

The Use of Lateral Thinking in Finding Creative Conflict Resolutions

A.J. Richardson, The Urban Transport Institute, Australia

R.C. Hupp, Bodman Longley, Detroit

R.K. Seethaler, The Urban Transport Institute, Australia

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ABSTRACT

Often, our ability to find creative and acceptable solutions to conflict situations is limited by our inability to break out of our habitual ways of thinking about the conflict. By the time a problem gets to the conflict resolution stage, most parties have become entrenched in their views and can only see the problem from their own perspective. What is needed is a conscientious effort and a deliberate technique for seeing the problem from other, perhaps innovative, perspectives. The techniques of Lateral Thinking, developed by Dr. Edward de Bono, are a good example of a set of such deliberate techniques for creative thinking. This paper will explain why Lateral Thinking is useful in Dispute Resolution, and will describe some of the techniques involved in Lateral Thinking (such as Concept Triangles, Random Inputs, Provocation and Movement).

It then extends the conventional discussion of Lateral Thinking for use within the context of Dispute Resolution, wherein creative solutions are only useful if they are acceptable to all parties involved. The idea of consistent creative solutions holds promise for quickly finding acceptable solutions in multi-party dispute resolution environments.

INTRODUCTION

Alternative methods of conflict resolution are becoming more widespread in an attempt to avoid the negative aspects of adversarial litigation. Rather than spending much time, effort and money on seeking to prove the other party wrong, more time is being spent on trying to find solutions which are acceptable, perhaps even beneficial, to both parties. The search for such "win-win" solutions is at the heart of many alternative conflict resolution methods.

However, even with the best of intentions, it is often difficult to find solutions which are beneficial to both parties. The parties themselves are in the worst position to see such solutions, since their involvement in the dispute has effectively polarised their view of the situation such that they can only see the situation from their point of view. In such a situation it is essential to have an independent "third party" facilitator who has at least some chance of seeing the dispute from both sides of the fence (de Bono, 1985). However, even a "third party" facilitator will have difficulty in designing creative "win-win" solutions since, as will be described later, such creativity is not a natural function of the human brain. Fortunately, however, there are some techniques which can assist in finding creative solutions to conflict resolution problems.

This paper seeks to show the role that creative thinking can play in the design of "win-win" solutions to conflict resolution problems. Drawing upon the techniques of creative thinking developed by Edward de Bono, the paper will show how all parties in conflict resolution can improve their skills in Lateral Thinking. The paper will outline some fundamental ideas, and some myths, about creativity and describe three major techniques in creative thinking, namely the concept triangle, random inputs, and the use of provocation. It will describe why and how these techniques work, and will then demonstrate their use in a range of conflict resolution situations.

WHY IS CREATIVITY NEEDED?

A formal consideration of creativity is needed in conflict resolution because, unlike some other parts of the conflict resolution process which rely on logical thinking and analysis, creative alternatives cannot be generated by logical thinking. The major body of work on creativity can be found in the writings on Lateral Thinking by Edward de Bono (1967, 1972, 1992). In his works, de Bono stresses that no new ideas can come from logical thinking; all new ideas comes from illogical and somewhat random thoughts. We have all experienced such situations where solutions to long-standing problems come to us in the most unlikely circumstances, such as when showering or when taking a walk and not really thinking about the problem.

However, de Bono has gone one step further and has invented a number of deliberate thinking strategies such as concept triangles, random words and "po" statements (po stands for "provocation operation"). de Bono describes how such strategies can result in significantly new ideas which can overcome problems which

could not have been solved through the application of conventional, logical thinking. However, de Bono also stresses that, once discovered, all of these new ideas must be able to be explained and justified in terms of conventional logical thought processes. In essence, all great new ideas are obvious in hindsight. Combining logical and illogical thinking is one of the great challenges in conflict resolution.

In essence, there are two situations when there is a real and practical need for creativity:

- where there is a real need for a new idea and we cannot proceed without that new idea. The need may arise with respect to a problem, a crisis or a conflict. Other approaches have failed, and creativity is the only hope for moving forward. This is the most common reason for the need for creativity in conflict resolution.
- where there is no pressing need for a new idea, but where a new idea may offer opportunities, advantage and benefit. Even if an acceptable resolution has been found, it may be worthwhile looking for improvements to that resolution.

People are generally more aware of the need for creativity in the former case. Indeed, in the latter case, many people are much happier to "let sleeping dogs lie" and can see no need to fix things if they aren't broken. However, it is clear, in hindsight, that often the best time to have changed something was when things were going well, since after that time things can only go downhill. Sometimes it is worthwhile looking for improved resolutions before the situation leads to conflict.

FUNDAMENTALS AND MYTHS ABOUT CREATIVITY

Before considering specific techniques which can be used to generate new ideas in conflict resolution, some basic ideas and myths about creativity need to be considered in order to set the scene for the discussion of deliberate creative thinking techniques. de Bono (1992) highlights eleven issues and myths about creativity which have developed over the years:

- Creativity is a natural talent and cannot be taught
Many people excuse themselves from being creative because they say that creativity is a natural talent you are born with, and therefore cannot be learned. de Bono positively disagrees with this view, and sets out to show how anyone can learn to be more creative, just like anyone can learn to play tennis. Clearly, not all people will learn to be Wimbledon champions in tennis, and some people will always be more creative than others. But everyone can learn to be more creative.
- Creativity comes from the rebels
Creative thinking is often seen to be something that is better done by the rebels in society, since they like to break the rules and think the non-conformist thoughts. However, since, as will be seen later, deliberate creative thinking is done by following a series of rules and procedures, it could be that conformists

may be better at deliberate creative thinking since they are the ones who are willing to follow the rules in order to generate creative ideas at will. This is a useful property of creative thinking when it is to be used by those in the legal profession, where adherence to rules is a relatively accepted practice.

