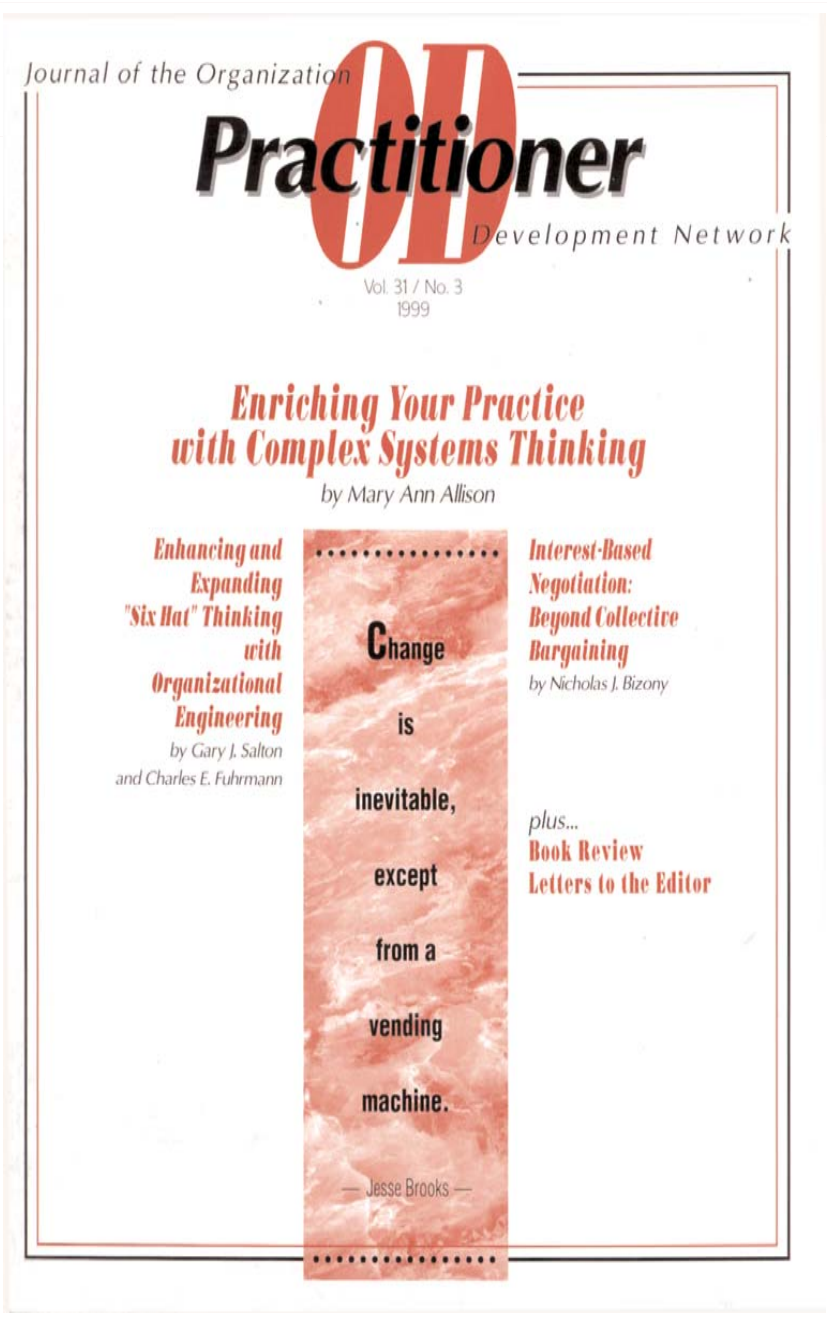


Enhancing and Expanding "Six Hat" Thinking with Organizational Engineering

By: Gary J. Salton, Ph.D. and Charles E. Fuhrmann

Dr. Edward De Bono is generally regarded as the leading world authority in the field of creative thinking. His groundbreaking work, "The Mechanism of Mind", showed how the nerve networks in the brain form asymmetric patterns, which the mind uses to become a self-organizing system.1 Applying his research to the study of human thinking and creativity, Dr. De Bono published his influential "Six Thinking Hats", which outlining a way of approaching "thinking" that improves both clarity of thought and creativity.2 This paradigm has been adopted by many corporations, governments and schools.

