





by Ana Moreno Salvo

or many, the term that best defines our times is the 'age of innovation', because creativity opens the door to a host of solutions that until recently were hidden and locked away in the depths of mainstream logical thinking. When Edward De Bono wrote the book "The Use of Lateral Thinking" in 1967, he gave the world a new way of looking and thinking that revolutionised human life in all its fields and facets. Many technological innovations, marketing strategies, business models, conflict resolution, companies and universities, and even successful novels, humour and entertainment programmes would never have seen the light of day without the creative techniques that De Bono made available to everyone who was able to see their potential.

In June 2015, Edward De Bono spoke with David Perkins at the International Conference on Thinking (ICOT) held in Bilbao. Given David's question on the blind spots of the twenty-first century, Edward answered, without hesitation, additive thinking, and he told the following anecdote: 'I was once invited to the United Nations in New York for a meeting with the leaders of all the

countries represented. I tried to get them to generate new ideas in addition to the ones they already had, but it was impossible. They all thought they were there to represent their countries and say what their countries wanted them to say. I believe we need to create a global environment for additive thinking, a "thought palace" where people from different countries can come together freely to think differently and generate creative ideas about global problems. What happens in politics does not happen in the business world; large corporations and companies are very interested in creativity and know that their success depends largely on the quality of their thinking. We also have a similar situation in the world of education; for example, in England there is much more interest in students mastering history than the present world, and this is a problem today.'

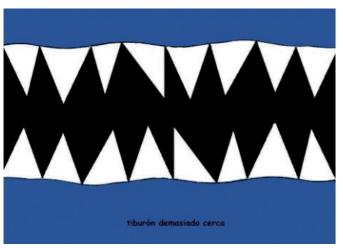
Edward De Bono was born in Malta in 1933, in a well-to-do family. He was the second of four children of a Maltese couple educated in England. His parents' educational style was very distant, and he spent most

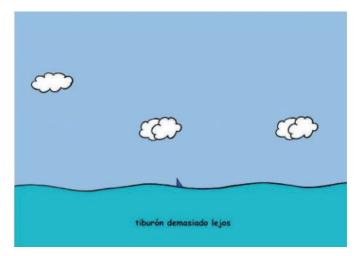
of his childhood in a boarding school. He only saw his family on holiday, and the four siblings were usually in the care of a governess. Although he never discussed the impact this had on his way of being, his wife thought that these circumstances forged a serious personality and a strong tendency to seek solitude. As a young man he was a child prodigy; at the age of fifteen he entered the university and at twenty-one he was already a medical doctor. At twenty-two he entered Oxford University, where he studied psychology and philosophy. In 1967 he published his most widely distributed book, *The Use* of Lateral Thinking. At that time, he was already assistant research director in the Department of Medical Research at the University of Cambridge. Over the course of his lifetime, he has been awarded five university degrees and three doctorates. In addition to Oxford and Cambridge Universities, he has been part of research teams at Harvard and London Universities. He is the author of 85 books that have been translated into 46 languages.

Ashok Chouhan, a billionaire and founder of India's prestigious Amity University, tells how he was once traveling from Europe to India when his plane was diverted to Paris. To kill time, he bought a book at the airport that had a very significant impact on his life, "The Use of Lateral Thinking". Since then, he has carried it in his briefcase for more than 30 years. Chouhan is just one example of the countless people for whom de Bono's creative techniques have opened up a world of possibilities that have led them to success. This includes businesspeople, scientists, Nobel laureates, humourists, writers, professional conjurers, architects, etc.

HUMOUR SHOWS HOW THE BRAIN WORKS

In response to the question of where he gets inspiration for his creations, humourist Alvaro Carmona says that humour is a change in the pattern through which things are seen, and while showing hundreds of notebooks full of drawings, he said, 'I find the best inspiration in them and in the creative techniques of De Bono's lateral thinking'.





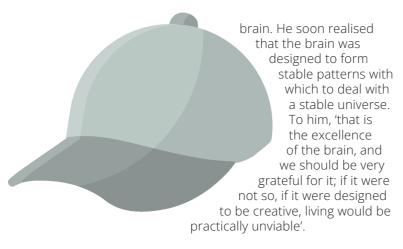
Source: "El libro de los tiburones". Álvaro Carmona

Humour comes into play when one realises that there is another perspective that affects the most common way of looking at things. With humour, the mind goes back and forth between the obvious way of looking at things and the unexpected but also plausible way. This alternation is precisely what characterizes humour and lateral thinking. Anyone who has a sense of humour should be able to understand the nature of lateral thinking much better than someone who does not. To De Bono, 'humour is by far the most significant behaviour of the human brain, because it reveals the nature of the underlying system, that is, a "self-organising" information system based on asymmetric patterns. Reason tells us very little about how the brain works, because any "organisation system" run backwards is a reasoning system. But, humour shows asymmetrical patterns, just like the brain, in that the path from A to B is not the same as the path from B to A.'