- People are either left-brained or right-brained

Left-brained people are regarded as logical and analytical while right-brained people are more perceptual and holistic. It has therefore been considered that creativity is a function of right-brain thinking, and can only be attempted by people who are right-brained. However, de Bono points out that both hemispheres of the brain are used in creativity thinking. In addition, while some people are predominantly left-brained, they also have a right-brain which they can be trained to use more effectively.

- Creativity belongs in the domain of art and the artists

We often consider creativity to be most obvious in the work of artists, and others of artistic persuasion such as musicians and architects. Creativity is not usually associated with the legal profession, where precedent and case law play an important role in many situations. However, many "artists" are only creative on very few occasions in their life, and thereafter tend to stick to their "creative" style. Many artists develop a style which is surprising and refreshing at first, but which is then used with minor variations from then on. They are not necessarily creative all the time or on demand. Most lawyers are not "flashy", but they do need to be creative in conflict resolution.

- Releasing inhibitions is enough to be creative

It is often considered that releasing inhibitions, removing the fear of being wrong and suspending judgement will be enough to generate new ideas. However, if inhibitions simply reduce our normal level of creativity, then releasing inhibitions will merely move us back to our normal level of creativity. In order to be really creative, however, we need to go beyond this point by the adoption of some "unnatural" behaviours. Merely wanting to be creative is not enough (even though it is an essential first step). What is needed is technique to foster creative ideas.

- Intuition and "sleeping on it" is enough

While it is true that many good ideas come to us when we are least expecting them, leading us to believe that our sub-conscious intuition is enough for generating creative ideas, such a method has a very low efficiency. It takes a lot of "sleeping on it" to come up with lots of good new ideas, and it is not particularly viable as a means of generating new ideas on demand. In the middle of a conflict resolution session it would be inappropriate to tell everyone to "go sleep on it" - what is needed is a method for pro-active, deliberate creativity.

- Creative people are a bit "crazy"

Being "crazy" is different from being conventional just as being creative is different from being conventional. However, it does not follow that being "crazy" is the same as being creative. Generating crazy new ideas does not mean that they will necessarily be useful new ideas. It can be a good start, however, since it makes us move out of our comfort zone and start considering something different. However, one needs to ensure that one moves on from the crazy new idea to the useful new idea.
- Scatter-gun processes will eventually generate creative ideas

The process of "brainstorming" gives the idea that simply listing a lot of different thoughts, and suspending judgement about them, will generate good new ideas. Clearly, the more ideas that are listed the more likely it is that at least one new idea will surface. However, it's a bit like having a thousand monkeys banging away on typewriters in the hope that they will write a best-selling novel - it could happen, but it is not likely. Most brainstorming exercises are more like "brain-dumping" where all we get are a series of ideas along the same line from each participant. We need more deliberate processes to force us out of our normal lines of thinking.
- Creative ideas must address big problems and issues

Many people, especially in Western societies, are obsessed with finding big conceptual jumps which lead to totally new paradigms of thought about a topic. Eastern thinkers, on the other hand, are more content with a series of small conceptual jumps that lead to new ideas without a major paradigm change. A series of small jumps rarely leads to the same outcome as one large jump, since the large jump may require a total overhaul of previous ways of looking at things. Most conflict resolution situations are more likely to be involved with relatively small issues rather than with big issues. Creative thinking should be considered when looking at both small and large problems.
- Creative thinking is a group process

Because many people have some experience with brainstorming exercises in a group, it is often considered that creativity is a group exercise. However, deliberate creative thinking can be an individual as well as a group exercise. Indeed, individual creativity can be better at the start of the process, where individuals can generate far more ideas and a wider range of ideas. Later in the process, groups can be good for building on ideas and suggesting variations and modifications to ideas generated by an individual.
- Creativity and intelligence are inversely related

Many people consider that high levels of intelligence are an impediment to creativity. Clearly, highly intelligent people are traditionally better at logic and analysis. They may also "know" when something won't work, and hence don't follow through on the idea. On the other hand, the less intelligent person may not be smart enough to know that the idea can never work, and hence, in their innocence, continue to work on the idea until, to everyone's surprise, it works.

However, deliberate creative thinking can be used by high and low IQ people alike, so long as they are willing to follow the rules of deliberate creative thinking.

USING THE CONCEPT TRIANGLE TO GENERATE ALTERNATIVES

A common situation in which some form of creativity is required is where different ideas are needed for solving a particular problem. Typically, this is done by making a list of the different ways of solving the problem. However, a relatively simple change to this process can make the effort much more productive in terms of the quantity and quality of ideas developed. The key change is to think of an idea not as an individual idea but as a representative of a "concept" which can be used to solve the specified problem.

As an example of using concepts to generate ideas, consider the problem of emptying a glass of water without touching the glass. When faced with this problem, most people will immediately come up with a particular idea, such as sucking the water out through a straw. Rather than immediately proceeding on to suggest other ideas, we can be more productive if we pause at this stage and identify the concept that underlies this particular idea. In this case, the concept might be "raising the water out of the glass". Having identified this concept, we now proceed to generate other ideas using this same concept. For example, we might place a cloth inside the glass, absorb the water with the cloth, and then lift the cloth out. Alternatively, we might put a string in the glass, freeze the water, then lift out an ice cube! This process can be represented in terms of a "concept triangle", as shown in Figure 1.