This article shows how Dr. De Bono's work, which is focused exclusively on human thought processes, can be integrated with the work of Dr. Gary Salton to show how these two theories together can be used to mutually enhance each other. It also previews a model of thinking and creativity that organization consultants can use to significantly improve the performance of their clients. Together, these theories offer a way of thinking about organizational problem solving and decision making that is both strikingly original and remarkably easy to use.

De BONO'S SIX THINKING HATS

Dr. De Bono divides human thought into six specific processes. Each process lays a distinct role and De Bono develops script-based rules that show how these roles are to be played. De Bono calls these processes "hats" to convey the idea that they can be put on or removed at will. Further, he assigns these hats a color to convey the general nature of the role assigned. The six "hats," corresponding to De Bono's six types of thinking, are shown in Figure 1.

Dr. De Bono uses the ideas of role and role playing to move thinking toward maximum productivity. The roles are designed to be blatantly artificial, a feature which helps the individual separate their individual

Figure 1
-- DeBONO'S SIX THINKING HATS --

White Hat:	Data and information considered objectively and without connotative judgment.
Red Hat:	Feelings, hunches and intuition are allowed introduction in a manner that legitimizes them and allows their expression.
Black Hat:	Logical negative embracing the province of judgement and caution and focused on risk exposures.
Yellow Hat:	Logical positive focused on feasibility and benefits often accompanied by optimism and focused on opportunity.
Green Hat:	New ideas and creative thinking focused on moving ideas forward by generating options and alternatives.
Blue Hat:	Control of the process focused on step-by-step processes necessary to reach a successful conclusion.

ego from the activity they have undertaken. In other words, the artificiality De Bono provides makes it clear to all that having these hats is "play acting" and not necessarily the unrestrained opinion of the individual. In addition, the artificiality of the roles helps to emphasize the separation of the various roles that are executed in the thinking process. This minimizes the confusion, facilitates coordination and provides a definitive focus for the process.

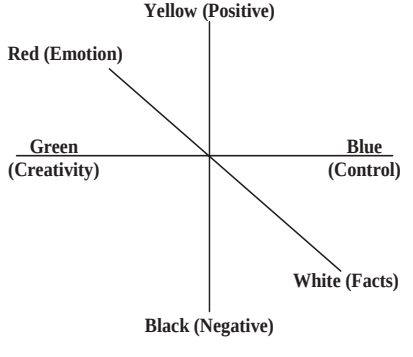
FIGURE 2
--PAIRS OF ROLE (HAT) CATEGORIES--

Role (Hat)	Function
White Hat and Red Hat	Objective-Emotion
Black Hat and Yellow Hat	Negative-Positive
Green Hat and Blue Hat	Creativity-Control

De Bono suggests that his six hats be thought of in pairs (see Figure 2), with each hat existing as the opposite. Looked at this way, De Bono's paradigm can be seen as encompassing three catagories. Graphically, the pairs can be depicted as forming a radial (see Diagram 1). This representation will be used later to show how the De Bono model integrates with the concepts of Organizational Engineering.

Dr. De Bono asserts that fully exploring most tough problems usually requires the use of all six hats. There is no particular sequence within which these roles or hats are engaged. This is determined by the situation.

-Diagram 1-

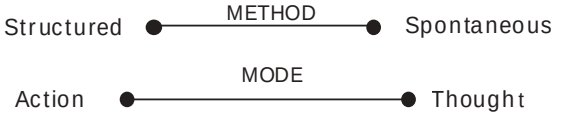


De Bono's model was an important step forward in terms of understanding human thinking and De Bono's six hats were excellent thinking aids. From the perspective of its application in organized environments, the main benefit of this model is as a device for coordinating the efforts of groups of people working on a common problem. This is also the realm of OE, to which we now turn.

