

THE SECRET OF GOOD DECISION-MAKING

Somatic markers, Gut feelings and Persuasive power

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The secret of good decision-making

What is a good decision?

'Yes, If only I knew...!' – words that may well have crossed your lips. You're not alone. Every one of us has been in situations where we are plagued with uncertainty and where it seems virtually impossible to make a decision. More than likely you had a particularly tortuous decision in mind as you uttered these words. Situations in which you were torn between two alternatives. Perhaps you even started to carefully list the pros and cons of the possible alternatives only to have your hopes of finding a solution dashed as advantages and disadvantages turn out to be evenly matched. Back where you started – unable to decide. 'I could just as well toss a coin' is the response often heard in such a situation. And some do indeed decide this way. Others ask friends and allow their decision to be influenced by helpful advice.

But there is another way. Each and everyone of us is in a position to decide for *ourselves*. At the end of the day it's *your* life, isn't it? And precisely because it is your life it makes a lot more sense to take matters into your own hands and take decisions which are right for you and not leave it to chance, fate or others to take them for you.

This book is about making decisions. I have written it because I'm convinced that now is the time to reveal the art of good decision-making to as many people as possible. Over recent years researchers in universities have built up a huge store of knowledge about the way we make decisions. Psychologists and brain researchers in particular have dedicated huge amounts of time to this topic. Today the two disciplines work almost hand in hand with excellent results.

I would like to invite you to taste the fruits of this work. And I would like to show you how to make use of this knowledge to make good decisions. Of

course there is no way this book can prevent people from making mistakes or taking the wrong decision under pressure. Sometimes even life itself intervenes and puts us in a position where decisions are unnecessary. Given the vast range of choices confronting us it would be wrong to put ourselves in a position where we *always* wanted to do the right thing. Learning to make mistakes is just as important for a fulfilled life as the ability to make the right decisions.

In this book I would like to provide you with a thorough insight into the manner in which your brain makes decisions and to show you how to use this knowledge when it comes to making your own personal decisions. One thing I can promise you is that once you have read this book quite a few of your decisions will be different than beforehand.

I have divided the book up into two sections. The first section takes a look at the fascinating area of brain research. You might need to take a little time over this section; there are a few technical terms which you will need to familiarise yourself with. For example, you will get to know the work of the brain researcher Antonio Damasio and learn what is meant by a 'somatic marker'. My main concern here is to clearly explain the processes in the brain, mind and body which are connected with decision-making. My reason for this is simple: I am convinced that anyone who understands how his or her brain and mind function is in a far better position to make independent decisions than someone who follows a particular formula such as '7 tips for success'.

Once you have grasped the important fundamental principles of decision-making you will be in a position to apply them flexibly and productively. You can then analyse situations in which decisions turned out to be less than perfect and learn from past errors. In contrast someone who uses '7 tips for success' like some kind of recipe ends up completely at sea when they turn out to be wrong, and they will do sooner or later. In these cases it is always an advantage to be able to make decisions for yourself.

The second section of this book is intended as a guide to putting theory into practice. It gives a number of examples showing how to put the knowledge acquired in the first section to good practical use in everyday life.

I have spiced up both sections with plenty of drawings, to illustrate the psychological processes and make them easier to understand. It is my intention that by the end of this book you will have discovered the secret of good decision-making for yourself and that you will be in a position not only to make better decisions but also to understand why you are making them. Once you can do this you will also be able to explain your decisions to those close to you, to make them aware of what you have chosen and even to convince them that they are right.

Section 1

How the brain and body work together in the decision-making process

The secret of good decision-making

Anyone wanting to explain the art of good decision-making must first forget all the traditional notions about what constitutes a good decision. Up until now the majority of researchers and thinkers have assumed that good decisions are based on concepts that in everyday language would be referred to as 'reason', 'common sense' or 'thinking'. Emotions or physical sensations which can be found in expressions like 'gut feeling' or 'heart's desire', are regarded at best as unwelcome distractions. This is made abundantly clear by remarks like 'be reasonable' or 'for goodness sake use your head' or 'make an effort to think straight'. Traditional ideas stress that it is only possible to make a sensible decision if the emotions are firmly under control: emotions and the accompanying physical sensations only serve to confuse and hinder objectivity.