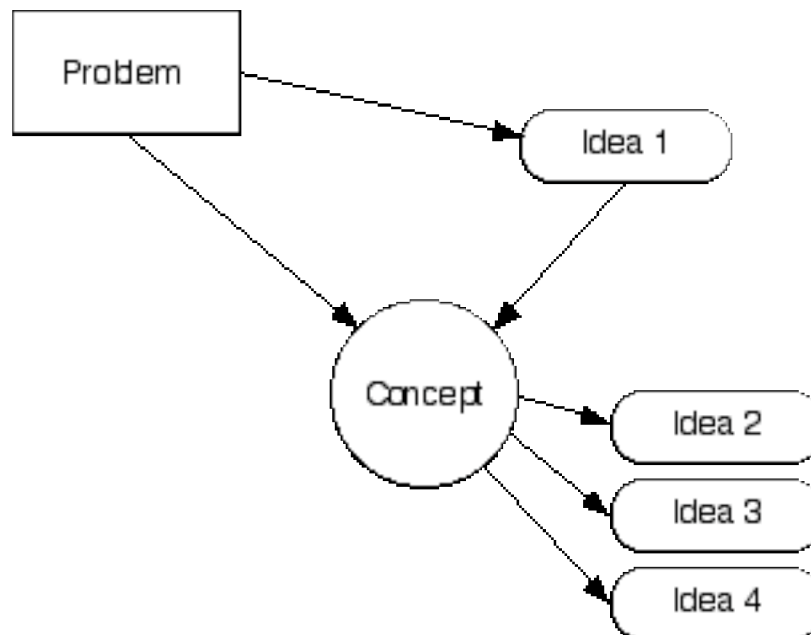


Figure 1 The Use of a Concept Triangle to Generate Ideas

With the "concept triangle", one uses the first idea to identify a general concept, and then uses this general concept to develop many different ideas, using this same

concept, for solving the original problem. Having identified all the different ideas using this concept, one then thinks of any other way of solving the problem, and then repeats the process of identifying the concept and then generating new ideas from this concept. For example, with the same problem, one could empty the glass by filling it with stones to force out the water. The underlying concept would be "displacement", and other ideas might be filling it with another liquid that was heavier than water, or by placing another glass inside the original glass. The same process can be repeated over and over again until all the concepts, and ideas, have been exhausted (at least to your mind). This overall process is shown in Figure 2.

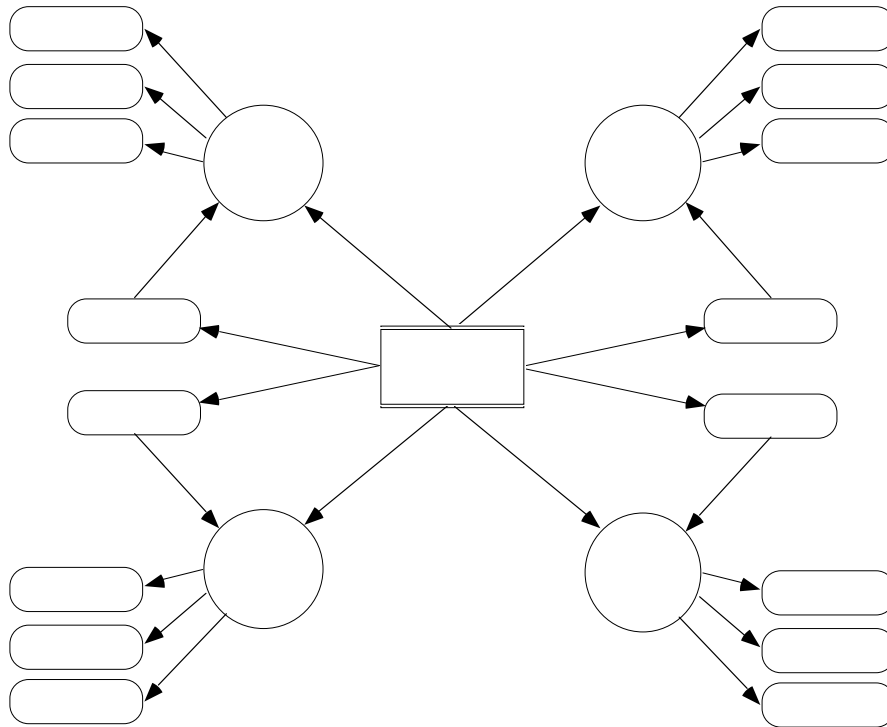


Figure 2 The Multiple Use of Concept Triangles to Generate Ideas

It can be seen in Figure 1, and Figure 2, that it is possible to go directly from the problem to a concept and then on to ideas. However, in practice, it is usually easier and more natural to first think of a specific idea and then identify the underlying concept.

The advantage of using concept triangles to generate ideas is that it is a much more comprehensive and exhaustive method of generating ideas than simply trying to list all the individual ideas. It also gives a much better understanding of the structure of alternative solutions and the nature of the initial problem. It also helps in documenting the possible solutions, because it gives a natural grouping of different ideas which helps in preparing reports on the problem.

The use of concept triangles is helpful when you are trying to identify, and categorise, ideas that are already within your span of knowledge, but when you need some assistance in remembering or identifying them. However, when you need to develop an idea of which you are currently totally unaware (i.e. when you need to be really creative), then other methods of Lateral Thinking are needed.

USING RANDOM INPUTS TO ESCAPE THE MAINSTREAM

One of the valuable functions of the human brain is in pattern recognition. Given only partial information, our brain is very good at filling in the missing information to arrive at a conclusion. We do this all the time, and everyday life would be impossible without such an ability. However, when we are trying to think of something new, this very ability can be a real impediment. Every time we come to an impasse in generating a new idea, our brain fills in the missing details and leads us back to something with which we are already familiar. Figure 3 illustrates this concept.

