

Dennis Cato
Pierrefonds Comprehensive High School
Pierrefonds, Quebec

Dr. de Bono's Mechanical Philosophy:

Commentary and critical questions

Abstract

The following paper attempts to show that de Bono's "mechanical philosophy," in rejecting those qualities of mind which are not reducible to the characteristics of a passive mechanical system, of necessity also rejects the very criteria in terms of which that system might be understood. The result is that de Bono's mechanical philosophy is self-contradictory and comes to stand as its own refutation. The paper also attempts to show that where de Bono's concept of "lateral thinking" is taken to be the practical expression of his mechanical philosophy, such lateral thinking is necessarily incoherent since the principles of the mechanical philosophy preclude rather than establish its exercise. On the other hand, where lateral thinking is not to be taken as the practical expression of the mechanical philosophy, its injunctions, being without theoretical foundation, are to be dismissed as trivial.

Introduction

If the brochure one receives at seminars on Edward de Bono's "CoRT Thinking Program" is to be credited, his concept of "lateral thinking" is taking the educational world by storm (1). The Program is proclaimed as a "revolutionary breakthrough in the art of thinking and learning," heralded as "the most widely used thinking program in the world (over six million students)." The benefits of the Program, so the brochure assures us, are hailed

"by children from the jungles of South America and by top executives of the Ford Motor company." "Teach your children to think," the brochure trumpets, "and you'll teach them to succeed."

But what, exactly, is involved in this revolutionary breakthrough in the art of thinking and learning? What is to be understood by de Bono's concept of "lateral thinking"? And what is the nature of that theory of knowledge of which such lateral thinking is the practical expression?

According to de Bono, lateral thinking "has to do with rearranging available information so that it is snapped out of the established pattern and forms a new and better pattern" (de Bono, 1969, p.229). This ability to rearrange available information is derived from de Bono's underlying theory of knowledge where he points out that, "Instead of the usual philosophizing as to what goes on in the mind, the system offers a mechanical philosophy" (p.30). In this mechanical philosophy the mind is seen as constituted by the mechanical operation of its neural units. For de Bono, "the brain is described as the mechanical behavior of mechanical units. It is the organization of these units that provides the mechanism of mind" (pp.7-8).

The following analysis of de Bono's mechanical philosophy attempts to establish two points, the first of which is self-contradiction. If de Bono adheres to his mechanical principles he will be unable to account for those non-mechanical qualities of mind by virtue of which those principles acquire what coherence they do possess and his mechanical philosophy, as a consequence, comes to stand as a refutation of the criteria it was designed to demonstrate. Of course, if de Bono does not adhere to his mechanical principles in the course of explicating his mechanical philosophy he avoids the charge of self-contradiction but does so at the expense of rejecting his own system as to what goes on in the mind. Secondly, where lateral thinking is taken to be the practical expression of the mechanical philosophy - indeed, what it is to think laterally can be identified only in terms of the mechanical philosophy - its exercise is necessarily incoherent since the principles of the mechanical philosophy preclude the very things which lateral thinking demands. In other words, if de Bono adheres to his mechanical philosophy, he will not be able to re-arrange available information so that it is snapped out of the established pattern and forms a new and better pattern. Of course, if de Bono does not take his lateral thinking to be the practical expression of the mechanical philosophy, its exercise, lacking theoretical foundation, will be idiosyncratic and trivial.

By way of establishing these points, de Bono's mechanical philosophy will be considered under the following headings: (1) the nature of the "special memory surface"; (2) the epistemological premises of the mechanical philosophy; (3) the functioning of the

special memory surface; and (4) the concept of lateral thinking as an outcome of the mechanical philosophy.

The special memory surface

The organization of the mechanical units that provides the mechanism of mind is embodied in de Bono's "special memory surface", that which allows incoming information to organize itself by being processed by information patterns already established on the surface. "Old patterns can actually determine how the new ones are received," de Bono points out.