ORGANIZATIONAL ENGINEERING

Organizational Engineering was introduced in 1996, Dr. Salton's work showed how human beings come to adopt the information processing and decision-making patterns that they use to navigate life. For this, Dr. Salton uses an information processing model - i.e., input goes to process which goes to output. But he greatly extends previous models by identifying how people's information processing patterns fall into two categories. One category describes the method used to approach decision issues, the other category describes the mode used to move these decisions into action.

-Diagram 2-



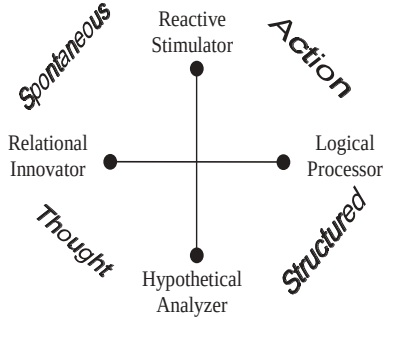
The first dimension - which, in fact, is a continuum - Salton calls the "method" dimension. This dimension addresses the ways in which people absorb and process information in order to assess issues. At the left end of this continuum, Salton sees a structured assessment methodology. People who employ this approach use a predefined, very structured approach for processing information. They organize their approach, and though specific styles may vary slightly, they all use predefined methods, which are characterized by attention to detail and a methodical pace. At the other end of the continuum, people employ a "spontaneous" strategy, one that targets a "satisfying" response. People at this end typically use a method that ignores detail and is characterized by speed. Thus the two "methods" are polar opposites.

The "mode" dimension depicts the ways people use the information they've processed. It also is a continuum, which has a preference for action housed at the left end of the continuum and a preference for thought at the right. "Mode" describes a person's preferred response to the information they've processed. It essentially describes the process a person uses to "digest" information, since the styles it produces give the process direction. A process targeted at creating a new concept (the "thought" mode) can be expected to differ strongly from a process targeted at immediately and directly using the information absorbed to influence the outside world (the action mode).

Dr. Salton's research shows that the two "natural" styles found at the extremes of the method and mode continua form four "styles" that, when looked at holistically, describe an individual's decision/action preferences. Specifically, the integration of method and mode creates four "archetypes" (see Diagram 3):

1. **Reactive Stimulator (RS)**: This strategic posture uses a spontaneous method and action mode. Input needs are minimal, processing is fast, and output is focused on action directly affecting the external world.
2. **Logical Processor (LP)**: This posture uses a structured method and an action mode. Input needs are detailed and large. Processing is typically measured, since much needs to be processed. Output is focused on action directly affecting the external world.

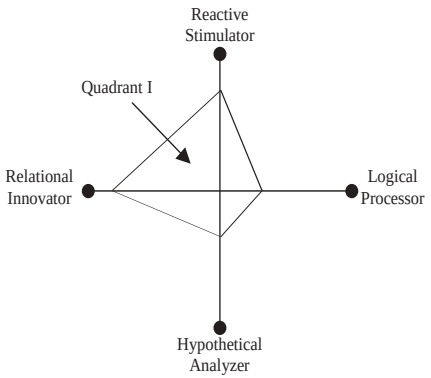
-Diagram 3-



3. **Hypothetical Analyzer (HA)**: People using this strategy employ a structured method and a thought mode. Information needs are substantial. Processing is typically slow since contingencies must be identified, consequences assessed and reaction plans structured. Output is focused on thought, since the exter nal world will not be effected until the plans they create are executed or the judgments finalized.
4. **Relational Innovator (RI)**: This strategy uses a spontaneous method and a thought mode. Information needs are minimal and typically disjointed. Processing is rapid as bits of information are quickly strung together. Output is focused on thought since the typical response is an idea in relatively pure form.