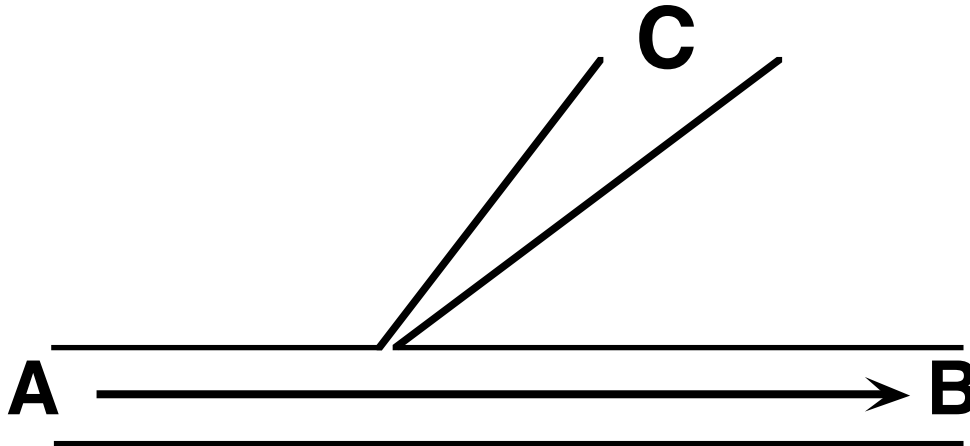


Figure 3 The Constraining Effect of Routine Thinking

We start at point A looking for a new idea but, each time we undertake this process, our routine way of thinking, including our brain's powers of pattern recognition, leads us down the same path to conclusion B. We can't seem to break out of our routine way of thinking to find the new idea located at C. We stay on the well-worn path, and don't (or can't) venture into the side alley which would lead us to C. And the more we try, the more likely we are to keep finding ideas with which we are already familiar in the corridor between A and B. Just as falling rain carves deeper and deeper rivers in the valleys of the landscape (because it always runs downhill to the lowest point), so new information falling on our senses tends to run into the same thought channels, carving deeper and deeper impressions on our "brainscape".

The same process occurs for each person involved in the conflict resolution process. Each of these people has their own "brainscape" which channels the incoming information in specific ways to arrive at a particular conclusion. The nature of their "brainscape" will depend on a variety of factors including their professional background (lawyers process information in different ways to social scientists, who in turn process information differently to engineers), or their previous experience in the conflict under resolution (parties on different sides will see the same "objective" information in totally different ways, leading to very different suggestions for resolution of the conflict). Thus, each person can start from the same point A, but their different "brainscapes" will lead them to very different conclusions at B and D, as shown in Figure 4.

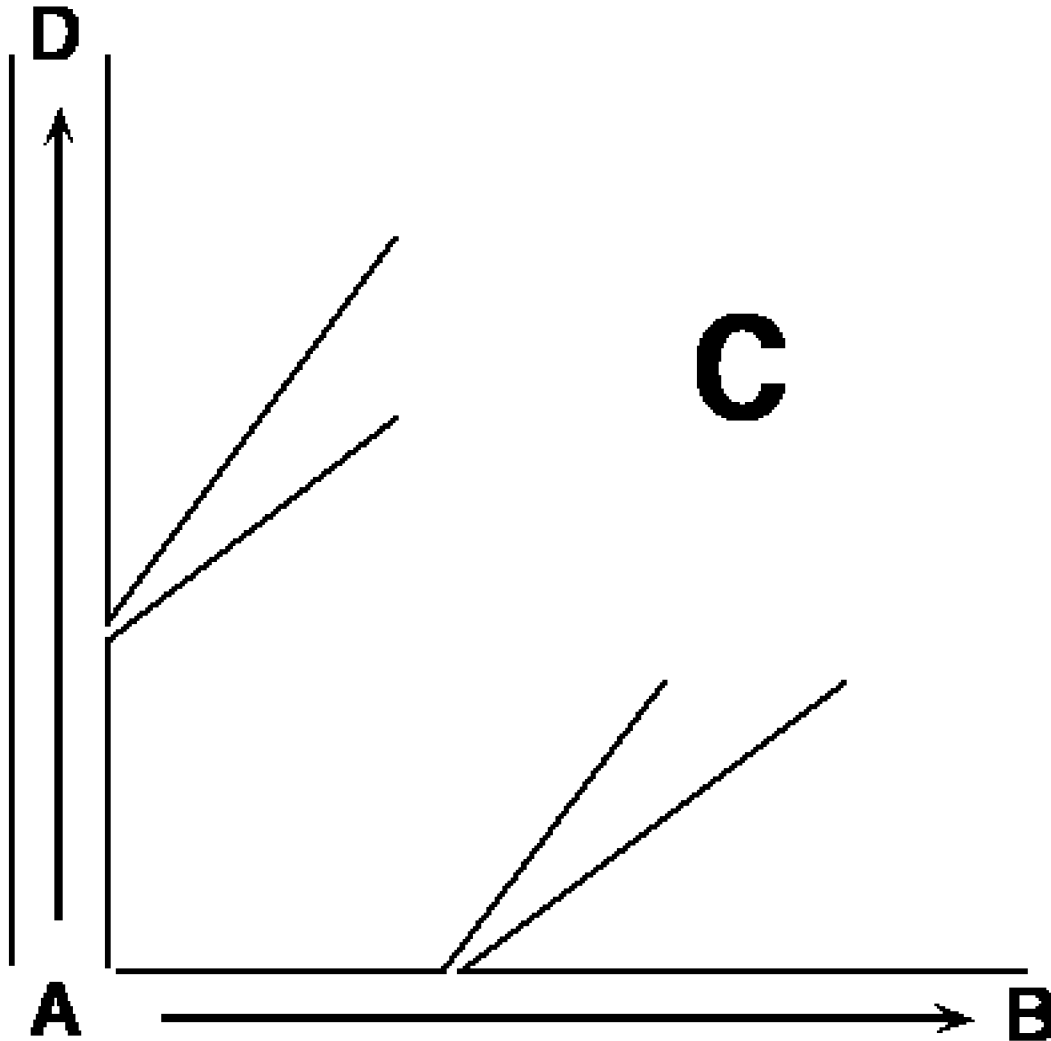


Figure 4 Different Brainscapes lead to Different Conclusions

What is needed is a way of collectively forcing us out of our comfort zone (i.e. out of the obvious paths from A to B, or from A to D) so that we have a chance of finding the new idea at C which may be a way of resolving the conflict to the mutual benefit of all parties.

