can you put yourself in the situation of someone learning these things for the first time? It is simply not possible. And that's probably why it's so tough for so many schoolteachers.

Getting your point across is further complicated by the different learning styles that people exhibit, best illustrated by looking at a 12 year old starting to play the game of monopoly for the first time. She may be one of the very few who examine the book of rules and play brilliantly after just a quick study, but she is much more likely to watch others playing before bravely joining in. On balance though, she is most likely to start playing with other patient family members and then simply pick it up as she goes along, learning from her mistakes as she progresses. She is 'learning by doing', as the management trainers would call it and for most of us, it's our favourite learning style as long as a safe environment is provided; yet traditional schooling methods and much of our daily communication are based on what you see, read and hear; most often, what you read.

Apple got round this by stopping to print instruction booklets and concentrating on product usage which was designed to be as intuitive and easy as possible. Anyone who has spent time going through typical instruction booklets for home appliances knows just how difficult

they can be to understand and follow… even if they are well written in the first place which is certainly not the norm.

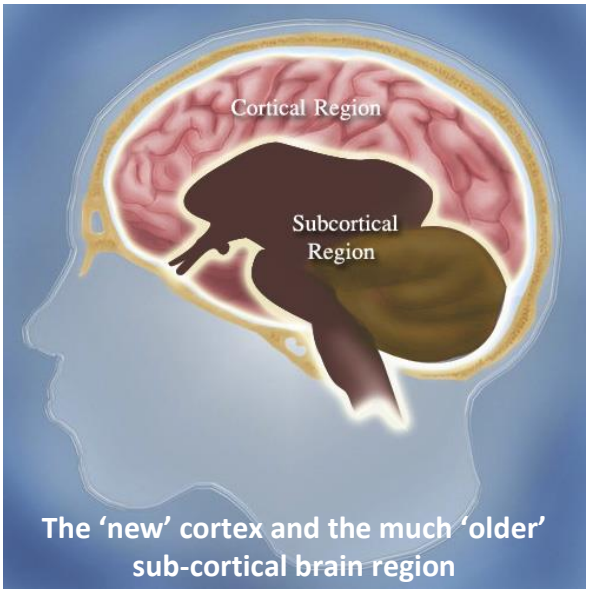
But what have learning, teaching and instruction booklets got to do with our day-to-day life? They provide us with examples of people who are working hard at clarity of communication yet still, all too often, getting it wrong.

Maybe you don't consider yourself to be a communicator; or maybe you'd like to be better at it but you just don't know where to begin? These pages are directed at you if want to get your point across more effectively and become more clearly understood. In the second part of this series, you will add elements which help you talk in a way which encourages people to remember what you said. All the clarity of communication in the world comes to nothing if it goes in one ear and straight out the other.

In its implementation, this work is based on the author's observations of individuals and teams over many years, but its main premise is based on scientific principles which have only been clarified in recent years. So, to get started, we will need to begin with a brief history of the brain.

Your highly interconnected brain

Although the different and diverse parts of our brains are highly interconnected, in evolutionary terms, we effectively have one much newer brain, the cortex, sitting on a whole bunch of older structures which are often referred to as the limbic system and the ancestral or reptilian brain (that being because it is shared with all other vertebrates including for example crocodiles). The origins of the limbic system go back nearly100 million years to the very first warm-blooded mammals which evolved towards the end of the Cretaceous period. The reptilian brain dates back as far as the earliest fish some 450 million or more years ago.



The 'new' cortex and the much 'older' sub-cortical brain region

Yet the cortex, or cortical region, only started its major expansion with the increase in size of the frontal lobes some 3-4 million years ago. It reached roughly today's size in our human ancestors about 500,000 years ago and currently accounts for around 80% of our brain's volume. Many scientists now believe that it is the amazing degree of interconnectivity across our brains which separates us from other primates, who also possess a cortex.

Today, the added input from brain-scanning equipment of various types allows us to analyse the separate functionality of the newer cortex and the older brain structures. Through this, we get the opportunity to promote self-knowledge and accordingly, to understand others better. This inward looking self-knowledge about the power of our own brains provides the starting point for our improved abilities to communicate with others, be they work colleagues, family members, shop assistants or the bank manager. By getting to know them better, we will get to know ourselves better… and vice-versa.

Technically, we should refer to these two groupings as the cortex or cortical region and beneath that, the sub-cortical region. For reasons that must by now be clear, we will refer to them simply as the **new brain** and the **old brain** as our form of shorthand when proceeding with this book. A neuroscientist might object to this type of oversimplification, but the differences in our thought patterns are extreme enough for most psychologists to see things in this bifurcated way, especially when it comes to our most basic thought processes. Put differently; the way we go about thinking at a high level, can be described in terms of the way these 'two brains' interact.

For those of you who would like a bit more knowledge on these two brains, and how we will proceed… here are a few gems of information!

The New Brain

- The new brain is your thinking brain. It's where you consider attributes and weigh up which decision to take, but it is not where you actually make that final decision; that's deeper down in the old brain.
- The new brain has four distinct areas each joined left and right, front and back by connecting nerves and tissues in particular ways. These four segments are formed by the two frontal lobes and the grouping of the sensory, parietal and occipital lobes to the side and rear.
- We are born with a natural pre-disposition to be able to use one of these segments more efficiently than others. By examining our own cortex, our 'new brain', we can identify our own strongest asset or set of gifts which allows us to better leverage our strengths, if we so desire. This knowledge brings us insights into those whom we get on with best and helps us understand why that is. Equally, we can gain deep insights into why others see or feel things differently than we do and learn what to do about that in terms of communicating and even influencing them. It's worth repeating… only if we so choose.
- The new brain is at least to some extent accessible to us for conscious thought – the old brain is not.

The Old Brain

- The old brain regulates our everyday bodily functions including balance and muscle control but it is also the seat of our most basic fight/flight reflexes and hence, our emotions. It senses your levels of stress and at times, pumps you full of adrenaline and endorphins which in today's world, sometimes undermine your ability to react as you would most like to. What your old brain doesn't realize is that in corporate life, making a presentation may be something where you'd profit from being calm and relaxed, yet in mistakenly sensing a dangerous situation, it pumps up your heart-rate and leaves you short of breath. 'Survival tactics ain't what they used to be…' as the saying goes.
- Like a sophisticated organisational set-up, the old brain has many distinct areas of expertise such as the two almond-shaped amygdalae, which are located to the left and the right at a central point on a line going through your eye to your ear. Of these, we shall hear more since they are an important part of our survival system and play a major role in how we deal with emotions, particularly in your response to fear.[1]
- The old brain is also the seat of one of our key personality traits, namely it determines how introverted or extraverted we are. Modern neuroscience can now show us that the relative levels of the hormones dopamine and acetylcholine in our brainstem, deep in the old brain, determine to a great extent whether we seek out crowded places when we need more energy or whether we prefer to look for a quiet spot to re-energise.

[1] (See Prof. Joseph LeDoux explain at: http://bigthink.com/videos/the-amygdala-in-5-minutes).

Your Brain: a few facts

It develops quickly: By age 2, the brain is about 80% of its adult size

A human brain is 75% water with the consistency of tofu or wobbly gelatine

The human brain has approximately 100 billion neurons (as many cells as there are stars in the Milky Way). Each neuron has between 1,000 and 10,000 synapses, equalling about 1 quadrillion synapses.

All the neurons in the human brain lined up would stretch 600 miles

(An octopus has 300,000 neurons, a honeybee has 950,000, and a jellyfish has no brain at all)

"The brain continues developing into your twenty-something years… while rewiring itself for adulthood; it's trying to wrap itself around the concepts of time, probability and uncertainty."… Meg Jay; 'Why Your Twenties Matter.'

Girls' brains mature faster -The brains of females reach maturity before those of men - Girls reach the half-way point in brain development just before age 11 years; boys do not reach that inflection point until just before age 15 years. So a young woman reaches full maturity, in terms of brain development, between 21 and 22 years of age, but a young man not until nearly 30 years of age.

- Although the way we think and process information in our new brains is very different from person to person, our old brains are highly predictable. They govern our sub-conscious so we have little direct control - perhaps that is why we think of ourselves mostly in 'rational' new brain terms. The reality is that our 'emotional' old brains are really in charge most of the time! And they never stop working.
- Yet because our old brains have been around for so long and their thought patterns progress along well-trodden pathways, they are also highly predictable; this allows you to learn which messages and ways of communication make contact and become 'sticky', or which approaches upset the old brain and if you are not careful, will be simply forgotten quickly.

Getting a better balance between the brains

To get a better understanding of people's strangeness, you will need to get a better understanding of the balance of power that exists in your brain and how it affects you when you make decisions and communicate with others. With greater understanding, each one of us can overcome the natural evolutionary-driven pitfalls that face us every day. But before coming to terms with that relationship, we need to first get a deeper knowledge of our conscious selves – those thoughts and thought patterns experienced by the new brain. And there's a bit more nature than nurture here than we might think.

By understanding our own strengths and accepting our weaknesses in this way, we can create the healthy environment and symbiotic relationship which gets the two evolutionary brain segments working in harmony – at least some of the time. If we don't first make that effort to identify these natural talents, our old brain will end up getting confused and over-worked as it struggles to cope with uncoordinated messages and linkages from the new guy on the block, the cortex.