Picture 1

Good decisions are made dispassionately and unemotionally. This view has become so entrenched in our way of thinking that often it is never called into question. For many people, managers for instance, it is as plain as the nose on their face; they keep a grip on their feelings and practise their poker face. In line with this view successful management is a matter of objectively analysing the costs and benefits of different options in order to arrive at a detached and rational decision. The ideal which many managers strive for is that referred to as the homo oeconomicus, someone who makes decisions like a machine.

Mr Spock from the sci-fi series 'Star Trek' was the absolute embodiment of this type. Although the star ship Enterprise is a fictional creation, as an example it is ideally suited to the purposes of this book. For those of you who aren't trekkies, Mr Spock is a Vulcan not a human. The Vulcans look more or less the same as humans except for one notable difference: they have pointed ears. In the following illustration I've tried to draw Mr Spock and his pointed ears.

Picture 2

Apart from their pointed ears the Vulcans also exhibit one other major difference to humans: they have no emotions.

In Star Trek, Spock's role is to gather intelligence data and his favourite word is 'facts'. His facial expression is stoic and unchanging, although in absolutely critical moments it is possible to detect a slight raising of the left eyebrow, but otherwise his body posture and gestures can be relied on to remain totally impassive at all times. For the most part he looks as stiff as a poker. Spock has provided the real model for the training of generations of managers and we continue to find such types in the majority of management positions. I call this type of manager the 'Spock model'.

However, interestingly enough on the star ship Enterprise it isn't Spock, the Vulcan, who is in charge, it's a human, Captain Kirk. From a scientific perspective it would be just as possible for a woman to occupy this role, and for this reason I've tried to draw a female Captain Kirk.

Picture 3

Why does a human make a better leader than someone from Vulcan? The human brain functions differently to that of a Vulcan: a human brain does not just process facts, it also deals with emotions which in their turn lead to changes in body posture and facial expressions. And these processes are important when it comes to taking good decisions. Thanks to his emotions and his ability to experience them physically a human being can make better decisions than a Vulcan. In the course of this book we will look at all the details relating to brain research which justify this assertion.

The Unconscious is also Part of the Process

There is another idea which you will also have to kiss goodbye to at the start of this book. This is the notion that good decisions are always linked to the conscious mind. As I want to use the word 'consciousness' quite a bit I would like to briefly explain what I mean by it:

When I use the term consciousness I am referring to all mental activities which we are aware of and about which we could give some information if asked. If, for example, I were to ask you: 'Why did you just buy a coca-cola and not a pepsi?', you might perhaps answer that you prefer the taste of coca-cola to that of pepsi. You can give me this explanation when with the help of your conscious mind you think about why it is you prefer coca-cola.

It could be that by consciously thinking about the question you believe you have discovered the main reason for your decision to buy a coca-cola. However, this might not be the case: people don't simply make decisions on the basis of conscious thought, but also on the basis of what is going on in their *unconscious*.

When I use the term unconscious I am quite simply referring to all those processes of which we are not consciously aware. Perhaps your unconscious decided in favour of coke because someone you admire ordered a coke for lunch yesterday. Or perhaps the image of adolescents in bum-hugging jeans drinking coke in an advert remained in your unconscious. A seasoned advertising psychologist could possibly get out of you in an intensive interview that you associate the bottle of coke and its typical form with a fond memory of your grandfather, who used to have just such a bottle standing on his desk which had a pink plastic carnation in it that he had won at the fair for shooting ten bulls' eyes.

It was Sigmund Freud, the founder of psychoanalysis, who never tired of pointing out that people are not just guided by their conscious minds. He emphasised that the unconscious also has a great influence on our decisions and, naturally, also on our actions. As it contradicted an ideal that the western world had cherished since the 18th century Enlightenment, namely that man is a rational being, who in contrast to animals possesses self-consciousness and free will, this fundamental premise of psychoanalysis remained a subject of controversy for some considerable time. Seen in relation to this ideal, Freud's assertion that man is influenced above all by the unconscious was just as great an affront as Darwin's discovery that we had evolved from apes. Another reason why the concept of the unconscious encountered great scepticism in universities was that it was difficult to measure scientifically.