This can mean that new information may only be received in terms of the old patterns. It is not the surface itself which is processing the incoming information but the previous patterns which have themselves altered the surface. It is the memory of previous patterns that processes the new ones. (de Bono, 1969, p.60)

In this scheme of prior pattern determinism the crucial feature of the special memory surface is that of its passivity, the fact that it does not process the incoming information but merely provides the conditions for previous patterns to process new ones. "The essential feature of the special memory surface," de Bono maintains, "is that it is a passive system which provides an opportunity for information to organize itself" (p.274). It is this characteristic of passivity which bestows on the special memory surface in particular and on de Bono's philosophy in general their mechanical quality, a quality he illustrates in a series of models. The "polyethylene and pins" model, for example, shows how hot water (new information patterns) poured over a polyethylene sheet suspended on pins will distribute itself into patterns conforming to those left by previous pourings (old information patterns). "The interesting thing," de Bono notes, "is that the memory surface does not actually do anything. It is quite passive" (p.59).

The quality of passivity determines the other characteristics of the surface. Thinking, for example, is a passive exercise, being nothing more than "a flow of activation across a passive memory surface, not an active stringing together of items from a memory store" (p.102). Further, there is no "thinker", no autonomous self who does the thinking. "The important point is that there is no separate agent which picks information out of the environment, stores it on the memory surface, then picks it off the surface in order to play around with it or use it" (p.274).

The difficulty, however, that immediately crops up in connection with theories such as de Bono's is obvious. How does he know all these things? If, like the rest of us, de Bono is himself possessed only of a passive special memory surface, how

is he able, in the absence of an actively conscious self who transcends the processing of incoming information by established patterns, to reflect on his flow of activation and report his findings in his theory of the special memory surface? If thought is a mechanical activity in which information organizes itself into patterns on our passive surfaces, could it be that the principle of such organization lies in the source of that information, in an environment which is meaningful independently of our knowledge of it? But to say this is to merely drive the question of the sources of de Bono's knowledge one step further, for, in order to know of such an independently meaningful environment consisting of an infinite range of information patterns there must be some further information pattern of which he is in possession and which has revealed to him that these external patterns are, in fact, independently meaningful. This is the only way de Bono is able to recognize the very existence of such patterns which, by definition, are both prior to and independent of his awareness of them. Put simply, de Bono must be in possession of some special access to reality-in-itself. As it happens, this is precisely what de Bono does claim.

Epistemological premises of the mechanical philosophy

What is to be understood when de Bono uses words to describe the mechanism of mind is that such use is sanctioned, on the one hand, by an unmediated knowledge of reality-in-itself, and on the other by the dispensation of a "special universe", one which is so different from our own that one plus one may well equal only one. When de Bono uses words, for example, such use is to be sharply distinguished from, say, that of an academic sitting in his academic tower. The reason for this is that:

...an academic sitting in an academic tower never need descend to examine the vagueness of the real world where complete data are impossible. Instead he examines the semantic consistency of the argument, the words themselves rather than the thoughts the words so imperfectly convey. (de Bono, 1978, p.38)

When de Bono descends to examine the vagueness of the real world where complete data are impossible, what he finds are his models of the mechanism of mind, things like the polyethylene and pins model and so on, and when he describes these models what his words do is to simply and impartially account for their functioning. Unlike the academic sitting in his academic tower whose words merely examine the semantic consistency of the argument, de Bono's words function as bare descriptions of reality-in-itself. When he sets up his models of the mechanism of mind, for example, what he does is merely watch "what happens when various processes and relationships are put together."

There is no question of words chasing other words, creating and justifying each other in an endlessly circular fashion. Words are only used to describe the behavior of the model and this is independent of the words used. (de Bono, 1969, p.33-34)

The picture is that of two parallel tracks, the one representing reality and the other language. Where the academic's words merely chase each other about on the language track, de Bono's words make that transcendental leap over to the reality track where they then come to function as the objective description of such reality, a description of that which is independent of the words used to describe it. de Bono's words, in other words, merely hold up a mirror to reality-in-itself.

The difficulty with all of this, of course, is the same as it was in the case of de Bono's knowledge of the existence of the passive special memory surface. How does he know that his words as descriptions of his working models do, and the words of the academic sitting in his academic tower do not, make contact with reality-in-itself? Could it be that de Bono enjoys privileged access to that "special universe", the one where one plus one may well equal only one?

The thing about de Bono's special universe is that what happens there,

....need not parallel what happens in the physical universe or even in the universe we know. Nor need the processes be the processes we take for granted as the only possible ones because we have grown up with them. It is possible to have a universe in which one plus one equals one and not two. (de Bono, 1969, p.56)

Undoubtedly, it is from this universe that de Bono speaks when, in respect to his memory surface, he reveals that, "The special universe of the surface leads to totally different behavior which can only be understood in terms of that universe" (p.125).