We will also examine the tension that exists between the unconscious brain and the conscious brain… in our terms, the old brain and the new brain. We will see how by being true to our 'conscious' strengths and as a result, being able to better understand others, we can then more easily leverage the old brain to communicate in a more compelling way. Paying attention to the ways and needs of other people pays off, but it does require some effort on your part to get started. This little bit of effort required of you helps you directly though, in that it builds confidence and adds competence; the result… a sharper you and a happier you!

By adopting the shorthand used in this book, with just 4 distinct 'new brain' types, a measurable degree of introversion or extraversion and the predictability of the 'old brain', you can derive this additional self-understanding and go on to better deal with your friends, families, co-workers and even strangers with whom you come in contact.

Are we rational beings?

In his book *Subliminal: How Your Unconscious Mind Rules Your Behaviour*, the theoretical physicist Leonard Mlodinow argues that many peculiarities of human nature can only be explained by understanding that our rational brains aren't really in charge. "Most of the time", he argues, "subtle cues exert a powerful, discomfiting pull on our behaviour. It is not so much that we are incapable of rational thought, of coolly weighing the pros and cons of a purchase or a relationship or a period of foreign travel. It is just that when we use the most logic-bound parts of our brain (nb: in general this equates to our cortex or new brain), psychologists and neuroscientists are discovering that we tend to fool ourselves into thinking that we're being rational when in reality, there are powerful, submerged cognitive forces actually guiding us." Mlodinow, clearly believes that we do not consciously control our decisions and beliefs in the way that we would like to think we do.

He believes that evolution has led us to a schizophrenic state of affairs: "We have an unconscious mind and, superimposed upon it, a conscious brain," he writes. "and as a result, it can be very hard to know why we do what we do, since there is no unitary thing called "my brain" or "my mind" calling the shots. Rather, there is a constant back-and-forth between the conscious and the unconscious, between the rational and the instinctual."

Just how does the brain work?

On April 2 2013, the following headline began appearing across the internet: "Obama seeks $100M to unlock mysteries of the brain". Those in the science community directly involved with the project added their comments with National Institutes of Health Director, Francis Collins, commenting that "advances in tech which are coming along very quickly make it possible to take a look at what's happening in the brain," and the research "leads us to believe we can accomplish something very dramatic."

The hope is that these new technologies will lead to insights into how the brain processes information and how this all links in to behaviour. "We aim through this ambitious project to try to unravel these mysteries," Collins continued.

Well; call me a killjoy but I'm pretty sure that their work will fall short of expectations. While it is true that we have learned an incredible amount about the brain and how it works in the last 30 years or so, particularly helped by the growing access in facilities around the world to various kinds of brain scanning equipment (from Positron Emission Tomography PET scans to functional Magnetic Resonance Imaging, known as fMRI's), we have also learned how

much we do not know. And that part is growing too. Analysis of the brain and how it works takes on truly mind-blowing proportions. One may also question as Dr Iain McGilchrist does in his book, 'The Master and His Emissary', whether our computerised attempts to understand and emulate the brain are taking on a too mechanistic approach. His viewpoint is that the emotional nature of our brain comes first – something that computers may have some trouble interpreting!

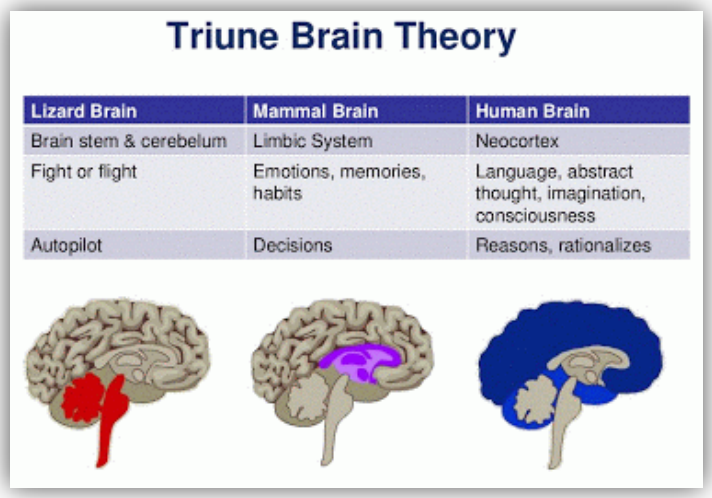
To delve deeper into this idea of complexity, let's further examine the new brain; visually and metaphorically, they are those 'little grey cells' that Agatha Christie's Belgian detective Poirot often refers to. They can be found in that visible part of the brain that we see when the skull has been conveniently removed. Known as the cerebral cortex, it is a thin, highly folded layer of tissue on the brain's surface; a thicket of prolifically branching neurons. A typical healthy human brain contains about 200 billion nerve cells, or neurons, which are in turn linked to one another via hundreds of trillions of tiny contacts called synapses. "One neuron may make as many as tens of thousands of synaptic contacts with other neurons", said Stephen Smith, PhD, professor of molecular and cellular physiology and senior author of a study, published November 2010 in the specialist magazine Neuron.

"In a human, there are more than 125 trillion synapses just in the cerebral cortex alone," said Smith. "That's roughly equal to the number of stars in 1,500 Milky Way galaxies", he noted. "Observed in this manner, the brain's overall complexity is almost beyond belief," he went on to say. "One synapse, by itself, is more like a microprocessor … and may contain in the order of 1,000 molecular-scale switches. A single human brain has more switches than all the computers and routers and Internet connections on Earth."

It's not difficult to see that to get an understanding of how the brain works that really helps us get further with the study of personality, we need to involve some degree of simplification. For many years now, psychologists have developed such simplified models looking from the outside in, and more recently, neuroscientists have done the same… from the inside out.

From the anatomical side, this has led to conceptual approaches which separate the 'younger' cortex from the older parts of the brain (in evolutionary terms), those which examine the left and right sides and those that separate the frontal cortex, who then refer to a front and back brain. At the same time, psychologists and philosophers have referenced concepts such as dualism which have separated mind from matter. Notably, Descartes of "I think, therefore I am" fame, proposed that the human mind and body are two distinct entities interacting with each other via a small structure at the base of the brain called the pineal gland to make a whole person.

Distinct from that and much more modern is the concept of dual-processing where automatic thought processes (fast) yield default responses unless intervened on by higher order reasoning (slow). Daniel Kahnemann in his best-selling book 'Thinking Fast and Slow' refers to these two types of thought as System 1 (fast) and System 2 (slow), essentially two separate ways of thinking whereby the brain's default pattern is to go for the faster solution and where it involves considerable effort to apply the second mechanism of thought. Processing simple multiplication such as 2x2 would need System 1 thought, yet 17x24 would involve system 2 (at least for most of us!).



In the 1960's, the American physician and neuroscientist Paul D. MacLean developed his evolutionary-based model of the triune brain and its related behavioural traits. This consisted of a three part model - the reptilian complex (or old brain), the paleo-mammalian complex (limbic system), and the neo-mammalian complex (neocortex). He saw these three supplementing each other in an additive process where one was added to the other over millions of years, starting with the reptilian complex in the very first vertebrates nearly 500 million years ago.

What's important to remember is that it had previously been assumed that the highest level of the brain, the neo-cortex, dominated the other, lower levels. MacLean demonstrated that this is not the case, and that the limbic system for example, which rules emotions, can hijack the higher mental functions almost arbitrarily. MacLean interestingly referred to the newest part of the brain, the cortex, as "the mother of invention and father of abstract thought".

A more psychological brain-based approach came in the book, The Psychology of Consciousness, published back in 1977, where Robert Ornstein described the two distinct but complementary sides of consciousness, the intuitive/irrational mode and the verbal/rational mode. Ornstein argued that the intuitive mode of thinking is often overlooked in Western science, education, society and psychology. A reliance on the rational mode of consciousness, he argued (and still does today), has led to a denial of our "inner" life, and the filtering out of much sensory input. He roughly aligned rational thought patterns with the cortex, and intuitive/irrational thought with the older limbic and deeper brain structures including the brain stem. Having said that, he became convinced that the brain is a messy but highly interconnected place – not unlike the views held by the Nobel prize-winner Gerald Edelmann who declared that the brain is "… not like a computer, but more like a jungle ecosystem".

On the psychoanalytical side, it was Carl Jung in the early part of the twentieth century, who developed the concepts of introvertism and extravertism and became the modern day father of many of the personality based assessments that are around. Most notably, the well-known and much used Myers Briggs Type Indicators were based on his work on personality types, although he took distance from some aspects of their test approach. His development of different personality types was based largely on our conscious beings, although Jung argued that the unconscious mind is always there, working for us in the background. Modern neuroscience supports this view, in particular showing how our unconscious minds play a strong role in decision making. This importance of the unconscious mind was also what led him to be critical of the prevailing view found in much modern science; that of a machine-like conception of what it means to be human.

Carl Jung firmly believed in the important role of nature (as opposed to nurture) when it came to our innate abilities to use brain functions. His personality types were set up as opposites (thinking vs. feeling for example) and he believed that we each have a natural disposition or gift allowing us to use certain ways of thinking more easily than others.