Brain research has been able to put an end to this lamentable state of affairs. In recent years it has succeeded in producing pictures showing how the brain works which enable us to directly observe the brain's activities. If you were wired up to the right machine, we would be able to see exactly which area of your brain is active when you think about coca-cola. And from this we could deduce what it is that your brain is engaged with at this moment.

As a result of such experiments we know that the conscious mind is only aware of a fraction of what goes on in the brain. The bulk of what we perceive and do throughout the day (and naturally night) is taken care of by the brain via unconscious processes. The brain researcher Gerhard Roth has even gone so far as to say that: 'for the brain consciousness is a condition to be avoided whenever possible and only to be used in cases of emergency'. In the course of this book we will take a closer look at why it is that the brain prefers to take care of things using the unconscious. At present it is sufficient to be clear that in this regard Sigmund Freud's ideas have been confirmed by brain research, and that the idea that man can consciously access all processes in his psyche is wrong.

The Emotional Memory

Now that it has become clear that unconscious processes can play an important role in our decision-making, let's take a more detailed look at how they work from the perspective of brain research. But to begin with let's take a look at the way the brain is constructed. The brain uses different areas for conscious and unconscious activity. If you could watch yourself thinking you would see that at times when particular thoughts spring into your consciousness then it is the part of your brain known as the *cerebral cortex* which is active. The cerebral cortex encases your cerebrum in the same way that bark encases a tree: 'cortex' is the Latin word for 'bark'. It is only around 3 millimetres thick.

In addition to this your brain consists of many other different parts, the cerebral cortex is only a comparatively thin wrapping. However, you only become consciously aware of your brain's activity when this thin wrapping is in action. All the brain activity that occurs below the cerebral cortex is unconscious. Some of this activity can become conscious under certain circumstances, as, for example, the memory of the coca-cola bottle with the pink carnation. Other aspects, in contrast, never reach your consciousness, for example the way in which your pancreas or spleen is influenced by your brain.

In the area below the cerebral cortex, i.e. in the unconscious, several independent areas central to our topic of making good decisions converge. The brain researcher Gerhard Roth has called this convergence the emotional memory.

This emotional memory is with us long before we come into this world; the areas of the brain that are responsible for the emotional memory are already working in the uterus before we are born. Everything which the organism experiences throughout its lifetime is stored in it. In the emotional memory knowledge is stored in the form of emotions and bodily sensations.

The emotional memory is not restricted just to humans: animals have just the same type of knowledge store as we do. Internal signals about emotions and changes in the body enable an organism to learn from experience and call up what has been learnt at lightning speed if it should find itself in a similar situation. In this way it is possible to get the benefit of experience, to repeat positive experiences whilst avoiding bad ones. To some degree our emotional memory is something we have inherited from our animal ancestors. It contains a comprehensive collection of our entire life's experiences and is, therefore, a priceless storehouse of knowledge.

Once we learn to appreciate this we can attribute a lot more importance to our emotions than has previously been the case and as is clear from the prevalence of the 'Spock model' I introduced earlier. Consequently, today emotions are no longer regarded as a disruptive element when it comes to reasoned thinking; rather, they are seen as an irreplaceable aid to survival. These survival aids come from two sources: some are inborn, others are acquired.

Knowledge that we have learned is stored in the emotional memory, which is so crucial when it comes to good decision-making. And because it is based on our own personal experiences it is also very individual. Simply put, we acquire knowledge by being rewarded for certain patterns of behaviour, or finding them pleasant, whilst others are punished or registered as unpleasant. The marks left by these experiences are permanent and deep.