In his dialogue with David Perkins in Bilbao, De Bono says that lateral thinking, or creativity of ideas, is based on breaking patterns or getting away from the pattern. For example, he says, a random word creates a new pattern from which to think. It all depends on the logic of the patterns. But it is not enough just to create new patterns for thinking; things must also make sense. De Bono tells how he once met with 300 environmentalists in California who told him how in rivers waste from upstream affects the water downstream. After working with them a bit, he saw that the waste from factories has to be in the downstream waters. At the time it seemed totally impossible, but 15 years later this idea became a criminal law for companies. For De Bono, this, like many other things, could have been thought of 200 years earlier.

'SEEING WITH THE MIND'

De Bono says that when he was doing research on how human body systems work, he became interested in the



Later he studied the thought processes of historical figures who had made great discoveries for the progress of mankind and realised that most of them had come upon it by chance. They all had one thing in common, unlike standard scientists: an attitude and mind that were open and attentive to possibility. They were able to open their thinking to intuitions and alternatives and then test if they worked.

This is how lateral thinking was born, and De Bono gave it this name spontaneously in an interview he did for the magazine "London Life" while explaining that 'it is necessary to move laterally to find other approaches and alternatives'. At that moment, he realised that it was the word he needed.

To De Bono, there are two ways of thinking: one through perception and the other through a process. Although he himself states that this is an overstated polarisation, it helps us to understand that the brain works differently from computers, which only process information, while the brain not only processes but also perceives. De Bono uses the word 'perception' differently from classical philosophers and describes it as the interaction of sensory data with the neural network of the brain, which he called 'seeing

with the mind'.

In the late 1960s, he created the CoRT (Cognitive Research Trust) programme of lateral thinking techniques inspired by his research in psychology and his interest in the kind of thinking that computers cannot do. For the first time in human history, we can treat creativity as a mental technique and not just as a matter of talent or inspiration. De Bono believed it was important to teach creative thinking in schools and promoted CoRT in countries on every continent. The programme was and still is taught in thousands

Practical lateral thinking is essential in problems where logical thinking cannot provide an answer

of schools around the world, including the USA, UK, Canada, Australia and Chile. But as De Bono himself says, the keenest interest in his techniques was from the business world, so he spent more than 30 years teaching courses in large companies, corporations, government institutions and universities. One time, he was asked to lad some sessions at a Nobel

LATERAL THINKING

Awards meeting in Seoul.

To De Bono, lateral thinking has three basic arguments: 1) logical or vertical thinking has limitations as a method for generating new ideas; 2) lateral processes are useful

for generating new ideas; 3) the purpose of lateral thinking is to produce new ideas that are simple, sound and effective.

In the early nineteenth century, European leaders were much more concerned when the astute Austrian diplomat, Prince Metternich, did nothing than when he did something. A shift from the obvious way of looking at something to something not so obvious requires a change in perspective. This is not particularly difficult if you have practice in feeling around and finding different

ways of looking at a problem or situation. But it is important to be interested in trying and to recognise the effectiveness of a change in perspective.

New ideas tend to occur to those who are able to avoid the rigidity of logical thinking. The following anecdote makes this clear: When cars had no rear lights, they had to back out of a cul-de-sac in reverse, leading to many accidents. One day someone used the rear turn signal to illuminate a road. It's a simple idea, but no one had thought of it before because of the logic of how the lights were designed to be used.

Practical lateral thinking is essential in problems where vertical or logical thinking has been unable to provide an answer.

A problem is a situation that demands a response that is not obvious. Sometimes a situation is a problem because it is viewed in a

certain way. And vice-versa: sometimes it takes a good dose of lateral thinking to see problems that have gone unnoticed.

Edward De Bono said, 'I have held academic positions at Oxford, Cambridge, London and Harvard Universities, where the amount of time devoted to the importance of possibility is nil'. Our culture and habits push us to seek certainty, but we should pay equal attention to possibility. Stomach ulcers were a serious medical problem that were hard to solve; many people investigated this disorder. A young physician, Barry Marshall, suggested it might be an infection, but he was laughed at. No one took that possibility seriously. Years later, it turned out that he was right, and instead of spending 20 years taking antacids and losing part of his stomach, he spent a week taking antibiotics. Possibility is very important; it is the key to creativity.