The left-brain, right-brain debates have gone on for some years now, but the earlier complete separation of skills, such as the location of all verbal ability being exclusively in the left brain, have proven to be too much of a simplification for many scientists. The most comprehensive study of the subject has been carried out by Iain McGilchrist and published in his book, The Master and his Emissary. He deduces that the right brain is where all learning commences before 'what is learned' passes with time to the left brain. Additionally, the right brain has the ability to examine what is possible, being flowing and interconnected in nature, whereas the left brain deals with what is predictable and with all things mechanical. One basic tenet of earlier right brain/left brain studies holds true; namely that, the left brain controls our right body parts (eyes included) while our right brain exerts its influence over the left hand side. (This is even the case for 90% or so of left-handed people). Back in the centre of the brain, the corpus callosum connects these two major brain segments, both transmitting and interestingly, blocking the exchange of information as it sees fit.

> "A chick that pecks a helpless ant should not forget that the sky is full of hawks"
>
> Old Kenyan Proverb

In addition, we humans don't have exclusive rights to this hemispherical division; it seems that all animals exhibit such left-brain, right-brain differences. Take the situation of the simple blackbird using its right eye to examine the details of the juicy worm in front of it, while its left eye keeps watch, looking at the bigger picture and ensuring that the blackbird does not in turn become prey to a bigger creature. That's why birds cock their heads to the right when looking at you closely, by the way.

Ian McGilchrist also distinguishes the frontal lobe functions from the sensory parts of the rear cortex. In his words," the defining features of the human condition can all be traced to our ability to stand back from the world… from the immediacy of experience. This distance, this ability to rise above the world in which we live has been made possible by the evolution of the frontal lobes." So in addition to the left/right connection, we have a front/back connection, the rear being anchored in our senses and feelings of being in the immediate present, the front allowing us to take distance and consider our position. These large frontal lobes give us the power to think flexibly and inventively – to take control of the world around us rather than responding passively.

So with frontal, rear, left and right segments, we are beginning to see how there is a certain independence to each of these four areas of 'conscious' brain functionality, yet getting the full use of our brains leverages the amazing interconnectedness of these areas. Left to its own devices, the basal left grouping of cortical lobes would not be able to see the wood for the trees, yet in the opposite segment, the frontal right lobe could see the wood but not make out the individual conifers. Equally, the basal right grouping would 'feel' the need for improved security but it would take actions from the frontal left lobe to make the tools necessary for its defence.

As referenced earlier, in the end, it may just be this degree of interconnectivity that gives you as a human being, your edge in dealing with the present as well as being able to examine future possibilities… not forgetting that you also need to maintain a sense of balance between rational (conscious) and emotional (sub-conscious) thought – at least some of the time. David Linden, Professor of neuroscience at Johns Hopkins University refers to 'our massively interconnected but messy brain". There is also growing evidence that in the cortex, both the balance and degree of connectivity between our frontal cortex and the sensory cortexes towards the side and the rear of our brains, play a key role in how we exercise moral and ethical self-restraint.

Your amazing brain

Combining the models, it would appear that both rational and reasoned conscious thought takes place in the combination of different parts of our cortex, and that unconscious thought and emotional feelings lie for the most part deeper in the tangled web of connectivity that MacLean named the limbic system and the reptilian complex.

Our brains process extraordinary amounts of information and then put them together into a coherent image or message that helps us decide on our next course of action. Imagine looking at a black 8 ball rolling down the table and then deciding whether to pick it up or not. Different parts of your brain are assessing the speed of the ball, the colour, trying to make out the number on its side while progressively determining where it is located and in which direction it is headed. And each day, we make hundreds if not thousands of decisions just such as this one.

Improving joie de vivre

Quality of life; joie de vivre; most societies have a word or phrase which loosely translated means 'joy of being alive' and yet in reality combine your day-to-day experiences with a certain exultation of the spirit. A positive quality of life encompasses our physical and spiritual well-being, bringing it together with many aspects of our daily interactions with others. Your personal 'joie de vivre' can play out differently at home and at work, where things are often not all they might be. Rather disappointingly, emplyee surveys have regularly shown that one third or more of employees are unhappy in the relationships with their bosses and this figure appears to remain constant (US data).

At the national level, regular polls pronounce the countries with the highest quality of life and the Paris based Organization for Economic Cooperation and Development's Better Life Index, yet again placed Australia at the top of their 2013 poll, calling it the happiest country in the world. Their eleven categories include income, housing, jobs, community, education, environment, civic engagement, health, life satisfaction, safety, and work-life balance. The USA comes in at number 6 and the UK just squeezes in at number 10.

A different interpretation of the same survey results focused less on economics and more on 'life satisfaction' places Switzerland at the top. This is a truer review of inhabitants' personal feelings of 'joie de vivre' and looking at the rankings this way, the UK and USA don't even make the top 10, while a country with far greater political and safety woes, like Mexico, does.

So even if the right blend of economic GDP success does contribute to delivering better lives to individuals, the answer to our personal well-being and feelings of happiness lies elsewhere; I would argue that to a great extent, it lies in our own hands… or, to be more precise, in our own brains.

Our brains are each unique and different, but just as we are born left or right handed, we have certain nature-given traits which determine our core personalities, the way we see, think and feel about things. This has become clearer since access to PET scanning devices increased in the 1990's. In this process, doctors conducting brain scans using positron emission tomography (PET) equipment, inject people with a small amount of radioactively labelled glucose which reveals levels of glucose metabolism to determine brain activity in different areas of the brain. Dr Haier's research with the University of California at Irvine showed that where you think fastest, you use the least amount of energy, or put differently; when you are enjoying thinking about something, it feels truly effortless and results in a lower oxygen /glucose usage in your brain… but more of this to come later.

Although we can influence our brains and there's a lot of nurture balancing out the nature, it is clear that we are all at least to some extent pre-programmed, whether we like it or not. It is why for example, some of us are turned on by the thought of adventure travel while for many others, such journeys would be boring or indeed, scary. It is why some people laugh at a seemingly idiotic joke and others find it plain idiotic and stupid. It's simply in our nature.

If we restricted ourselves to respecting a generic list entitled, "the best ways to behave", we would only get so far because outside of areas such as basic politeness, we sometimes find that our behaviour towards others is misunderstood, taken as inappropriate, irrelevant or

perhaps to some, we can appear downright boring. And this is not just in complex, cross-cultural situations.

This all makes things a bit difficult, knowing that your personal target of improving your 'joie de vivre' is going to be at least to some extent influenced by the way that others react to you.

The correct pathway commences with first, getting to know 'yourself' better. By getting to understand your own thinking style, the doorway will open for you to consider how you can express yourself better to others. Just to be clear; this book is not suggesting that you undertake a personality change. It is also not attempting to help you become all things to all people – which would be bland and confusing. The solutions and techniques offered here represent the very opposite of lying, deceiving or being untrue to yourself in any way; but they will involve making decisions about how you choose to express ourselves effectively to others. As a simple example; if you know that someone you work with is highly visual, then it is unlikely that telling them about your feelings for their work will make his or her day. So let us begin:

Adapting your communication style

Ever wondered why some people seem to hit it off with many different types of people? They are not brainier – at least not in the IQ sense, they are just naturally adapting their communication style to the situation and the people around them. Winston Churchill was particularly good at doing this. Although he was known for his witticisms, his creative art, his great imagination his risk-taking skills and his bravery, in his wartime speeches, he was able to conjure up a solid, realistic and procedural approach that was relevant to the British populace and helped maintain their support during very tough times.

> "We shall not flag or fail. We shall go on to the end. We shall fight in France, we shall fight on the seas and the oceans, we shall fight with growing confidence and growing strength in the air; we shall defend our island, whatever the cost may be. We shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills; we shall never surrender."

Thankfully, we live in better times, and just as most of us benefit physically and mentally from living in developed countries with some degree of economic success, by developing our 'joie de vivre', we could reach the next higher rank on the happiness ladder. We can do this by simply maximising the number of positive interactions we have with others, be they in the form of phone calls, blog posts, chats with the neighbours etc. In doing so, I am not asking you to be nicer to others; It's not even a question of "…doing unto others as you would have them do unto you", as Mathew explained in the Bible - not that that's a bad approach to take. Good as both these guidelines are, we must face up to the fact that in our regular daily lives, the differences we experience in how we interrelate with others in the world unite us but also work to keep us apart. Yet again, we must face it that people are simply strange!

I live in Belgium, a lovely country, if somewhat divided along linguistic lines. I have good Belgian friends and enjoy living here but my personal 'joie de vivre' is negatively affected

every time I go to the supermarket. It matters not to which one; the assistants (when you find them) seem to be smiling happy people when they talk to each other, but I always get the feeling that we, the customers get in their way. Yet here's some good news; by studying the lessons outlined in this book, I have come to first understand them and second, communicate with them in ways which are - at least some of the time – productive for both parties. Belgian supermarket staff, still remain one of my toughest challenges however, I have to admit!

By making the effort to understand our own thinking style, certain things become clearer to us; we can for example, develop a better understanding of what stresses us out and why; and then we are in a better position to do something about it. The same goes for our interactions with others. How often does it happen that we leave a conversation behind, wishing that we had expressed ourselves differently, or perhaps opened up with our true feelings on one or the other topic? What use is our personal frustration when with a little effort and some forethought, we could have had a more positive interaction… that still goes for my situation with the sales staff at Delhaize (whoops I'm name-dropping)!

Our personal well-being has important physical and emotional components, and if we interact with others more successfully, we can leverage what society has provided us with, and build on it.