Before considering the application of Lateral Thinking in conflict resolution, consider its use in finding a new idea in a more general context. One way of getting out of our thinking rut is by the deliberate introduction of a random stimulus which has nothing to do with the topic about which we are thinking. This random input has the effect of deliberately moving us away from the usual path between A and B, thus putting our mind temporarily in an unusual, unstable position such that we might see the new idea at C. Having discovered this new idea, we then see, in hindsight, how it relates to the issue or problem we were considering at A. Importantly, we must be able to explain logically how the idea at C is able to solve the problem we were considering at A, as shown by the reverse arrow from C to A in Figure 5.

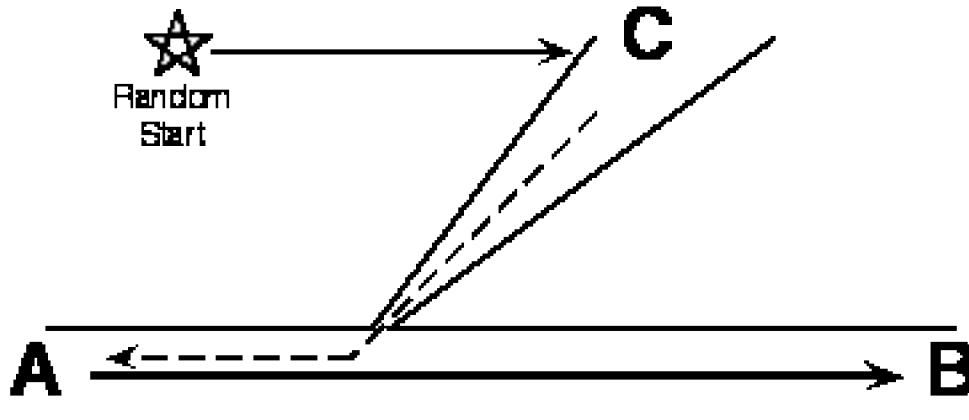


Figure 5 Using a Random Starting Point to find a New Idea

While we could not have found C from A by logical thought processes, we must always be able to show, in hindsight, how C is logically connected to A. We are all familiar with this concept. Having found a new idea, by whatever process, we often say to ourselves or others "How obvious! Why didn't I see this before?". Explaining good ideas is not very hard; finding them in the first place is much more difficult, unless specific Lateral Thinking Techniques are employed.

One of the simplest, but most powerful, techniques in Lateral Thinking is the use of the Random Word. The Random Word technique is a deliberate method of generating a random starting point, from which we can start looking for new ideas. There are many ways of generating a random word. The simplest is to open any book on a random page and, with eyes closed, point to a place on the page with your finger. You then select the next noun following the place at which you have put your finger. Another technique, often used in Lateral Thinking training sessions, is the use of a card containing 60 numbered nouns (specially chosen for their evocative nature). The person looks at their watch and reads the time to the nearest second. They then select the noun from the list corresponding to the number of seconds. The idea of the Random Word technique is to use this random word (noun) to generate ideas relating to the focus of the thinking effort. An example will explain the technique further.

The first thing that needs to be done is to define the focus of the thinking. This may be a specific problem or just a general area. In this case, let us assume that we want some new ideas about Improved Security at Airports We write this in the Focus box in Figure 6.