Since the behaviour of the special memory surface can be understood only in terms of that special universe to which de Bono has access, such behaviour, of course, must remain forever veiled from the eyes of the academic sitting in his academic tower. However, could the academic be blamed for protesting that de Bono has offered absolutely nothing beyond his simple stipulation for his claim that his words make exclusive contact with reality-in-itself? Could he be blamed for protesting that de Bono has offered absolutely nothing beyond his simple say-so that his special universe exists anywhere else than in his imagination? Could he be blamed for protesting that de Bono's appeal to a special universe, in which meaning as understood in the universe

that we (and de Bono) know does not exist is to come to serve as the sanction for meaning in the universe that we (and de Bono) have grown up in, is not to strike a blow for breadth of thought but is rather to engage in fantasy?

The functioning of the special memory surface

We have learned, so far, that the distinguishing feature of the special memory surface was its passivity. There was to be no agency associated with its behaviour, whether in the sense of one who initiated and directed thought, or in the sense of one who could transcend the contents of the surface and reflect upon them. In de Bono's determinism of prior patterns, new information was to be received only in terms of the old, established patterns. Can de Bono adhere to his mechanical principles in explaining the functioning of the special memory surface, or does such explanation come to stand as a refutation of the mechanical principles it was designed to demonstrate?

Brevity dictates limiting discussion of the memory surface to its three distinguishing features. These are (a) the "limited attention span", (b) the "short-term memory", and (c) the "internal patterns".

The limited attention span

Where it is not the memory surface itself which processes incoming information but the previous patterns which have themselves altered the surface, what, exactly, is involved in such processing? What do the established patterns do to the incoming information?

"When a large pattern is put onto the surface," de Bono explains,

....only a small part of the pattern is retained. The rest is simply ignored. The area of activation of the memory surface is strictly limited and cannot exceed this size. This limited area settles on the most easily activated part of the surface and this just means the part that has been used most frequently.... A limited attention span means that something is left out, but it also means that something is actively selected. It is this selection process, this ability to select, that is so important. Selection means preference and choice instead of total acceptance of all that is offered. It is this selection which is so often assumed to be impossible in a passive system. (de Bono, 1969, pp.84-85)

Semantic, conceptual, and functional difficulties can be seen to attach to de Bono's limited attention span. Initially, one can only wonder **why** there is no good reason to assume that this selection is impossible in a passive system, particularly in view of the fact that de Bono offers no reasons to assume it **is** possible. One can only wonder how, in particular, can the memory surface actively select something, can exercise preference and choice instead of totally accepting all that is offered yet, at the same time, be seen as a passive system which does not actually do anything. It can only be that de Bono's words, here "active" and "passive", have made contact with that special universe where what happens need not parallel what happens in the physical universe or even in the universe we know.

Conceptual confusion surrounds what is to count as a "large pattern." Does it correspond, say, to a dogbone lying on a carpet where the dog ignores the carpet-pattern and retains the bone-pattern since the area of activation on the dog's memory surface is strictly limited and cannot exceed bone-pattern size? Or does a large pattern mean something like de Bono's awareness of the fact that when a large pattern is put onto his surface only a small part is retained? The point, of course, is that de Bono, like all mechanists, tacitly invokes non-mechanical concepts to bestow meaning on his mechanical terms. Here the concept of "pattern size", one which is strictly meaningless in mechanical terms, is invoked to lend the semblance of intelligibility to his notion of "limited attention span", but, since derivative concepts share the attributes of their exemplars, both must be relegated to the realm of incoherence.(2)

Finally, functional confusion beclouds what is actually happening on the memory surface. For if "the area of activation of the memory surface" is strictly limited, what sense is there to the view that this limited area of activation then "settles on the most easily activated part of the surface," since the most easily activated part of the surface happens to be **identical** with the area of activation of the memory surface. The area of activation, in other words, must settle on itself. While the area of activation is settling on the most easily activated part of the surface, what has happened to that small part of the large pattern which was retained? By some process of transubstantiation intelligible only in the special universe, has it, perhaps, become transformed into the area of activation which then settles on the most easily activated part of the memory surface? And, of course, just what has all this to do with establishing how the limited attention span serves as a mechanism of selection in a passive system?

De Bono's attempt to secure the passive nature of the special memory surface's selection process by reference to spatial criteria, i.e., the limited attention span, has not met with success.