There are two fundamental parts to this approach which draws on my experience in using both psychometric and neuromarketing techniques in my consulting work over the last 10 years.

1. Get to know your rational new brain better so that you can recognise the strengths and thinking styles of others
2. Learn the rules of the unconscious yet predictable old brain, allowing you to move from simple communication to being able to effectively influence others

The first of these will be covered in part two of this series; the second in part three.

Understanding other strange people

Your personality is written all over you

Let's begin the process of recognising the personality traits of others and acting accordingly. Some people, we have noted, seem to be able to do it better than others. You know the type; they walk in the room and appear to 'feel' the dynamics in the room. Their questions are direct and appropriate and the answers they get are well listened too. You might describe what they have as a certain magnetism or charisma.

Unfortunately, we don't all wear mortarboards where our brain characteristics and preferences are mapped out for others to see as in this picture. But after reading through this book and with some simple exercises, you too will become more effective communicators and show greater empathy and understanding when with others.

In a nutshell; finding the 'real you' unlocks the key to making more of yourself and improving your interaction with others too. It allows you to consider yourself more as others might see you and this may lead you to some healthy questioning. In the words of the great 20th century American psychologist, Carl Rogers: "The curious paradox is that when I accept myself just as I am, then I can change".

And whether you decide there is any need for personal change or not, this book is aimed at helping you make more of yourself; not, I repeat, pretending to be something you are not. Carl Rogers also spoke of 'Joie de Vivre', defining it as being "the quiet joy in being one's self...a kind of spontaneous relaxed enjoyment." And I for one, hope that you will be able to enjoy having a little more of it.

Is it morally right to 'classify' others and put them into categories?

The personal advantage associated with most methods of psychographic evaluation is that you get categorised without any relative value being placed on those categories – unlike in IQ tests for example. The proponents talk of showing differences but not singling out particular advantages over others. They judge results in terms of potential suitability for specific jobs, lifestyle choices or even marriage partners rather than labelling those who take the tests as better or worse people.

Categorisation in the field of social psychology is talked of in terms of *person perception* and it covers the different mental processes that we use as we form impressions of other people. By definition, it's a pretty subjective area and because of our upbringing and those influences around us, we don't always (some would say don't often) get it right. The context of the situation changes things too – seeing a burly person walking towards you on a dark, deserted street brings up different emotions than in a crowded daytime scene when you

may well have missed him altogether. The clothes people wear, facial hair, the accent they speak with… the list of influences goes on and on and yet we continue to categorise because it's in our own interest, particularly that of our old brains. The old brain is our organ of survival after all and to make snappy decisions of the flight or fight nature, it needs to simplify things. That's why we have the thoughts and form the impressions we do – we continue to categorise people and objects into higher, more simple-to-access groupings on a frequent basis throughout our lives. We frame people and ideas by letting them fit our preconceptions.

Taken too far, it can lead to the building of stereotypes in the mind, built on easy to spot differences such as skin colour. A well-known example of this is the experiment run by Jane Elliott with her third grade students back in 1968, not long after the murder of Martin Luther King. After first discussing the need to demonstrate racial prejudice in an essentially 'white' part of Iowa with her young audience, she convinced her class that children with blue eyes were superior and requested that those with brown eyes wear identifying collars so that they could be recognised from a distance. They were encouraged that day to play in separate groups and to experience segregation first hand, such as by not drinking from the same water fountain. She would chastise brown-eyed children when they did not follow the rules to a tee and single them out to show examples of the negative aspects they brought to the classroom. On the other hand, she went as far as to give supposed scientific evidence to support the higher intelligence associated with the blue-eyed children.

After just 15 minutes, she began to notice differences. During the day, the 'superior' group of 'blue-eyes' became bossy and arrogant; interestingly, their performance in class exercises also rose and the brown-eyed pupils tended towards subservience as they accepted their lot in life.

The following day, she switched things round and pretty quickly, the roles were truly reversed; the brown-eyes gained in superiority albeit not taking as much advantage of their classmates as the blue-eyes had on the previous day. That afternoon of the second day, she put a halt to things and after talking it through emotionally and rationally, every member of the class wrote a letter to King's widow, Coretta Scott King.

So although categorisation can help us, but we must be aware of the pitfalls with which it can be associated. In studying the different psychographic models out there, many of them based on the work of Carl Jung, the Swiss psychologist, it becomes clear that we profit from a deeper knowledge of this mix of different personality styles and thinking types. Problems do however occur when our psychographically determined strengths do not match our work or social environment, thus leading to stress and eventually to burn-out.

Nature vs. Nurture

We all take it pretty much for granted that amongst us, some have brown hair or blue eyes, some darker or olive coloured skin, some are shorter or taller than others and so on, but the type of categorisation with which we are less comfortable is the thought that we are pre-programmed mentally. Yet it is becoming clearer that we each have certain traits and abilities which, although they can be modified to a certain extent, will not fundamentally change. Over the years, many scientists and academic researchers have speculated in

particular as to whether psychological characteristics such as behavioural tendencies or personality types and mental abilities are perhaps even 'hard-wired' into our systems before birth.

Genetics refers to hard-wired traits such as being blue or brown-eyed, things that we cannot change – except perhaps via the use of contact lenses! Being left-handed is on the other hand (no pun intended), something that you can modify over time and you may well be familiar with attempts prevalent in previous generations to 'straighten such people out' by correcting or normalising them. My own wife, an adamant left-hander - still comes from a generation where she was forced to write with her right hand and terms such as being 'cack-handed' or having a 'main de merde' were still common in their usage. So, left-handedness is at least to a degree an example of genetic soft-wiring where a degree of influence is possible, should we choose to or be forced to make certain modifications.

In other neurobiological fields, Professor Russell Foster of Oxford University has shown that however we may try to adapt our circadian rhythms, we cannot but be strongly influenced by the power of daylight and darkness. All animals set their internal clocks to adapt to the length of daylight and even if we wish to try and counteract this primitive drive, it proves impossible. He has shown that long years of shift work (working mostly nights) are associated with increased illness and mortality. It seems that when we fight our body's innate preferences in that area, we are doomed to lose. So how is it with the brain?

Particularly as a response to the class system and establishment thinking of the 19th and early 20th century, it became fashionable after World War ll to think that nurture could compensate for almost any default of nature. 'Being born into a poor family should not stop you going for greatness'… and neither should it!

80 years earlier, it was Charles Darwin's cousin Francis Galton, a child prodigy, who first popularised the nature versus nurture discussion in his book 'Hereditary Greatness', written in 1869. His conclusion at the time was that the evidence was more on the side of nature rather than nurture and although he went on to found eugenics, the unpleasant science which advocates the genetic improvement of the population, usually via government intervention, he did believe adamantly in the provision of a fairer society to encourage opportunity:

"The best form of civilization in respect to the improvement of the race, would be one in which society was not costly; where incomes were chiefly derived from professional sources, and not much through inheritance; where every lad had a chance of showing his abilities, and, if highly gifted, was enabled to achieve a first-class education and entrance into professional life… ".

These days, he would be called a 'nativist', adopting an extreme position on hereditary traits and standing on one side of the argument against the 'empiricists' who see the human mind as a blank slate which is gradually completed by our cumulative life experiences. Most psychologists today however accept that heredity and your environment both contribute to the person that you eventually become. Put differently, a certain degree of hard-wiring interacts with your environmental and cultural context and is added to by the personal choices you make about your life.

When it comes to the brain, there is now sufficient evidence to show that we are born with certain innate skills and Dr.Benziger's work (more of which later) aligns Jungian archetypal classifications with up-to-date brain research, showing distinct brain areas associated with specific thinking styles. In this book, you will see how because of your 'nature', you may not be able to influence certain elements of just who you are, but you will also learn just how much room there is for 'nurture' to make more of your natural talents.

Problems with psychographic assessments?

Psychographics is defined as the study of personality, values, attitudes, and interests, and assessments according to these criteria usually takes the form of a multi-question test.

Because these are self-questioning assessments, they rely on us being able to – or wanting to – fill them out honestly. If they're being used as part of the process of being interviewed for a job, almost all of us will ponder over certain questions in the light of the job we are applying for. Why admit to being shy at parties when they've said they need someone who will fit in quickly and be a real team-player?

When completed honestly and to the best of our abilities, they provide valuable insights and the most sophisticated assessments reveal whether we are being true to our natural gifts or strengths. Dr Arlene Taylor, a leading specialist in 'wellness' based in Northern California refers to the concept of 'adaption', a term used to describe those behaviours that involve the development and use of skills which don't match your natural gifts. According to Dr. Taylor, a certain amount of adaption is desirable and brings with it opportunities to accomplish more activities, but excessive adaption (known as falsification) can lead to fatigue, frustration and ultimately exhaustion. Carl Jung too believed that Falsification of Type could lead to serious and potentially life-threatening

Nature vs Nurture? The Scorpion and the Frog

One day, a scorpion decided that he wanted a change of scenery and kept going until he reached a wide river.

He could see no way across, but he did see a frog sitting by the bank of the stream on the other side of the river.

"Would you give me a ride across the river?" he asked.

"Well, Mr. Scorpion! How do I know that you won't try to kill me?" asked the frog.

"Because," the scorpion replied, "If I try to kill you, then I would die too, for I cannot swim!"

This seemed to make sense to the frog. But he asked. "What about when I get close to the bank?"