In reality, these types are not mutually exclusive; people can be, and usually are, combinations of all four types. These combinations can be depicted by a "profile" that connects the relative strength on each dimension with strength on another as shown in Diagram 4.

-Diagram 4-



Unlike De Bono's work, which is focused on thinking processes, Salton's work is focused on the information processing styles people use to decide and act. The OE model is focused on how decision styles are likely to be "expressed" when an individual is dealing with something. For example, with all else equal, an individual who prefers using a style that demands detail (e.g., Hypothetical Analyzer) would be slower to act than one who prefers a style that avoids detail (e.g., Reactive Stimulator). The Hypothetical Analyzer would simply want to have more information to process and this would require time. The other information processing options carry similar behavioral consequences that simply "fall out" of the information processing strategy of the individual.

ORGANIZATIONAL ENGINEERING AND THE SIX HAT MODEL

At their foundations, De Bono's model of thinking and Salton's model of decision/action share the same geneses. In De Bono's model, the human brain makes sense of the world by building up patterns based on experience. In his model, the human brain is saturated with perceptions and makes "sense" out of them by forming stronger neural connections as patterns repeat. The greater the repetition of a pattern, the stronger the neural connection. Subsequent stimuli are channeled into these patterns and begin to form interrelated conceptual channels - "like falling rainwater collected in contours set by previous downpours."3 Thus, Dr. De Bono's six hats, in reality, are six broad neural channels, six primary contours in the human mind.

OE starts at a different, but entirely compatible place. Salton's model starts with the self-evident fact that all behaviors begin with a decision. That decision can be reached by using structured or spontaneous unpatterned methods. Once a decision is made, the outcome of this decision can be "converted" into either action or thought (see Diagram 2). A stable profile is established by the frequency with which a persons elects a method and mode while in interaction with the environment. In other words, just as De Bono's stimuli form "contours", Salton's styles (i.e., neural channels) are built by the repeated success of a strategy in a particular environment.

In both the six hat's model and the OE paradigm, people can change. The most obvious place people's hat preferences are changed is in school. The goal of education is to create specific hats for collecting and organizing experience. Kids who don't naturally start out with the "right" hat are soon taught the requisite skills. In Salton's case, it is repeated exposure to an environment favoring one or another strategic style that creates greater skill levels and an increased probability of application in the first place. For example, military training repeatedly emphasizes the value of precise execution of rules and preprogrammed sequences. Most recruits come to see the value of and pleasure in the structured action posture being promulgated. Or they don't last very long.

While both models admit change, both contend that a basic change is not easy. It takes many years to contour the human mind. Complete reformation of the strategic paradigm can happen sooner but is still very sticky. Even a 12-week basic training course (24 hours a day, 7 days a week under constant supervision) will not change a person's entire structure. It just enhances one element of it. A complete change will usually require at least two years of repeated exposures. In both theories, the ability to alter a style is beyond the resources and patience of most organized environments.

Both paradigms recognize that thinking and behavior usually takes place in organized settings of one sort or another. In this context, De Bono's model is prescriptive. It tells people what to do to get a better result. It defines specific roles that, when enabled, "call out" specific types of thinking. This prescription, when used, helps prevent people from electing to simultaneously use different "contours" that cancel each other out (e.g., the opposites in Diagram 1 like Red Hat and Black Hat).

In this regard, the OE paradigm rests on a bit deeper foundation. It is descriptive and diagnostic rather than prescriptive, describing what behavioral posture people are likely to take when addressing a new situation. As in De Bono's model, OE believes people have access to all of the postures and, in any given instance, you cannot say that the person will choose one over another. However, within a group, you can be reasonably certain that the OE style with the strongest representation will be most often witnessed. This insight allows the Organizational Engineer to construct groups that have predefined characteristic responses.