It is now time to attempt to secure it by reference to temporal criteria, i.e., the "short-term memory".

The short-term memory

Where the limited attention span consisted of a restricted area of attention determined by the established patterns on the special memory surface leading to active selection and discrimination, it is the short-term memory, consisting of those patterns just presented to the surface, which leads to active combination of those patterns. The short-term memory has considerable significance for education since, according to de Bono, "The combining property leads to association and learning" (p.90). While de Bono observes that: "The whole tendency of the special memory surface is to establish separate patterns and to go on reinforcing that separateness" (p.90), the short-term memory over-rides that tendency by means of alternating attention between two recent patterns presented in sequence.

If the patterns occur in sequence so that attention moves from one pattern to the other and back again, then the short-term memory properties of the surface may combine them into a single pattern. From the alternation of the two patterns may emerge a third pattern which combines them both. This combining property of the special memory surface ultimately depends on the necessity of the activated area to be single and coherent. (p.90)

Semantic difficulties in connection with the short-term memory do not revolve around the simple meaning of words as with the limited attention span but rather appear in the form of de Bono's rendering the combining properties of the special memory surface analytical with the attributes he inscribed in the concepts in terms of which such properties are to be understood. In other words, the function of the short-term memory is to combine patterns occurring in sequence into a single pattern provided that the activated area on the special memory surface is single and coherent. But to be "in sequence", to be "single" and "coherent" is what it **means** to be combined. Explanation, however, requires more than analytical presupposition.

Conceptual difficulties arise in connection with the sharp distinction some behaviourists make between their own and other's mental processes. With his short-term memory he attributes to others a process of learning in the form of some simple associationism, but his own claim to knowledge of that short-term memory, of course, is inexplicable in terms of de Bono's alternating his attention from one pattern to another and back again.

Functionally, the principles of the mechanical philosophy rule out the short-term memory alternating recent patterns occurring in sequence since prior-pattern determinism requires information to be received only in terms of old, established patterns, that is, in terms of the long-term memory. In addition, de Bono is silent as to just **why** the short-term memory combines patterns occurring in sequence. In the absence of that separate agent, there appears to be no particular reason to do so.

Of course, that separate agent who picks information out of the environment, stores it on the memory surface, then picks it off in order to play around with it or use it, is inscribed but unacknowledged in de Bono's account of the short-term memory. For, in order that two patterns may be perceived **as being** in sequence such that attention may move from one to the other in order **to establish** those similarities in terms of which a third pattern which combines them both may emerge, there has to be that separate agent who performs the operation. In his absence the whole performance of the short-term memory is incoherent. Where previously de Bono tacitly invoked that separate agent to bestow intelligibility on the selection of the limited attention span, it is now only by covertly appealing to that separate agent which the mechanical philosophy rejects, that short-term memory acquires some coherence.

The internal patterns

To resolve the contradiction contained in the view that, according to the mechanical philosophy, there is no separate agent who picks information out of the environment, stores it on the memory surface, then picks it off the surface in order to play around with it or use it, on the one hand, and on the other, according to the limited attention span and the short-term memory, the special memory surface actively selects some features from the environment and ignores others as well as combines patterns occurring in sequence so that a new pattern may emerge, de Bono re-defines what is to be understood by the "self". While he admits that the special memory surface "behaves as if it had a self" (p.120), and, indeed, "This self has a unity of consciousness" (p.120), what must be understood is that: "In spite of having a self the special memory surface has no trace of selfishness.... In the eyes of the special memory surface all features of the environment are equally desirable and there is total impartiality in dealing with them" (p.120). But why does the limited attention span select some features from the environment and ignore others? Does the short-term memory combine all patterns which are presented to it in sequence? To engage these perplexities, de Bono introduces his "internal patterns".