Someone, for example, who has been told from an early age to put others first and to subordinate his or her own needs to those of others must often invest a great deal of time and energy at a later date to purge the body and the emotional self of this early indoctrination. Even if it is years since a parent has been around to throw a reproachful glance over his or her shoulder many adults still report a phenomenon that we call 'guilt feelings'. They feel awful for having even said no just once, and they find it impossible to enjoy so much as a moment's respite without their bad conscience rearing its ugly head. Regardless of how many times they tell themselves that they too have a right to a relaxed weekend, their emotional memory pops up to tell them something else and persists in sending unpleasant emotions as a signal that they are doing something they shouldn't because all past experience suggests that it will lead to punishment. In the part of this book which deals with putting ideas into practice we will take a closer look at how to get round the emotional memory in such cases.

The Quick and the Dead

There is a difference between the way that conscious thought processes, our reasoning activities, and the unconscious processes that take place in the emotional memory work, and this is something we need to understand if we are to improve our decision-making. It is important to be aware that the emotional memory functions differently to those areas of the brain devoted to reasoning processes. The brain researcher Antonio Damasio uses a graphic example from the world of computers to compare the way in which these two areas work. The area of the brain responsible for reasoning processes is like a computer with comparatively little memory (ROM) capacity; it functions slowly and can only process a limited amount of data at any one time. In contrast, the emotional memory can be compared to a computer with a huge memory capacity. It can process immense amounts of data in a very short time. The rule

of thumb is: reasoning processes can take quite some time, signals from the emotional memory come in a flash.

Why then has evolution provided us with something like conscious reasoning when the part of the brain responsible for it has to toil so arduously? The pure reasoned, non-emotional analysis of a situation or condition of the kind provided by Mr Spock does not, of course, only have disadvantages, it also has important advantages. The results which it provides may require a fair amount of time, but when they come they are extremely precise and very detailed. The emotional memory delivers its evaluation a lot quicker but its results lack both clarity and detail. We have 'a bit of a funny feeling', but cannot explain exactly where it comes from. Both the brain's evaluation systems have different specialities and, when they work together, form a formidable partnership.

Our reason works *precisely*, but *slowly*. The emotional memory, which works unconsciously, can come up with *quick* appraisals, but these are only of a general nature. It is, nonetheless, helpful for us to gain a rough overview *before* our reasoning processes click in. The brain researcher Joseph LeDoux has come up with an illuminating example in this regard which I would like to run through with you now.

Just imagine that you are walking through the woods. You are thinking about the next presentation that you have to give at a meeting in two days time, and are running through the arguments you find particularly convincing in your mind in order to put your case as strongly as you can. All of a sudden you recoil at the silhouette of something that you have seen at the edge of the path out of the corner of your eye. This silhouette looks like a snake. Your heartbeat increases and in the pit of your stomach the alarm bells are ringing.

All these reactions have occurred before you have had so much as a split second to consciously analyse the situation. The areas of your brain working unconsciously have already undertaken a preliminary assessment and placed your body on red alert ready to flee. This all happened while your conscious mind was focused on the forthcoming presentation. The information you now have about the situation has been very quickly processed, but nonetheless remains hazy. You do not know exactly what the matter is. All that you can make out is that something suspicious is lurking at the edge of the path. You stand stock still and take a harder look at what exactly this snakelike object is. Mr Spock clicks in. Now your cerebral cortex is active and can give you a detailed analysis. In this example from Joseph LeDoux it turns out that the suspicious silhouette is not in fact a snake, but a gnarled stick that has become covered in moss and subsequently taken on a snakelike appearance. Your emotional memory mistook the stick for a snake. When you think that millions of living things have been able to protect themselves from snake bites as a result of being warned by their emotional memory, then such a little misjudgment is not a great problem. In this regard LeDoux thinks that 'for our long-term survival it is better to mistake a stick for a snake, than a snake for a stick'. To make this point clear, with exquisite dry humour he came up with the symbolic title for the relevant chapter of his book: *The Quick and the Dead*.

In the example given by Joseph LeDoux the emotional memory misjudges the situation, and ultimately it is reason that comes up with a more accurate picture. However, the reverse can also be the case. Each of us can think of at least one occasion when the verdict arrived at by our feelings turned out to be completely right, and our reasoned judgment proved to be wrong. 'I had a funny feeling about that employee as soon as we met, somehow the chemistry wasn't right from the very beginning. But he had the best references of all and so finally I gave him the job'. In this example the assessment by the emotional memory provided a great deal of information about the manner in which the new employee behaved at the interview and moulded it into an overall picture, which taken in relation to your previous experience of employees led you to the feeling that you should turn him down.