The two models are the same in other ways. For example, the individual who has established a particular thinking "contour" will tend to believe that he or she has the "right" way of viewing things. Since all thought "contours" work, at least to some degree, the individual will always receive a degree of positive feed-

back confirming the accuracy of his/her judgement. The same comment applies to OE's strategic profiles. There is not a right or wrong strategic style. They all work. While some are more suited to particular situations than others, the environment does not necessarily declare this advantage in a definitive way.

The reason that a particular choice is either model may not be ideal is the same in both cases. It concerns what Dr. De Bono calls "reactive thinking." Basically, this is the kind of thinking involved when a person simply reacts to a situation without consciously thinking about what style or hat the situation calls for. De Bono and Salton contrasts this with "mapmaking" which is where people exploring a subject specifically decide on the thinking hats that will yeild the "best" results. In other words, both models see the human as creating a favored pattern almost accidentally. The degree that this is true is the degree to which thought and planning (about which style might yeild the best results) ought to be used. In De Bono's case, the improvement is realized through directly selecting the right "thinking hats." In Salton's case, the improvement is realized by orchestrating the makeup of a group's strategic style.

Both models rest on equally firm foundations. De Bono's rests on the natural organization of the brain, Salton's rests on self-evident decision parameters that must be used by any human being while making a decision.

Both models also describe patterns that have been established over time. Unlike most psychological models, both De Bono and Salton admit change and explicitly show how it can be accomplished. However, both also show that any "chosen" pattern is relatively stable and can be depended upon to remain constant over reasonable periods. Thus, both models show the human vulnerability of getting "stuck" using one particular technique and assuming that this is best for all cases. Both models also show that there are thinking/action alternatives that might be better suited to particular situations. Both models can demonstrate that consistently using any one hat or style in a given situation is likely to yield suboptimal results over any series of transactions.

The two models were designed to address different issues. De Bono is concerned with the quality of personal thought. Salton is focused on visible behaviors exhibited both by and within groups. These two works were developed independently, but the degree of similarity is not surprising. De Bono's thought focus is precedent to the behaviors that are of interest to Salton, since some form of thought precedes the behavior. The fact that both theories work in practice and that both are compatible with the other gives confidence that a level of "truth" has been realized.

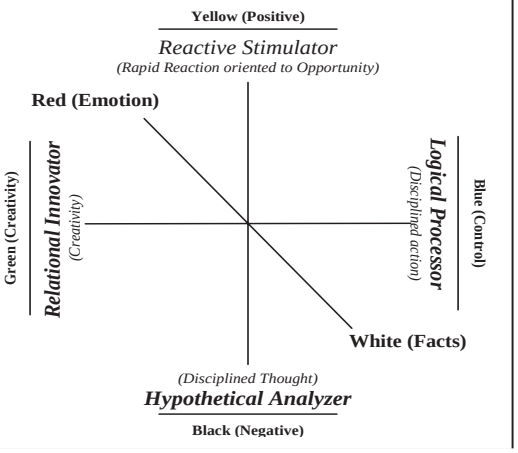
INTEGRATING AND EXTENDING THE TWO MODELS

The "Six Hats" model and OE not only share similar geneses and common characteristics but they can also literally be "put together" to show graphically how, by highlighting the intellectual light of each model, the other organizational performance might be enhanced.

Diagram 5 overlays Salton's OE Model on De Bono's "Six Hats" model. On the horizontal and vertical axes the conceptual categories match exactly. OE's Relational Innovator (RI) focuses on new ideas and initiatives and derives much

of his or her satisfaction from the creativity involved in their contributions, just as is called for in De Bono's green hat. Because it is behaviorally oriented, OE has more characteristics and derivative elements to its model. For example, it can be shown that the RI's strategic style is detail averse, tends to approach issues non-linearly, has a strong emotional component, tends to resist strict control and so on. OE's remaining three categories have the same one-to-one correspondence with those of De Bono (see Figure 3).