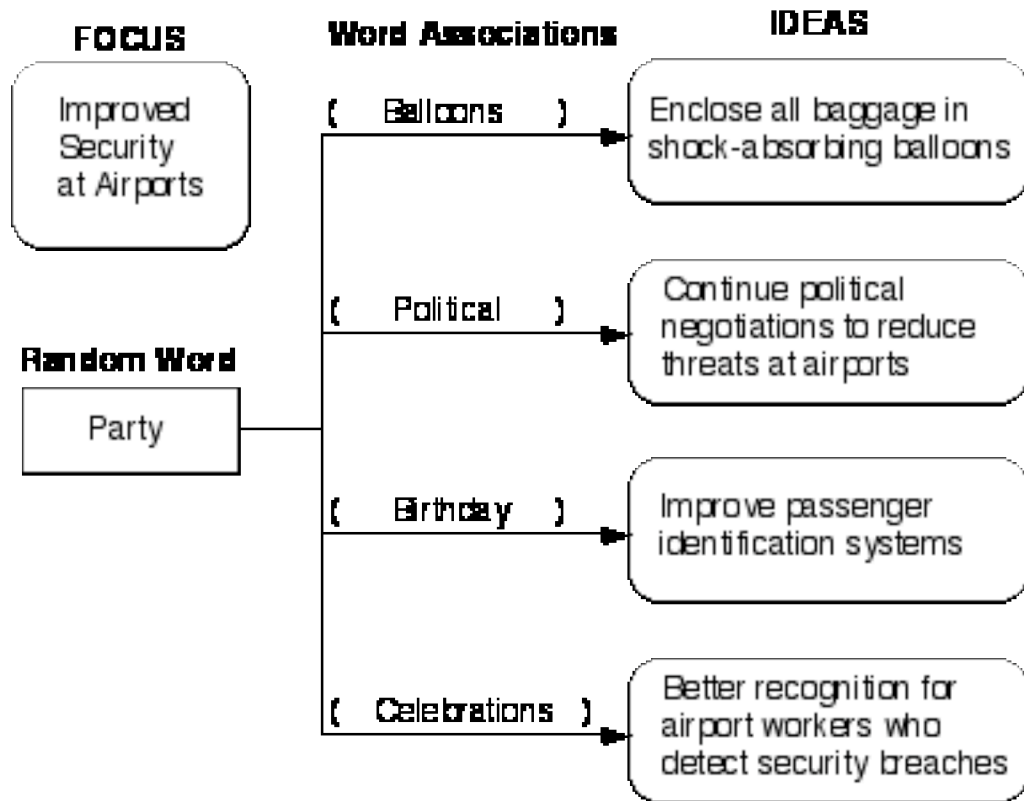


Figure 6 Using the Random Word Technique

The next step is to select a Random Word. In this case, we have used a card with 60 nouns, have looked at our watch and seen that the number of seconds is 34, and have selected the 34th word on the list, which was "party". We write this in the Random Word box in Figure 6. Now, without thinking about the Focus, we write four things that come to our mind about "party" within the brackets on the arrows emanating from the Random Word box in Figure 6. This stage of the process should be done quickly and without thinking about the Focus (which requires a degree of discipline).

In this example, the word associations with "party" were balloons, political, birthday and celebrations. The next task is to use these associations to come up with new ideas about "improved security at airports". In this example, the line of thought might be something like this:

Balloons: give rise to the idea of cushioning shapes filled with air, which leads to the idea of "bubble-wrap" plastic sheeting used to protect fragile items. From here, emerges the idea of wrapping all baggage in high-strength, shock-absorbing "bubble-wrap" balloons to mitigate the effects of any explosive devices contained in the baggage.

Political: the word association of a political "party" quickly leads to the idea of continuing political talks and negotiations to try to minimise the threat to airport security. This is an example of where the use of the random word does not lead to an immediate idea for resolving the problem. Rather, it leads to an underlying

concept to deal with the problem. This concept could itself become a "Focus" in a subsequent Random Word exercise, to try to find creative ideas about how these political negotiations could best be undertaken.

Birthday: birthdays are a means of marking the day on which the age of a person increases. Age is one way in which people are identified. This leads to the idea of improving passenger identification systems as a way of reducing the risk associated with suspect people boarding an aircraft.

Celebrations: celebrations are held when acknowledging the special efforts of an individual. This leads to the idea of developing better recognition and reward programs for airport workers who detect airport security breaches.

The entire exercise outlined above should take no more than five minutes. In this way, you can use the technique whenever there are five minutes to spare. The exercise could then be repeated by selecting another Random Word, which would probably result in a totally different set of ideas. However, it is important that you should not just keep discarding and reselecting Random Words until you find one that is easy to work with. You must work with the first one selected, and only after finishing the entire exercise should you move on to another Random Word. Random Words which are difficult to work with are most likely the ones that are well away from the well-trodden path between A and B in Figure 3, and hence most likely to result in new ideas well away from your normal thought patterns.

As noted above, some of the ideas generated may be directly applicable, while others may be more like concepts which need to be developed into more specific ideas. These concepts could become a "Focus" in subsequent Random Word exercises, to try to find specific creative ideas about how to implement the concepts. Having generated a series of specific ideas that show potential, it would then be necessary to subject them to critical appraisal and improvement to develop ideas that are capable of implementation. This appraisal process could well use the techniques of Six Hats Thinking, also developed by de Bono (1986).

USING PROVOCATION TO DELIBERATELY LEAVE THE MAINSTREAM

The Random Word technique outlined above uses a random process to get out of the mainstream thinking between A and B. Another way of leaving this mainstream thinking is to deliberately set up a provocative situation which is known to lie outside of the mainstream. This process has been named Po (for provocative operation) by de Bono (1972), and is a first step, followed by the process of "movement" in the generation of new ideas, as shown in Figure 7.

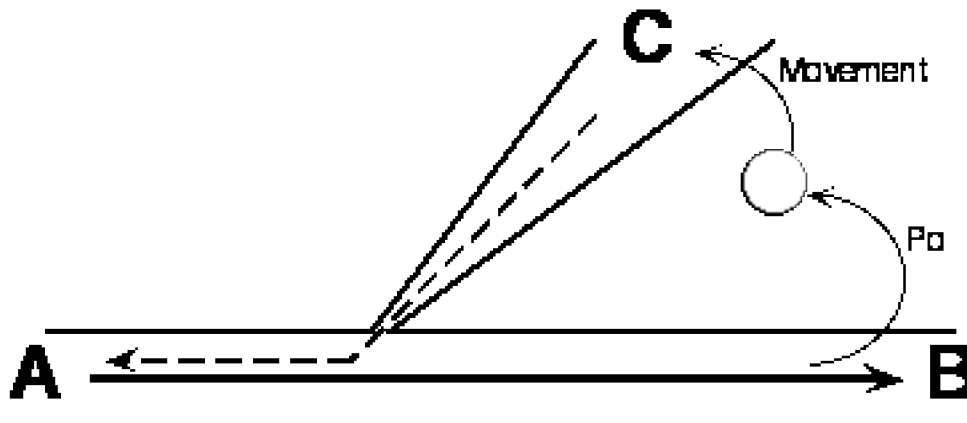


Figure 7 Using Provocation and Movement to find a New Idea

Unlike the Random Word starting point, which has no connection with the mainstream of thought between A and B, the Po process uses this mainstream to deliberately generate a starting position which is outside the mainstream, from which we can then work towards a new idea by the process of "movement". The first step in the Po process, therefore, after identifying the Focus of the thinking, is to establish something that is taken for granted about the Focus (i.e something that is part of the mainstream thinking on this topic). One then moves away from this mainstream thought by means of one of five different techniques:

Escape: with this provocation, we simply negate what we have taken for granted about the topic. For example, if the Focus is "Water Pollution", a taken-for-granted statement may be "water runs downhill". An Escape provocation would be "water does not run downhill". It doesn't matter that this statement looks to be impossible. Indeed, that is the whole point of a Po statement; it must be out of the mainstream of thought about the topic. The issue now is how we can move on from this Po statement to find some new ideas about Water Pollution, which is the Focus of our thinking in this example. Techniques of movement will be described later in this section.