RELATIONSHIP BETWEEN LOGIC AND CREATIVITY

When faced with a problem, lateral thinking tries to test different solutions one after the other. Once one is chosen, it is followed with all the rigor of logical thinking. Then another one is chosen, and so on. The search for alternative ways of seeing things is not natural; it is necessary to act intentionally, although with time and practice, it requires less effort. A useful technique is to deliberately invert the situation. For example, instead of assuming that the Sun moves around the Earth, one can assume that the Earth moves around the Sun. Other techniques are transferring relationships from one situation to another one that is easier to handle, deliberately shifting the focus of attention from the problem to something else.

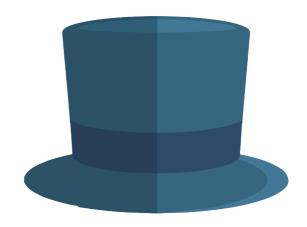
Marconi, the inventor of the radio, was daring enough to think of transmitting a signal across the Atlantic Ocean.

The experts told him it was crazy, because the curvature of the Earth would cause the signal to be lost in space, and they were right. But they did not know, like Marconi, of the existence of an electrically charged layer in the upper atmosphere,

which bounced the wireless wave back. Marconi came to a conclusion he would never have reached if he had allowed himself to be swayed by the rigidity of logic. Lateral thinking involves getting down in the dirt and searching until you find a natural path. Logic must ensure that it is irrefutable once it has been found.

CHANCE AND PLAY IN CREATIVITY

Many good ideas start with a fortuitous combination of factors. For example, X-rays emerged when Roentgen forgot to remove a fluorescent screen from a table where he was experimenting with a cathode ray tube, and photography emerged when Daguerre noticed the image left by a spoon on an iodised metal surface. The role of chance in generating new ideas is that it provides an opportunity to look for something that would not otherwise be found. It is an attempt to stimulate the coincidental occurrence of phenomena that would not otherwise be sought.



Playing means experimenting with chance. James Clerk Maxwell, one of the most eminent mathematicians, played constantly. He was aware of the value play. He learned to draw ellipses by playing with threads and pins, which led him to explain the laws of light reflection when he was just a child. During play, ideas arise spontaneously and give rise to other ideas.

Pasteur worked in many fields, and in each of them there seemed to be fortuitous elements that favoured him. He himself recognised that the mental predisposition to develop the contribution of chance is what matters. He was able to notice things he wasn't looking for, coincidences, things that others didn't notice because they let the opportunity slip by.

With practice, when it comes to seeing things differently, the ability to find context for any type of information increases. As lateral thinking improves, information gotten by chance becomes increasingly useful.

There are many lateral thinking techniques that use chance, such as when two different things are combined to provide new value. The effectiveness of the combination is evaluated by whether it can add value and improve (business, project, environment, school activity, etc.). It can be done with two random words. The accent is on the combination of the two words, not on taking one and applying it to the other.

FROM ARGUMENTATION TO THE SIX HATS

Another of Edward De Bono's great accomplishments is the creation of the famous Six Thinking Hats Technique for exploring problems and solving them as a team. To De Bono, 'we have always thought of traditional argumentation as the best way to resolve problematic discussions, but in reality it is an exercise in logic and ego'. There are other more effective ways of doing this, such as exploring a situation or a topic from different types of thinking to broaden the view. The Six Thinking Hats Technique forces us to adopt different points of view, to break with the pattern. When it was applied in some courts in New York, unanimous decisions were reached very quickly. The famous finance company J. P. Morgan in the same city managed to hold only one-tenth the number of meetings that it used to thanks to this technique. This technique is universally used in countless fields, from education to business, politics, medicine, etc.

FAREWELL

The change De Bono proposed is not to replace logical thinking with lateral thinking but rather to free the domain of logic by defining the creative alternative and showing us how to do it.

Pasteur recognised that the mental predisposition to develop the contribution of chance is what matters

To De Bono, today we have the technology to do almost anything. Now we need to apply it to things that add value to our lives. His contribution sought to be more fundamental and liberating than telling us what our values should or should not be. It shows us how to seek and broaden our perception of alternatives, how to think, instead of telling us what to think, because we are going to need it, now that the right/wrong paradigm has disappeared.

In this context, according to De Bono, 'what will change human behaviour are changes in thinking, not changes in values'.

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Dear Edward, thank you for your genius and your dedication to human progress. For believing in the potential of creativity and devoting your whole life to teaching the world, to thinking better in order to make it possible. We all owe you a lot, and we will always remember you, because as you said yourself: 'A memory is what is left when something happens and does not completely unhappen'.