The internal patterns, for de Bono, are to be taken as being,

....the things usually examined under the headings of emotion, mood, motivation, drive. By internal pattern is simply meant some effect on the memory surface that is over and above the pattern left by information coming in from the environment. (p.206)

This "some effect" on the memory surface over and above the pattern left by information coming in from the environment shortly comes to constitute "the only contribution which the memory surface makes to these information patterns" (p.272). In turn, this "contribution" soon comes to "intrude on the memory surface and help(s) direct attention. Instead of the external information being left to self-organize on its own there is now an additional influence which picks out some things rather than others" (p.123). Further still, this "additional influence" comes to assume mastery over the special memory surface. "The only important point about these internal patterns", de Bono observes, "is that they dominate the memory surface" (p.206). Finally, we find that the internal patterns,

....provide the substance of self and individuality. Without the emotional aspect exactly identical information patterns would be formed on memory surfaces which had a similar exposure to information. On account of emotional variability these patterns may be very different. (de Bono, 1969, 1972) (3)

De Bono's introduction of his internal patterns to account for individual variability which was inexplicable in terms of the limited attention span and short-term memory has been costly. It has resulted in the collapse of his entire mechanical philosophy. It was the distinguishing feature of the special memory surface - itself the distinguishing feature of the mechanical philosophy - that it was a passive system which did not actually do anything. But we find that its contributions come to dominate the surface. Since the internal patterns are over and above the patterns left by information coming in from the environment, de Bono's scheme of prior-pattern determinism breaks down. The things usually examined under the headings of emotion, mood, motivation and drive which are over and above the pattern left by information coming in from the environment overturns the view of mind as the mechanical behaviour of mechanical units. Thinking ceases to be a mechanical flow of activation across a passive memory surface. Finally, if the internal patterns provide the substance of self and individuality without which incoming information patterns would be identical for those having similar exposure, then there appears to be no distinction between such internal patterns and that separate agent ruled out by the mechanical philosophy, the one who picked information out of the environment, stored it on the memory surface, then picked it off the surface in order to

play around with it or use it. With his internal patterns, de Bono purchased the beginnings of coherence as to what goes on in the mind, but he did so at the cost of surrendering the principles of his mechanical philosophy.

Lateral thinking

"To realize that a dominant idea can be an obstacle instead of a convenience," de Bono points out, "is the first principle of lateral thinking" (Harmondsworth, 1972, p.29).(4) As its name implies, lateral thinking aims at going beyond sequential or what de Bono calls "vertical" thinking.

Lateral thinking is a generative process. Instead of waiting for the environment to change established patterns these are deliberately disrupted in various ways so that the information can come together in new ways. If any of these new ways are useful they can be selected out by any of the selecting processes. (de Bono, 1969, p.229)

The deliberate disruption of established patterns is effected by the use of "PO." This is de Bono's "new word". It is intended to signify neither acceptance nor rejection of a proposition but rather a temporary suspension of judgement. "The whole purpose of PO," de Bono explains, "is to provide a temporary escape from the discrete and ordered stability of language which reflects the fixed patterns of a self-organizing memory system" (p.259). Information can come together in new ways during this temporary escape by means of selecting processes embodied in CoRT techniques such as PMI (Plus, Minus, Interesting), CAF (Consider All Factors), and OPV (Other People's Viewpoints).

The difficulty, however, with de Bono's concept of lateral thinking is that, far from being supported by his mechanical philosophy from which it might seek to derive theoretical coherence, the deliberate disruption of established patterns is precluded by that philosophy. In order to realize that a dominant idea can be an obstacle instead of a convenience some further pattern or perspective is required to ground that realization. But in the mechanical philosophy, there is no further pattern or perspective, for the dominant idea is dominant by virtue of its domination of the memory surface. That is what constitutes a dominant idea. Oddly, this dilemma is explicitly recognized by de Bono.

The errors, faults and limitations of information processing on the special memory surface are inescapable because they follow from the nature of the organization of the surface.... Nor can the faults be eliminated by deliberate avoidance since the system is

a passive one. Nor is the recognition of the faults as they occur possible because this implies an alternative pattern for comparison. (p.210)

For the smooth functioning of lateral thinking, the mechanical philosophy has now become an obstacle rather than a convenience. Not only are errors, faults, and limitations inescapable and cannot be avoided by deliberate effort, they cannot even be recognized as being errors, faults, and limitations. One cannot satisfy the first principle of lateral thinking since one cannot even realize that a dominant idea has become an obstacle rather than a convenience. How, then, can established patterns be deliberately disrupted so that information can come together in new ways and how can any of these new ways be selected out if they are found useful? Who is it who will rectify these errors, faults, and limitations of information processing on our special memory surfaces? As a matter of fact, de Bono will.