I wouldn't sting because I wouldn't be able to get to the other side of the river!" replied the scorpion.

"All right then...how do I know you won't just wait till we get to the other side and THEN kill me?" said the frog.

"Ahh...," crooned the scorpion, "once you've taken me to the other side of this river, I will be so grateful, that it would hardly be fair to reward you with death?!"

So the frog agreed to take the scorpion across the river, swimming over and settling himself down. The scorpion crawled onto the frog's back and the frog slid into the river. The water swirled around them, but the frog stayed near the surface so the scorpion would not drown.

Halfway, the frog felt a sharp sting in his back and looked to see the scorpion removing his stinger. A numbness began to creep into his limbs.

"Now we shall both die!" croaked the frog, "Why did you do that?"

The scorpion just had time to reply

"I could not help myself. It's in my nature" before they both sank into the swiftly flowing river.

Ancient, anonymous fable

problems with practical and psychological implications.

Only if we can get a clear read on our natural brain gifts or talents, can we begin to see whether falsification is taking place. This lies at the heart of the problem. In the first of Marcus Buckingham's series of books on identifying and leveraging your strengths, "First, break all the rules", he writes of the need to establish a benchmark to establish your starting point using methods such as the MBTI (Myers Briggs Type Indicator). The MBTI leads to a choice of one in sixteen acronyms such as ENTP or INTJ which identify your type. Once you have a reading, you can find out how many others share this characteristic with you by carrying out some easy on-line search, but… up to one third of all respondents get a different profile the next time they take the test. Perhaps that's why in his next excellent book, "Discover the Source of your Strengths", Buckingham goes on to list thirty-four themes from which you can select a certain number as relevant to your natural strength; effectively introducing his own psychographic measurement.

After a life at different levels of business within international companies, I can truly say that looking at the many personality and thinking styles assessments out there, only the Benziger Thinking Styles Assessment gives easy to interpret results (4 thinking styles and one dimension of extravertism) while being robust enough to identify falsification of type. It provides a solid anchoring point upon which to base your skills in interactions with others, and in assessing your fit with hobbies, work and friends. For that reason, as we go deeper into the subject, the BTSA will provide us with our starting point and a very simplified test approach will get you started in part 2 of this series... More on that later.

Another way of going about assessments means using so-called 360's where other team members, friends or a mix of people give their opinions about you and what you do. Here something else can occur; the popularity stakes can all too easily get in the way just as poor managers may use the 360 assessment as a substitute for applying solid and effective management techniques. Among other criticisms, many work colleagues don't feel very comfortable providing feedback to others, especially if it is negative. Nonetheless, many people swear by them, although they are more expensive and much more difficult to carry out than individual approaches.

So when selecting a psychometric assessment technique, make sure that it is likely to reflect the real you and give useful answers for a clear interpretation of your thinking style. We will continue to discuss the subject at a more general level before then narrowing it down to Dr Benziger's well thought through approach for our practical examples.

You in the workplace

The goal of this book is to offer guidance in improving your communication abilities and promoting your understanding of others and of course, that's not just restricted to the workplace. Having said that, the highest levels of stress are reported in the workplace and it's most likely that a clearer understanding of those around you and an improvement in your ability to express yourself will bring rewards. Bearing this in mind, you will find more work related references and examples than others.

According to the American Psychological Association's 'Institute of Stress', report dated July 2013, 77% of respondents regularly report having physical symptoms caused by stress. These are most often reported as being fatigue (51%), headaches (44%) and having an upset stomach (34%). A total of 48% report that this has a negative effect on their work and personal life but in terms of where the stress arises, the number one cause is down to job pressure, described variously as: co-worker tension, issues with bosses, and being work overload related. A full 30% of respondents report being 'often' or 'always' under stress at work.

In a recent Gallup poll of US[2] companies, employees relate their overall level of happiness with how well they were matched to their workplace. Those regularly using their strengths (over 7 hours per day) reported 92% happiness levels and 18% pain levels whilst those who were able to use their strengths for less than 3 hours per day reported 75% when it came to happiness and a 38% level of pain. In summary, those among you who use your strengths regularly are simply happier.

Using the techniques outlined in this book, you will be able to connect better with your manager and those around you by adopting the old brain/new brain language.

- How often does it happen that you cannot develop a good working relationship with your manager, key team members or with other departments?
- Are there some customers you get on better with than others?
- Is your voice always heard when something on the agenda is important for you?

Or should we be cynical? Is any of this really important, or is 'work' simply 'work' and by definition full of politics, miscommunication, unrealistic expectations and the occasional success story?

My answer is a definite No!

And if you want your life to become more pleasurable by getting on more easily with others, learning to express yourself better and being more clearly understood, read on.

Is it my manager's fault?

Well sometimes it is; and we do tend to blame our managers for some of the ups and particularly the downs of corporate life. But let's hear a word for them, for they have bosses to report to as well. Their job description is broad, and ranges from providing a buffer to senior management through to dealing with all sorts of red tape and regulations. It's true that many of us have also experienced the ethical lapses of managers, often acting under pressure, when they don't 'walk the talk' quite as taught in their management classes.

But when it comes down to it, they are the same person at work as in their private lives; they do not re-arrange their corporate brains every morning to deal with the day, although admittedly, they do sometimes put on a veneer of what they believe is expected of them as managers. Some are known to switch from Mr "Nice Guy" to Mr "I'm an important Manager" Guy, but these days, I'm pleased to say that they are becoming more of the exception.

[2] Gallup-Healthways Well-Being Index; September 2012

Is it a lack of training that lets them down? Are we all part of the problem? Yes, and yes. But if I were to pick on the one area which so often lets them down, it would certainly be connected with training. Not necessarily a lack of it, but a lack of the right training combined with a lack of continuity and follow-up on the lessons learned from that training.

Continual training is not a luxury; it's a necessity. At school and even university, we are tested on our ability to memorise and express data, words and concepts. There are no teamwork classes and no management classes… unless you are skilled at one sport or another and maybe played for the school team. That's why some recruiters like to select those candidates with successful sporting backgrounds. They are effectively hoping to reduce the amount of team-oriented training in which they'll need to invest for their future managers. Yet when senior managers or HR professionals do send people off on courses, often as not they are seen as one-off events – not part of a coordinated plan. But let's now bring this back to the individual level.

There is more power is in our hands than we think. If we, the employees, play our role correctly, we can be successful as individuals and as team players and also provide exemplary bottom-up training for our managers by simply improving our communication skills. We really do have more power than we give ourselves credit for. Using the latest applied neuroscience, you will learn how we are each uniquely wired for success and how our skills become additive when we work with others.

Employees leave managers and not companies

…as a team at Florida State University showed in 2006. In a survey of over 700 people from a variety of jobs, the following was reported:

- 39% of managers fail to keep promises
- 37% fail to give credit where it is due
- 31% gave staff the 'silent treatment' in past year

With this new approach, we have to be just a little braver; to dare to open up and speak up; we have to become even more demanding in an appropriate way and we must accept that sitting around and waiting for things to go the way we want them might last forever – that's why we need to take things into our own hands. We cannot afford to play the blame game and waste emotions on the bad managers out there; we will take the initiative and work on ourselves by taking the high road.

Are you up for the challenge? Because it all starts with you. Using the simple to use system provided in part two of this series, you will begin by identifying your own thinking style strengths (your ID). Then you learn how to identify the people you are working with, the 'ID' of your manager and of those other influential people around you in the organisation or in your personal life. When you have achieved this, you will be well on your way to working more efficiently with them.

It is not difficult to do. You will learn a simple language with just three main components, and you will need to focus on just one of these in order to get a good understanding of where they are coming from (their ID or personality type) and how you can better express yourself in order to be relevant and understandable to them. Yes, it will mean learning to vary somewhat your approach, depending upon to whom you are talking. But by developing

a clear picture of yourself first, you will always stay true to your own strengths and personality characteristics. Remember; you have a clear predisposition for a particular type of brain strength. You are already engineered (hard-wired) for success.

Once you have learned to communicate more effectively with your manager and others, then you can go on to improve your ability to influence, enabling your contribution in the team to grow. But there is no point in studying those skills of influence unless you start by knowing and accepting your own skillset first. By knowing yourself better, you will know when you are playing to your strengths and also, when you need help from others.

This is not a lesson in office politics. But it does represent a way of discovering what is really important to your manager, how you can relate that to your personal strengths and to your progress on projects or day-to-day activities.

What you'll be doing as we practice will consist of two distinct phases and culminate with the combined effect of using both old and new brain approaches:

PHASE 1 – your new brain

1. **Get a clearer picture of 'you'** - identify yourself using the latest methods from the worlds of neuroscience and psychology
2. **Practice your new skills with friends -** identify some people who are close to you in your private life (can be Mum, a sibling or a good friend)… this is your practice zone
3. **Get to work** - Go on to identify your work colleagues as best you can. Identify your boss and other management figures who are influential in your life at the company.

At this stage, you can already improve communication by constructing conversations and providing information and feedback which is more relevant to the needs of others.

PHASE 2 – your old brain

1. Get the right blend of **rational and emotional** components
2. **Discover how people can best be influenced** (hint: it's rarely by confronting them head-on) and how they really make decisions, using current examples from neuromarketing studies
3. Move **from interesting to compelling** presentations, be they to an individual, your boss, or to an auditorium full of people.