This overall picture contains information which will perhaps never enter the conscious mind, not even under hypnosis or during an intensive interview. We know, for example, that people judge each other according to their smell, which gives rise to sayings such as 'he smells of money' or 'I smell a rat'. The olfactory nerve, which processes information about smells, leads directly into the emotional centre of the brain and elicits an immediate emotional response. The cerebral cortex has no chance to intervene. Your emotional memory perhaps detected the condescending way in which he greeted the secretary, or it noticed the quality of his handshake, registered in passing that he was wearing socks adorned with playboy bunnies, and that his voice was just a bit too loud to make his self-confident pose credible. All this data, and probably quite a lot more too, was being compared in the unconscious with all your previous experiences, and the end result was: 'he doesn't fit in'. But your reason saw the excellent references, the year spent abroad and the brilliant qualifications. Your very own Mr Spock pointed out the facts, and as a result you appointed someone who turned out to be an absolute nightmare.

So, how do you make good decisions? As we have seen each of these evaluation and decision-making systems has advantages and disadvantages.

The art of good decision-making lies in the ability to maintain command over both decision-making systems – reason and the emotional memory – and to recognise their weaknesses and strengths and as a result to be in a position to put them to use when and where it is appropriate.

In order to develop this ability you first of all need to have more details about the way in which the emotional memory works.

The Somatic Markers

The brain researcher Antonio Damasio has studied the role emotions play in human decision-making processes, and his results make a significant contribution towards understanding the secret of good decision-making. Let us begin with a look at a completely normal day from the viewpoint of the human brain as it seeks to ensure the best possible chances of survival, or the highest degree of well-being, for a particular individual. From this perspective human life consists of an endless flow of decisions. As soon as the alarm clock rings I have to decide whether to get up or stay in bed. Do I go straight to the bathroom, or do I take a look out of the window to see what the weather is like? Do I go to the toilet or clean my teeth first? First stroke the cat or kiss my husband? Honey or strawberry jam? Skip over the stock market pages to avoid getting upset, or read them thoroughly after all? Quickly water the plants or enjoy a leisurely drive to the station? Even something as simple as choosing a seat in the train demands a decision from your poor, half-asleep, overworked brain. Take a look at your own daily routine from this point of view. You'll see that in reality your brain is forever making decisions.

Antonio Damasio has studied the way in which your brain regulates these processes. And he has come up with some surprising results. For a start he has found out that for the majority of decisions, which in everyday language we would describe as 'reasoned', and which we believe are made in line with the Spock model free from emotional interference, have in fact a significant emotional component. In addition to this he has also discovered that it is not only the emotions which constitute a large part of reasonable decisions, but also bodily sensations. Butterflies in the stomach or going weak at the knees can in certain circumstances have more effect on a decision than 20 files full of facts. Thanks to the work of Damasio 'gut feelings', a phenomena experienced by many people, but nonetheless not taken seriously when it comes to decision-making, have now been accepted into the serious world of scientific research. So, it makes sense to take a closer look at Damasio's ideas in what follows.

Damasio has been looking at the way in which the emotional memory works and how it signals its presence. In the example of the snake used by Joseph LeDoux the reactions are so powerful that they normally force their way into our conscious mind and make themselves clearly felt. However, the emotional memory is not only active at times of danger, but also at all times throughout our everyday lives. And, as we have already seen, much of what it does never reaches our consciousness. Without our noticing it our emotional memory is continuously making one decision after the other. If this process wasn't constantly underway in our unconscious mind, we would hardly be able to get on with anything in *any aspect of our life*. Set against the traditional notion that reason always plays the leading role, this is a revolutionary assertion. And for this reason it is necessary to take a particularly close look at the reasoning behind it.

Antonio Damasio makes his ideas clear using the example of a businessman who is on the brink of making an important decision. I have provided illustrations