Reversal: here, we take the opposite of the statement that we have taken for granted. Sometimes this can be done by taking the opposite of a key word in the statement, or simply by reversing the statement such that the subject of the sentence becomes the object and the object becomes the subject. For example, if the taken-for-granted statement is "water runs downhill", then possible Reversal provocations are "water runs uphill" (by taking the opposite of "downhill") or "hills run down water" (by reversing the subject and object of the sentence).

Exaggeration: if the thing that is taken for granted contains some numerical measurement or quantity, then we can often get a provocation by simply exaggerating (upward or downward) that measurement or quantity. For example, if the taken-for-granted statement is that "water runs downhill", an Exaggeration provocation might be that "water walks downhill" or that "water runs down many hills".

Distortion: if there is a time sequence or a relationship in the taken-for-granted statement, then we can often get powerful provocations by distorting that sequence

or relationship. For example, if the taken-for-granted statement is that "water runs downhill", a Distortion provocation might be that "the hill slides up underneath the water".

Wishful Thinking: in this case, we suggest a fantasy idea that we know cannot occur, and which is therefore definitely out of mainstream thinking. This is the only provocation where we don't need to specify a taken-for-granted statement in advance. We simply complete a statement of the form "Wouldn't it be nice if...". In the area of Water Pollution, such Wishful Thinking provocations might include "polluted water cleaned itself", "water polluters identified themselves and made a voluntary payment to clean up the pollution", or "it costs nothing to clean up water pollution", or "polluted water was worth more than clean water".

The purpose of provocation is not to generate new ideas immediately, but simply to get you out of the rut of mainstream thinking (as shown in Figure 7). The further it takes you away from the mainstream, the more powerful is the provocation. Therefore don't shy away from "crazy" provocations. The crazier the provocation, the more likely you are to generate a really new idea at the next stage of the process.

To use provocations to generate new ideas, we need the concept of "movement". Unfortunately, "movement" is not a natural mental operation for most people. When faced with ideas or statements, our natural tendency is to use the mental operation of "judgement". That is, we examine the statement and "judge" whether it makes sense, whether it is useful and so on. In creative thinking, we need to deliberately "suspend judgement" at this stage. This is what is traditionally done in "brainstorming" sessions. Participants are asked to "suspend judgement" while they and others propose ideas. However, this is not enough by itself. Suspending judgement does not tell us what to do with the ideas after they have all been proposed. This is where the process of movement is useful. Rather than examine the idea (the provocation) to see whether it is immediately useful, we use the provocation to "move on" to other ideas. We want to see where this provocation may lead us in the future. We use provocations much as we would use stepping stones to cross a river. We are not interested in whether the stepping stones are good in themselves; we simply want to use them to get to the other side of the river, where we might find greener pastures full of new ideas. To do this, a range of specific "movement" techniques have been devised.

Five major "movement" techniques exist for use in conjunction with the provocations derived by the methods described earlier:

Extract a Principle: this is similar to the "concept triangle" described earlier in this paper. You look at the provocation and try to extract an underlying principle or concept from the provocation. You then discard the provocation and work with the concept to identify new ideas related to the original focus. For example, if the provocation was "water does not run downhill", you might extract the concept of "stationary". You then concentrate on "stationary" and see how this might generate new ideas about "water pollution" (which was our original focus area). In doing so, you might generate an idea which is immediately useful (i.e. you have figuratively reached the other side of the river) or you might generate another provocation (you

have generated the next stepping stone). In using this movement technique, the trick is to concentrate fully on the extracted concept and forget about the provocation that gave rise to that concept. Clearly, however, more than one concept can be extracted from a provocation. For example, we could also have extracted the concepts of "zero gravity" or "flat ground" from the above provocation.

Focus on the Difference: here the provocation is compared with the existing situation, and the points of difference are highlighted and explored to see if they might lead to a useful new idea. Even if the differences are only small, they should be concentrated upon and explored rigorously. For example, if the provocation is "polluted water is worth more than clean water", you might ask yourself why clean water is usually more valuable than polluted water. From this you might identify the difference as depending upon what type of "pollution" is added to the water. Perhaps there are some additives that could actually increase the value of the water; for example, adding gold dust to water produces a very valuable gold slurry. Perhaps adding another pollutant could modify the original pollutant in a way that makes the overall mixture more valuable than either the original polluted water or even clean water. For example, adding hydrochloric acid to sodium hydroxide (both being highly corrosive pollutants) produces common salt and water. From this, you might consider the idea of deliberately mixing various pollutants in an attempt to develop useful and valuable "cocktails". At this stage, we have forgotten about the idea of "polluted water is worth more than clean water"; we have simply used that as a stepping stone to generate a range of other ideas.

Moment to Moment: in many situations, this is the most powerful of the movement techniques. Here, we imagine or simulate what might actually happen if we tried to implement the provocation as it stands. Along the way, we look for new ideas that are generated by the simulation. A very productive way of using this movement technique in a group is for one person to perform the simulation while others look for ideas suggested by the simulation. In this way, the performer can concentrate fully on acting out the situation, while the observers can concentrate fully on looking for new ideas. For example, if the provocation was "water walks downhill", the moment-to-moment simulation might see water walking downhill with deliberate steps. From this might come the idea of changing the profile of a stream into one that actually contains steps over which the water flows. At the bottom of each step, there may be a small holding basin that the water temporarily sits in before moving on to the next step. This series of holding basins provides an opportunity for sediments to settle out from the water and be extracted by a series of small pumps at the bottom of each holding basin. The water that flows over the next step is therefore slightly cleaner than the water that flowed over the previous step. Thus, as the polluted water walks downhill, it is cleaned up with every step.