PHASE 3 – putting your brains back together

With a bit of practice, you can increase the effect that you have on others. And after putting it all together, it will be time to begin developing your own personal action plan.

A word for managers

This is not (necessarily) a how-to book written from a manager's point of view, although if you are a manager, nothing stops you from taking the initiative. Certain managers have a natural instinct for spotting the right people to work with and helping them fit in with the team. They can also focus on improving the flow of information by providing training as needed and where necessary, filter out the pressures coming from other areas of business

or from senior managers. You may be one of those people and you may not. Each one of us has a certain amount of natural management talent within us but I have found that it is the combination of good mentors and constructive 'nurture' that helps us over time to excel at managing others productively.

You will have noted that the first stage in step 1 of this process is to get to know your own core strengths; to learn how they affect your natural leadership style, how that style fits in with the prevalent management style in your company, and how your thinking style affects others – those with whom you work as well as your family and friends too.

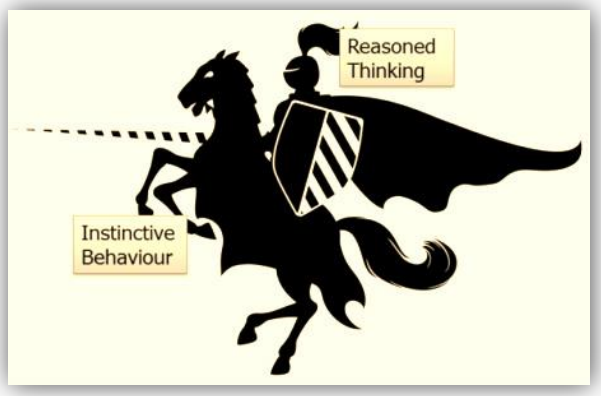
As a manager, it requires a brave stance on your part to take the lead in this. The 'brave' part comes about by revealing your true nature to others. Your natural strengths will be acknowledged but inevitably, so will your weaknesses. This approach works best as a group exercise. By carrying it out in the context of other people's strengths, you and those you are working with can see where you augment each other, where you differ and where you need to rely on others to bring skills you simply don't have.

A simplified approach: using a two-step model

As we mentioned, to simplify our own dialogue in this book, we are going to refer to the new or neo-cortex (the 'thinking' part of the brain) as the new brain in evolutionary terms and lump the limbic system and the reptilian together as the much older parts of the old brain dealing with more basic instincts and many of our basic motor skills. Webster's defines a "model" as "… a description or analogy used to help visualize something. In just such a manner, many models have been developed in an attempt to explain variations in human behaviour… models can provide a framework from which to identify and discuss differences and similarities, a sort of shorthand language." It is just this shorthand that we need to stop ourselves getting involved in so much detail that we will not be able to see the wood for the trees (just for the record, that would represent a lack of use of the left frontal cortex, what we will go on to refer to as the Frontal Left.)

In using this shorthand, let's not forget that the brain's combination of reptilian, paleo-mammalian and neo-mammalian structures is far more intricate than a set of nested Russian dolls. Many researchers now think that it is the degree of inter-connectedness between these areas of the brain which gives us our amazing human skillsets, yet there is still something fundamentally different about the old brain and the new brain. To bring our shorthand to life, we will use a metaphor, namely that of a horse and its rider.

The Horse and Rider Analogy



Observing a rider, sitting on top of the horse and holding the reins, he/she seems to be in charge. But let's not forget their relative sizes, with the rider weighing considerable less than the horse. If something scares the horse or if she sees food, who then is really in charge? ... For when the Horse and the Rider disagree about which direction to pursue, the Rider always loses. The horse can 'feel' whether you, the rider, are OK… she feels your emotional state. So how do you get in harmony with each other? And can you ever be truly in control? First, as the rider, you need to attend to your rational brain; to determine your true strengths which help you get your bearings; first then with this increased sense of self-understanding, you can begin to consider the horse.

Put simply, the horse

- is primarily interested in its own well-being (and not being an animal's next meal!)
- appreciates simplicity, with clear contrast to establish differentiation
- understands tangible things like an apple, or soft-rain on its skin
- has a short attention span and is quickly bored
- is highly visual and in touch with its senses

So the horse is like a walking 'Older Brain', collaborating with the rider – at least some of the time and making instinctive fast decisions based on previous experience and inherited traits relating to 'fight or flight'.

Why horses have no pre-frontal cortex

Horses used to all live out on the open plains as herbivores, foraging for food and living in herds. They travelled many miles daily while grazing. As seasons changed and grass died off, the herd would move to find new grass and other types of shrubbery. What kept them alert was the threat of predators, which could surprise them and catch them unawares if they were not constantly on the lookout.

Unlike predators, horses as prey animals needed no reasoning skills to be able to plan ahead, consider or visualize in the mind's eye. These skills were only developed by predators and omnivores that needed to know how to find herds of prey animals, work as a pack, and hunt down their prey. Scientists believe that this explains why horses' brains have not developed a "Prefrontal Cortex" which is responsible for reasoning abilities in humans and some other predators and omnivores.

This explains why horses have little or no ability to plan ahead, consider events or visualize what might happen. Instead, their behaviour is controlled by responses learned from simple trial and error, which over time develop into rather predictable habits. This is to be found especially in the presence of a large amount of fear, stimulating the 'flight or fight' response. So it is the actual occurrence of certain stimuli that trigger the horse to remember how it reacted and/or solved a problem the last time it faced it.

The UNESCO award winning psychologist, Robert Ornstein, refers to these survival drivers as the 4 F's, namely; feeding, fighting, fleeing and sexual reproduction. He is well known for his sense of humour!

But as you walk around your place of work or stroll down the street, I'd like you to imagine everyone you see appearing as a horse and rider. When you see what appears to be a rational decision, stopping at the pedestrian crossing to wait for the traffic to go by for example, the rider (aka the new brain) got his way; when they

The office would get kind of crowded if each of us appeared with our old and new brains

stop at the doughnut store, maybe it was the old brain (aka the horse) that got its way!

Understanding how these two distinct sets of drivers influence us today is crucial to being healthy and having a positive mindset. It is through their application when we interact with others that we can create more effective relationships.

This leads to our long-term goal, to use a second French expression, of feeling "bien dans ta peau", or 'good in your skin', and experiencing a genuine sense of well-being. We might still find others strange but at least we'll have a greater insight into why they are like they are and why they do what they do!

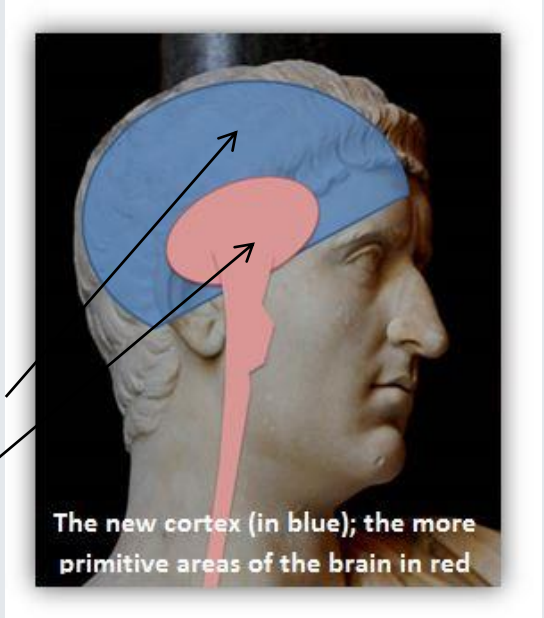
Dividing up your brain

Our thinking styles and personality are formed by the interaction that goes on in the conscious brain – largely speaking the cortex. Yet they are also strongly influenced by the degree to which we are extraverted or introverted which is largely down to the chemical balance found deep in the old brain. Although every old brain is wired more or less the same way, the main neurotransmitter used by introverted brains is acetylcholine whereas for extraverts, it is dopamine. The balance of chemicals makes us predestined to do certain things differently, being for example more or less adventurous or conservative in our decision making. The speed at which the old brain makes instant decisions such as fight or flight when faced with an adversary is the same; the decision we make depends on this inner system of arousal which we all experience slightly differently.

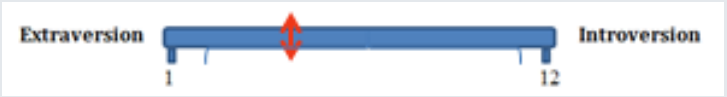
1. **Old Brain/New Brain**
   Two brain segments… the cortex (new) and the sub-cortical part consisting of the older limbic and reptilian systems.

   Approximating neatly to Daniel Kahneman's terminology:

   - New Brain; System 2
   - Old Brain; System 1

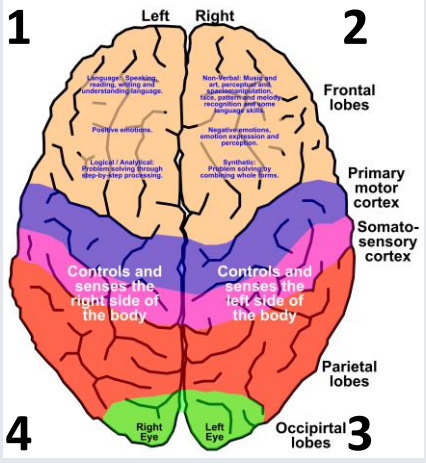


2. **Personal Arousal Level**
   Your level of arousal (Introversion/Extraversion) is determined by the hormonal balance in your brain stem, at the base of your old brain.