-Diagram 5-



The foregoing analysis however left out two of Dr. De Bono's six hats. We can, at this point, incorporate them using a concept OE call "pattern". In OE, a pattern is the combination of two adjacent strategic styles. A pattern highlights the common elements of the adjacent styles and shows how they can work together to produce a more complicated but still visible behavioral display. For example, Diagram 4, Quadrant 1, outlines what OE calls the "Changer" pattern. This pattern combines the creativity of the RI and the rapid, positive response preferences of the RS, producing a rapid, although not necessarily well thought- out, change style. The common elements of both these strategic styles are items such as an aversion to detail and a desire for variety and excitement. Seen in this light, De Bono's red and white hat can be seen as combinations of two of OE's strategic patterns. This is shown on Diagram 6. De Bono's red hat is a combination of OE's Reactive Stimulator and its Relational Innovator. De Bono's white hat is a combination of OE's Logical Processor and Hypothetical Analyzer styles.

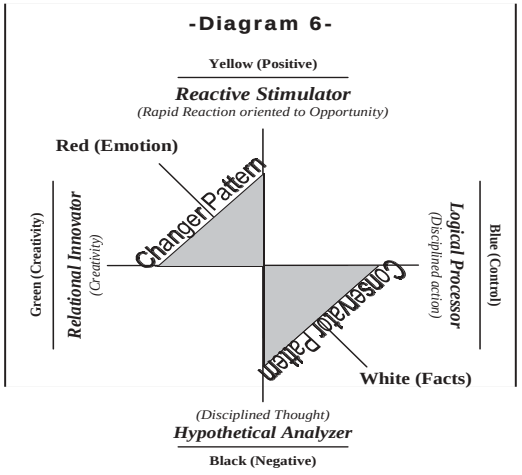
The "Changer" pattern shown in Diagram 6 can be seen as a representation of the red hat because both the RS and RI strategic styles tend to use emotion in expressing their behavioral preference. Emotion is

Figure 3
--Comparison of Six Hat and OE Categories—

Green Hat	Relational Innovator	Both categorical concepts stress creativity as a key component.
Yellow Hat	Reactive Stimulator	De Bono stresses positive assessment. OE calls for rapid action focused on positively addressing the issue at hand.
Blue Hat	Logical Processor	De Bono stresses control. OE also sees control realized through the methodical application of rule based methods.
Black Hat	Hypothetical Analyzer	De Bono stresses negative (critical) assessment. OE sees the same orientation focused on conceptual (versus action) issue elements.

admissible because neither style is bound by a predetermined formula (e.g., logic) in approaching issues. The motive force provided by emotion serves as a "driver" causing both of the strategic styles to use passion as a substitute for structure in convincing others to accept their resolution options.

-Diagram 6-



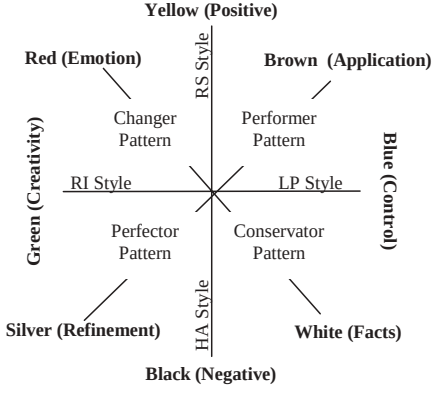
The "Conservator" pattern shown in Diagram 6 can be seen as an expression of the white hat because both the HA and LP strategic styles tend to use logic and other disciplined, structured methods in expressing their behavioral preference. Emotion is the enemy of logic and so both styles tend to adopt a reserved, measured posture. Their focus is to convince others to adopt their resolution options on the basis of the compelling reasoning they bring to bear on a subject. Reasoning is the relationship between facts and thus the "Conservator" pattern tends to collect, organize and prize facts as a central element of their strategic posture. The HA contributes the conceptual framework ensuring that all options and potential outcomes have been considered. The LP focuses on a single option and specifies it to the point that it can be executed with precision and high certainty of outcome.