Positive Aspects: this is a very simple technique that concentrates more directly on the provocation itself. Rather than thinking about where the provocation might lead, we look at the provocation and see whether there are any direct benefits or positive aspects of the provocation itself. For example, if the provocation was "water runs uphill", you might ask "what would be the value of that?". Possible answers include: if a factory has its clean water intake upstream of the factory and its polluted water

outflow downstream of the factory, then it would now be taking in its own polluted water and this would provide an internal incentive to clean up the outflow; water running uphill would prevent pollution from reaching international waters, thereby confining the pollutant to the country producing the pollutant; and water running uphill might mean that it could be used for other purposes such as generating electricity on the way uphill. Each of these "benefits" could then be examined to see whether they could be achieved by more practical means.

Special Circumstances: while provocations are generally crazy and unsuitable for implementation, there may be some special circumstances where the idea may have some immediate use (even though it may be impractical in general). For example, if the provocation was "water polluters identified themselves and made a voluntary payment to clean up the pollution", this could suggest a "polluters club" that polluters would be willing to join in order to buy and sell permits that enabled them to pollute at a price that was sufficient for someone else to clean up the pollution on their behalf.

While the above techniques are specific methods of developing "movement" from a provocation, there is also an important attitude that can be developed from the idea of movement. Thus, whenever confronted with an idea that seems a bit crazy or unworkable (whether it was meant as a provocation or not), stop and think about how you can "move on" from that idea rather than simply rejecting it as "crazy". Looking for "silver linings" rather than "clouds" can be an amazingly productive source of new ideas if a conscious effort is made to apply "movement" rather than "judgement" to ideas that occur regularly in our daily lives.

USING CREATIVE THINKING IN CONFLICT RESOLUTION

The methods of Lateral Thinking described above are just three of the possible ways of generating new ideas. In describing these methods, some simple examples have been used to illustrate the concepts and techniques. Specifically, though, where and when can Lateral Thinking be useful in conflict resolution?

Using Lateral Thinking in conflict resolution is somewhat different to using Lateral Thinking in the circumstances outlined above because of the multiple parties involved in conflict resolution. As shown in Figure 4, two parties may start at the same point (A) but in trying to find solutions to the problem identified at A, they may end up at two very different points (B and D). It is insufficient for each party to use Lateral Thinking independently to develop creative solutions, since their creative solutions may only be useful in solving the problem from their own point of view, as shown in Figure 8. For example, solution C1 may be totally satisfactory for solving the problem for one participant, while solution C2 may be totally satisfactory for solving the problem for the other participant. However, C1 does not solve the problem for the second participant, while C2 does not solve the problem for the first participant. What is needed is a solution that solves the problem from both perspectives, as shown in Figure 9.

Finding consistent creative solutions as shown in Figure 9 is not an automatic task. It is likely that the use of Lateral Thinking will often lead to inconsistent solutions as shown in Figure 8. However, the persistent use of Lateral Thinking to generate a range of alternative solutions will lead relatively quickly to a number of consistent solution possibilities. Importantly, the use of Lateral Thinking gives rise to the possibility of finding such solutions, where previously the options were limited to solutions such as B and D which lay within the initial "brainscapes" of the participants, but which excluded the creative solutions at C1, C2 and C.

It was stated earlier that "the parties themselves are in the worst position to see such solutions, since their involvement in the dispute has effectively polarised their view of the situation such that they can only see the situation from their point of view". The use of Lateral Thinking enables the participants to participate more effectively in finding solutions that will be to their mutual advantage. Unaided, the participants would quickly polarise to finding solutions such as those shown by B and D in Figure 9. However, using Lateral Thinking in a facilitated environment, they can now move beyond their own individual "brainscapes" and start searching for creative mutual solutions. If one or the other finds such a solution, it will not be immediately discarded by the other just because they didn't find it themselves. Rather each party must run the creative solution through their own "logic filter" to see whether it solves the problem from their point of view. If the solution is acceptable to both parties, then it can be considered to be an acceptable consistent solution.

The use of Lateral Thinking also enables the use of others not directly connected to the dispute to be used in the search for creative solutions. Many people working independently with Random Words or Po statements can quickly generate a wide range of possible solutions. These can then be evaluated by the parties to the dispute by running the solutions through their own "logic filters" to see whether it solves the problem from their point of view, thereby verifying whether they are acceptable consistent solutions.

CONCLUSION

This paper has outlined some of the basic characteristics of creative thinking, and has described three methods of Lateral Thinking proposed by Edward de Bono. The Concept Triangle has been shown to be useful in expanding the range and number of alternatives, given an initial idea about an area or problem. The Random Word technique has been described as a way of generating substantially new ideas, well removed from our conventional line of thought. The use of Provocation and Movement has also been described as another technique for generating creative new ideas. With each of these techniques, examples have been given to illustrate the concepts involved.

The methods have then been discussed in the context of dispute resolution, where it has been emphasised that the only useful creative ideas are those which solve the problem from the perspectives of all parties involved in the dispute. The techniques

of Lateral Thinking provide an effective way of generating consistent creative solutions.

REFERENCES

- de Bono, E. (1967). *The Use of Lateral Thinking*. Penguin Books: Middlesex, UK.
- de Bono, E. (1972). *Po: Beyond Yes and No*. Penguin Books: Middlesex, UK.
- de Bono, E. (1985). *Conflict: a better way to resolve them*. Penguin Books: Middlesex, UK.
- de Bono, E. (1986). *Six Thinking Hats*. Penguin Books: Middlesex, UK.
- de Bono, E. (1992). *Serious Creativity: using the power of lateral thinking to create new ideas*. HarperBusiness: New York.