3. **New Brain**
   Four cortical segments; four distinct thinking styles in each of the two frontal lobes and the two sensory cortexes, left and right, towards the rear

   1. Frontal Left
   2. Frontal Right
   3. Basal Right
   4. Basal Left

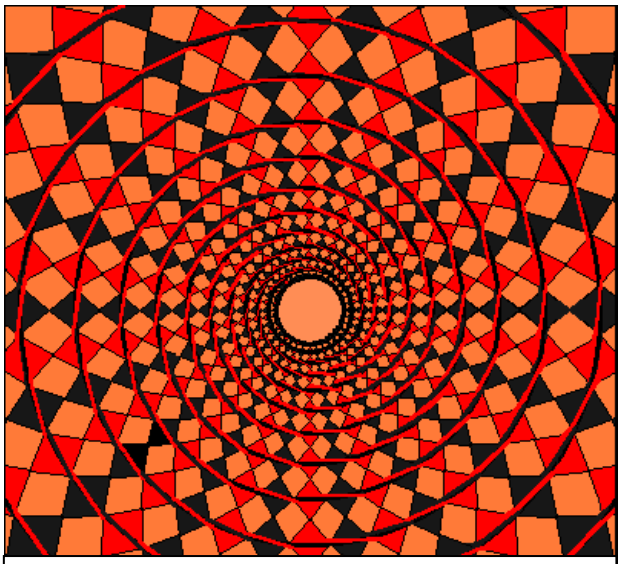


So which part of the brain is in charge?

… your Old Brain taking charge

Ever been scared? Of course you have, whether it was a rational fear caused by a speeding car getting too close or the irrational fear you confronted in a creaky old house when you were not sure what was around the next corner. By the time you felt scared though, your body was already busy keeping you safe. As your organ of survival, your old brain reacted at the slightest hint of danger, long before the thinking, conscious part of your brain (that's your new brain) could get involved. Your old brain instinctively went into its subconscious Fight or Flight mode. Your heart rate increased; so did your blood pressure and surprisingly quickly, your body chemistry changed. Suddenly different hormones were pumping around your body and when your new brain finally sensed all these changes, it finally dawned on your consciousness, that you were scared! It was maybe half a second, but that half second could have saved your life… thanks to your old brain.

Our brains are programmed to feel fear first, and to think second, leading us as humans to being hard-wired when it comes to feelings. When we see a suspected snake in the grass, our old brain is quite obviously making the best decision for us. Yet for example, public speaking is even more scary for lots of people so it is perhaps not surprising that in such situations, our rational thoughts are temporarily blocked by our primitive older brain.



The Old Brain sees a spiral – only the New Brain can look further and determine that this is an illusion.

… where the new brain thinks it's in charge!

You fully realise that being scared in a dark old house is ridiculous. There are no such things as ghosts and Harry Potter is a fictional character! You decide to continue down the corridor so your new rational brain has won. Temporarily; your face feels a cobweb and you jump back in fear. Unfortunately (or perhaps fortunately), no amount of rational thinking can undo your primal reaction of getting out of the way of danger.

Imagine you are a man sitting in a crowded cinema when you feel dampness rising in your eyes because you fear that your hero is about to die. Virtual reality or not, your self-control usually keeps you from crying but maybe… just maybe, you avoid the eyes of others after the film till you are sure that you've 'manned-up' again.

"The amygdala has more influence on the cortex than the cortex on the amygdala". The Emotional Brain by Joseph Ledoux,

Brain specifics and thinking styles

More recent neurological research, particularly as first outlined in Joseph Ledoux's 1995 book, The Emotional Brain, has begun to link psychological analyses of how we think and make decisions with physiological and neurological pathways. It is not the purpose of this book (nor in the abilities of the author) to write extensively on this subject but some background will help understand the basics.

For many years it has been mooted in psychological circles that a 'dual-process' model of the brain is at work. Daniel Kahnemann refers to these processes as two fundamentally different modes of thought; one thought system (system 1) being that which cannot be switched off and is fast, associative and intuitive; the other one (system 2) being slow, deliberate and taking much more effort. Kahneman compares this System 2 to a supporting character who believes herself to be the lead actor and often has little idea of what's going on. And yet he goes on to say that we readily identify with this second system led by the processes of the new brain, the 'rational, logical cortex, which requires so much attention, rather than the more primitive, emotional old brain who often as not is really the one in charge. The distinguished neuroscientist, Antonio Dimasio, also re-balances the two parts of the brain saying "We are not thinking machines that feel; rather, we are feeling machines that think."

System 2 (aka the new brain) is also a bit lazy and tires easily; that's why it often just accepts what System 1 tells it. Yet in reality, both are neurologically intertwined but distinct parts of the brain. System 1 is essentially driven by our old brain; and system 2 is represented by our new brain or cortex.

When you engage in intense System 2 thinking, Kahneman says, something happens to your body. Your pupils dilate. Your heart rate increases. Your blood glucose level drops. You become irritable if someone or something interrupts your focus. You become partially deaf and partially blind to stimuli that ordinarily command your attention. Kahneman writes that "intense focusing on a task can make people effectively blind." New brain thought patterns are more complex, and reside in the brain's cortex. They are particularly influenced by the prefrontal lobes, which are well developed in humans but less so in other animals (chimpanzees, gorillas and orang-utans excluded). It recognizes that what you see is not all there is.

One of Kahneman's examples is of Steve, "a meek and tidy soul, with a need for order and structure, and a passion for detail". The question is posed; is he a businessman or a librarian? Inevitable, the Old Brain thinking pattern which runs on automatic, spots the resemblance between the description and the librarian stereotype and shouts out "librarian," yet the new brain recognizes that the number of librarians, relative to businessmen, is tiny and so in all probability, Steve is much more likely to be a businessman. This has nothing to do with those personality traits that might have made library work a more appropriate career choice.

The Old Brain is always switched on, partly because its work is not that hard. It houses everything from our fight and flight responses to our prejudices and preconceived opinions which have built up over the years. However, when your New Brain is put to work, it requires so much effort that it can take over your whole body, so it goes to work less

willingly. The Old Brain simplifies things and assumes that what you see is what you get (WYSIWYG) even while involved in regular bodily functions such as movement or simple conversations. Where it struggles is with the more analytical style of thinking needed to participate in what we usually consider to be better decision-making because it jumps quickly to conclusions and is subject to prejudice and established thought patterns.

When deciding to run away from a crocodile or hunt a rabbit, slow reactions and carefully thought out decisions did not help primitive mankind to survive and become our direct ancestors. The Old Brain evolved over millions of years and the quick decision making process driven by the brain's amygdala in response to primitive emotions such as fear were critical.

Daniel Kahneman won the 2002 Nobel Prize in economics for work relating economic decision-making to psychology. "Although system 2 (new brain) believes itself to be where the action is, the automatic system 1 (old brain) is the hero of the book" from his best-selling book, Thinking Fast and Slow

In his ground-breaking book, The Emotional Brain, Joseph Ledoux, the professor of neuroscience and psychology at New York University focused on the role that emotions and feelings still play in most decision making today

Whichever way you look at it, psychologists and neuroscientists, when forced to simplify to explain their work to the broader public, adopt a two-tiered approach.

Kahneman's emphasis is on these two systems of cognitive decision making:

- System 1 requiring little effort and using heuristics, biases, associations, and metaphors to proffer rapid decisions;
- System 2 processing information more slowly and taking a more effortful, deliberate, and logical approach to decision making.

Damasio uncovered the neurological bases – the cortical and subcortical induction sites for affect and cognition (e.g. the prefrontal cortex and in particular, the amygdala in the old brain).

LeDoux referred to two pathways:

- Pathway 1 - (the low road) being a fast pathway where visual or auditory stimuli travel to the sensory thalamus (the relay station for sensory input) and then straight to the amygdala (emotional processing). A much used example of decision making in this context is to look at a person walking through a wooded area who sees an object having a shape like a snake. Using this fast pathway, the individual gets startled, jumps away and experiences fear.
- Pathway 2 - (the high road) being a slower pathway where visual or auditory stimuli travel first to the sensory thalamus and then onward to the sensory cortex (new brain) before feeding back to the amygdalae. This slower pathway would involve taking a moment to assess the snake-like object, and finding that it is in fact just a twig, not experiencing the fear response. If used alone however, being a slower response system, they may have been bitten, had it indeed been a snake!

Where's this all leading us?

The Old Brain is for the most part pretty good at what it does; it's highly sensitive to subtle environmental cues, signs of danger, and so on. Let's not forget that it is what helped keep our remote ancestors alive and without it, we would not be here. Yet it represents our unconscious and we have little or no control over it. When it tells us we are hungry, we cannot just remove the feeling. In an interpersonal context, if it tells us that we don't like someone when we meet them, it does not inform us of why.

That being said, when we think of ourselves, of our personalities, of how we are essentially rational beings etc., we talk almost entirely in terms of our new and conscious brain. Our industrial and education systems are based on rational thought and the whole 'science' of economics assumes that given a choice, we as humans will react rationally. In this sense, it has been argued by some that we experience our conscious thoughts mostly from our left-brains.