The only form of compensation for the faults is an awareness that they are inevitably followed wherever possible by techniques of using the surface that minimize the faults. Such techniques are then fed into the surface as organizing patterns that can possibly influence information processing. (de Bono, 1969, p.210) (5)

It is de Bono, after all, who not only has recognized our faults, errors, and limitations, but who is also aware that they are to be followed wherever possible by his techniques to minimize them, techniques such as "PO", "PMI", and so on, which he will feed into our surfaces as organizing patterns that can possibly influence our information processing. It is de Bono, after all, who excuses himself from the injunctions of his own mechanical philosophy - he **is** able to recognize his errors, faults, and limitations as they occur; his errors, faults, and limitations **are** escapable; his errors, faults, and limitations **can** be eliminated by deliberate avoidance. It is de Bono, after all, who continues to make his somewhat behaviouristic distinctions between his and others' mental processes, distinctions which he fails to support in terms of his own behaviourist criteria. For, if one wonders just how it is that de Bono can exempt himself from the principles of his own mechanical philosophy, the one which w3s to replace the usual philosophizing as to what goes on in the mind, de Bono can only remind us that he alone enjoys access to that special universe where what happens need not parallel what happens in the physical universe or even in the universe we know, a universe where one plus one may well equal only one.

Conclusion

I have attempted to show that de Bono's mechanical philosophy suffers from self-contradiction, that his explanation of his philosophy tacitly appeals to criteria which he explicitly rejects. I have also attempted to show that his concept of "lateral thinking" is incoherent since the principles of the mechanical philosophy preclude rather than establish its exercise. It is suggested, in view of these things, that the claim that lateral thinking constitutes a revolutionary breakthrough in the art of thinking and learning be given re-consideration.

NOTES

1. The initials "CoRT" stand for "Cognitive Research Trust". The "o" is added for purposes of pronunciation.
2. Where de Bono's concept of the "limited attention span" is meaningless in terms of its relationship to "incoming information", his notion of "area of activation" is internally incoherent. This area of activation involves "a single, coherent and limited area of illumination which moves about the surface according to what has happened in the past and what is happening at the moment" (p.83). The reason why this area of illumination is moving is because of the "tiring factor", which means that: "If there is a row of units with decreasing thresholds so that the threshold of each is less than that of the preceding unit, then activation will flow along the whole row without any pause" (p.101). However, since incoming information activated the most easily excited unit of the special memory surface, i.e., that with the **lowest** threshold, the single, coherent and limited area of illumination will **not** move about the surface according to what has happened in the past and what is happening at the moment. To say nothing about the ontological status of this moving area of illumination and its relationship to the rejected notion of the separate agent, its connection with the ability of the special memory surface to select on the basis of preference is obscure.
3. The derivation of the internal patterns is inconsistent with the notion of area of activation. de Bono maintains that the patterns emerge as a result of a "mismatch", where "a pattern of activation (which) tends to try to develop in two different directions at the same time. This unstable state could well give rise to an internal pattern such as fear or tension" (p.218). Since, however, patterns of activation are single, limited and coherent, it is not clear what it would mean for one to try to develop in two different directions at the same time. Again, in the absence of that separate

agent, it is not clear just how the mismatch could be perceived as being a mismatch.

4. The other principles of lateral thinking, "different ways of looking at things," the principle that "vertical thinking by its nature is not only ineffective in generating new ideas but positively inhibiting," and, finally, "the use of chance in the generation of new ideas," are either synonymous with or follow from the first principle.
5. When de Bono feeds his techniques into the memory surface what happens is called the "insight phenomenon". By way of describing the insight phenomenon de Bono employs his "D-line" diagrams, where "D-lines" are to be understood as depicting the flow of activation across the memory surface. Where X and Y are two entry points into the insight D-line diagram, de Bono explains that: Depending on what the previous patterns were, the flow might lead into the pattern shown at either X or Y. The usual entry point would be X, but if one day, because one had been thinking of something quite different, the entry point was to be Y, then the flash of insight would occur (p.164).

What de Bono is saying reduces to the claim that there is a pattern called the "insight pattern" - it is what the pattern would look like if insight were taking place - and there is an entry point to the insight pattern called the "insight entry point". If the insight pattern is entered by the insight entry point then insight occurs but if the insight pattern is not entered by the insight entry point then insight does not occur, since that is what the "insight entry point" means.

REFERENCES

- de Bono, Edward. (1969). *The mechanism of mind*. New York: Simon and Schuster.
 de Bono, Edward. (1972). *The use of lateral thinking*. Harmondsworth: Penguin.
 de Bono, Edward. (1978). *Teaching thinking*. London: Temple Smith.