OLD BRAIN	NEW BRAIN
Unconscious	Conscious
Fast but limited	Slow but smart
Now	Now and then
No effort	Quite some effort
Always ON	ON or OFF
500 million years old	3 to 4 million years old

To live at peace with ourselves and arguably with society as a whole, what we need to do is to foster a healthy balance between both brains… between both newer and older systems of thought. But there is one large difference between the two that will aid us in developing communication skills. Whereas the older part of the brain, that responsible for quick thinking (System 1 aka Old Brain) may sound primitive, it is also quite predictable. You can literally make the generalisation that all people react the same basic way when faced with certain situations, a good example being jumping away from the snake-like object in the woods. What plays a role here is the degree to which our reaction or degree of arousal shown by our old brains is stronger or weaker, and this is moderated by the reticular activating system in the brain stem. This is also a form of hard-wiring and depending on its degree of sensitivity, we refer to this as the introvert/extravert dimension. This terminology was developed by Carl Jung long before he knew that there was a physical element relating directly to this state of arousal in our brains. In flight or fight terms, this may lead to one person fleeing while another decides to fight back – or in the boardroom, one openly disagreeing with the boss, another deciding to take things in calmly and another biting their tongue and disagreeing in silence.

Such a generalisation cannot be made for our new brains. Our large, multi-folded cortex is much less predictable and more differentiated from person to person. It is there that we will start our journey, and it is there thanks to nature's good grace, that we find certain pre-programmed traits which will make our thinking styles easier to dissect.

Less strange than you think?

Part two of this three part series will help you with your personal identification and the provided exercises then allow you to profile others and over time, to better relate to them. This will be the approach:

1. Getting a clearer picture of 'you'; identify yourself using the latest methods from the worlds of neuroscience and psychology (first, your thinking style and your level of introversion or extraversion)
2. Then identify some people who are close to you in your private life (can be Mum, a sibling or a good friend)… this is your practice zone
3. Go on to identify your work colleagues as best you can. Identify your boss and any other management figures who are influential in your life at the company

APPENDIX 1 - More on the brain

Knowing me and knowing you

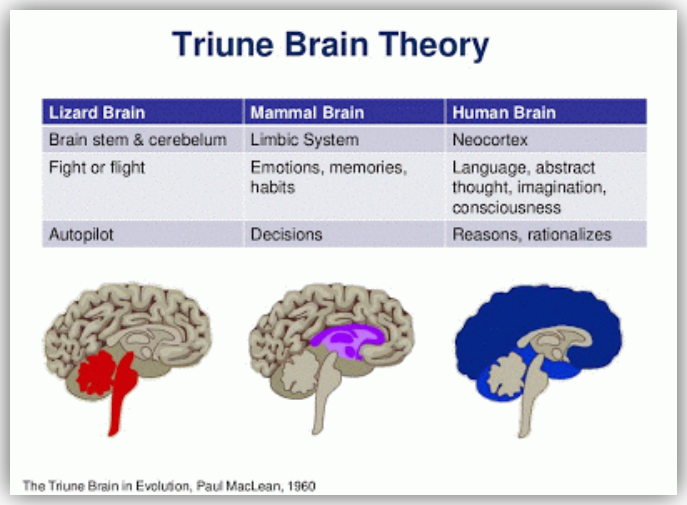
In much the same way as we are all naturally left or right handed, different parts of our brains are also hard-wired to perform certain functions better than others. Our brains are extraordinarily complex. Weighing in at about 1.5kg and representing just 2-3% of our body weight, they also use a lot of energy, receiving 15% of the cardiac output, 20% of total body oxygen consumption, and 25% of total body glucose utilization.[i]

People are sometimes referred to as left brain or right brain dominant with each side controlling one type of thinking. The conventional wisdom is that the right brain allows us to be more creative and artistic, while the left brain is more structured and routine-oriented. The neuropsychologist and cognitive neuroscientist Elkhonon Goldberg goes one step further referring to the right brain as the 'novelty' hemisphere and the left brain as the 'repository of well-developed patterns'. Put differently, he believes that we learn using our right brain and store and develop patterns and procedures in the left. The right brain sees the big picture and the left brain sees the details. Not surprisingly, he believes that as we age, the left-brain steadily strengthens.

The left and right sides of the cortex are physically separated by the corpus callosum, which is a bundle of nerve connections allowing the two halves to communicate. They look similar but in fact, the right brain is slightly longer and wider than the left brain.

The Cortex or new brain has evolved over time from the back to the front which means that the frontal lobes are the 'youngest' and in some ways, the most sophisticated part of you. These large frontal lobes are also connected to the three major elements towards the side and the back of the cortex, namely the parietal, occipital and temporal lobes.

A simplified model of the brain



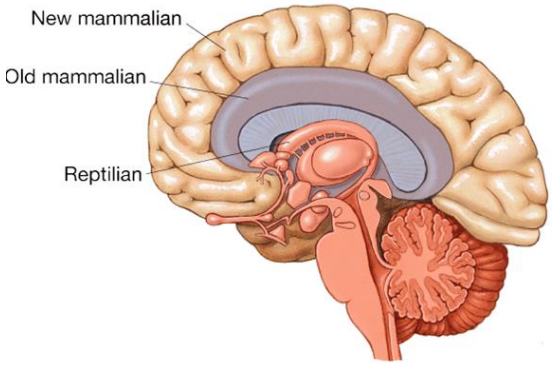
Although criticised by experts for its oversimplification of such complex patterns, MacLean's triune brain model still provides a useful starting point. This practical piece of shorthand shows that as humans, we possess a 'reptilian' inner-core brain which we share with all vertebrates. It first appeared in fish over 450 million years ago. The mid-brain or limbic system appeared in small mammals much later, about 150 million years ago and layered on top of this is the new or 'neo' cortex which began its growth spurt in primates just 2 to 3 million years ago. It's clearly the baby of the family, but not in size. The cortex, layered, crinkled and bunched up as it is, represents a full three quarters of the volume of your brain, and the frontal lobes make up nearly half of that 'new' volume.

The cortex makes us special – connectivity too

We are not the only ones to have a developed cortex with large frontal lobes. Gorillas, chimpanzees and Orang-utans also possess them. But humans possess a greater amount of white matter in their brains than great apes and these myelin-covered axons provide greater connectivity, particularly between the pre-frontal cortex and the rest of the brain.

It may well be this degree of interconnectivity that gives humans their edge and helps them balance rational and emotional thought – at least some of the time. David Linden, Professor of neuroscience at Johns Hopkins University refers to 'our massively interconnected but messy brain". There is growing evidence that the balance and degree of connectivity between our frontal cortex and the sensory cortexes towards the side and the rear of our brains, also plays a key role in how we exercise moral and ethical self-restraint.

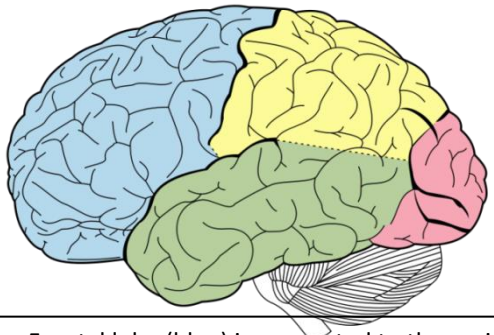
The Old Brain - Going sub-cortical



So, just as the thinking and sensory components of the cortex are linked and allow for communication, so are the cortex, the mid brain and the reptilian brain between them. They have established numerous interconnections through which they influence one another and the neural pathways from the limbic system to the cortex, for example, are especially well developed.

OLD BRAIN - The **reptilian** brain, the oldest of the three, controls the body's vital functions such as heart rate, breathing, body temperature and balance. Our reptilian brain includes the main structures found in a reptile's brain: the brainstem and the cerebellum. The reptilian brain is reliable but tends to be somewhat rigid and compulsive.

The **limbic** brain emerged in the first mammals. It can record memories of behaviours that produced agreeable and disagreeable experiences, so it is responsible for what are called emotions in human beings. The main structures of the limbic brain are the hippocampus, the amygdala, and the hypothalamus. The limbic brain is the seat of the value judgments that we make, often unconsciously, that exert such a strong influence on our behaviour.



The Frontal lobe (blue) is connected to the parietal lobe (yellow) and the temporal lobe (green) by the central sulcus and the lateral sulcus.

NEW BRAIN - The **neocortex** (meaning literally new cortex) first assumed importance in primates and culminated in the human brain with its two large cerebral hemispheres that play such a dominant role. These hemispheres have been responsible for the development of human language, abstract thought, imagination, and consciousness. The neocortex is flexible and has almost infinite learning abilities. The neocortex is also what has enabled human cultures to develop, yet in its make-up and in the way it works, it is substantially different from our earlier and older brain structures. In the words of Professor David Linden again: "With modern parts atop old

ones, the brain is like an iPod built around an eight-track cassette player". The eight track player does what it does efficiently and the moment you press the button, it starts working; the iPod is much more sophisticated but takes its time to get going.

Leveraging your strengths

This 3 part series gives you the opportunity to leverage your strengths and make more of yourself in your chosen field as you develop that clearer understanding of yourself and others. It will help you to improve your communication skills and your powers of influence in the context of your natural strengths, and acknowledges that there are also areas where you are less talented. Those areas only become weaknesses if you pretend they don't exist, bluff your way through or torment yourself and get stressed-out! It helps you face up to that fact and considers where you can seek others in your personal and business life who can augment your relative weaknesses in those areas.