This conceptualization of De Bono's structure suggests that facts and emotions can reasonably be seen as thought preferences that attach themselves to strategic postures. Most humans get most of their satisfactions in the results of behavior. Even the satisfactions of creativity are most often realized when those thoughts are conveyed to others. The obvious conclusion is that the organizational engineer can expect "automatic" red hat thinking if the group being worked with has a lot of people with a "changer" orientation.

EXTENDING THE SIX HAT MODEL

When applied, the logic outlined above shows where De Bono's model can be expanded. There are two patterns in the OE model that do not have a matching hat representation-the Performer Pattern and the

-Diagram 7-



Perfector Pattern. These are graphically shown in Diagram 7.

The "Performer" pattern is the combination of the logical, disciplined LP style-blue hat (control) and the shorter range, action based RS style-yellow hat (positive). Both share an action orientation. The RS favors an instant, shorter-range, "let's get it done" posture. The LP favors a disciplined, mid-range, "let's do it right" posture. The emotion of the RS is being combined with the control and discipline of the LP. This is accomplished by changing the focus from facts and emotion to action. Both elements can ignore the differences because both can subscribe to a common value of action.

The reason that this is left out of the De Bono model is because he was concerned with thinking, not action. He wasn't worried about the actual realization of the thoughts being processed in the outside world. However, the reason for the existence of most organized environments is only realized if the thoughts being processed are converted into tangible action. Therefore it may be legitimate to create another hat that speaks of the systematic implementation of the ideas generated using De Bono's methods.

The author calls this role the brown hat role. Brown is the color of earth, from which the sustenance of mankind arises. Like the Performer strategic pattern, this hat produces a product regularly and with a vigor that can be compared to the energy provided by emotions in thought-based activity. As in De Bono's assignment of colors to his hats, this color has an internal logic.

The role characteristics that are associated with our new brown hat can be derived from the strategic styles from which it has been created. We propose that the brown hat includes these characteristics:

1. A focus on output as measured by tangible, physical product.
2. A determined enthusiasm for achieving production optimality.
3. A disciplined commitment to quality and precision in both process and product.
4. A willingness to use expeditious methods in situations where the end is more important than the means.

Adding the brown hat to the De Bono model brings benefits well worth consideration in our organized environments. The separation of thinking and doing is akin to the line and staff organization of the old days of organization theory. The brown hat integrates the "line" directly into the "staff" and shows it's contribution to be of equal value to the people who sit behind the desks. In addition to having the merit of being closer to the truth of today's world, this extension allows the same paradigm used in the corporate office to be extended to the factory floor. This may result in a synergistic payoff visible on the bottom line. The R&D group will be directly connected to the machine operator in a way immediately understandable to both groups.

The "Perfector" pattern is the combination of the creative orientation of the RI (green hat/creativity) and the disciplined assessment and planning of the HA (black/negative assessment). Both elements favor new ideas but for different reasons. The RI (green hat/creativity) sees it as an expression of creativity that

he or she values as a good in and of itself. The HA (black hat) sees the new ideas as an opportunity to engage the sophisticated skills of study, analysis, assessment, evaluation, planning and constructive criticism. The differences between the strategic postures on such items as the level of detail, emotions and the value of logic are set aside in their common appreciation of the delights available from new ideas and initiatives. Both elements can ignore the differences because both can subscribe to a common value of "new"-for the RI the "new" is the creation of something previously unknown. For the HA the "new" is unplowed ground on which conceptual tools and techniques can be tested and refined.

The concept of Perfector is one of refinement. In physical terms, it can be likened to evolution. In nature an animal is created and then modified over time to accommodate changes in environment. Evolution understands perfection to be a temporary phenomenon. Likewise, the "Perfector" strategic pattern understands that an idea created today may be improved tomorrow because of a change in its environment, a new material, a new process, or a new thought paradigm. The Perfector strategic pattern advises us not to sit on our laurels but rather continually strive to improve the "perfect" item we have just created.

The reason De Bono doesn't have a hat equivalent to the "Perfector" strategy is again obvious. Dr. De Bono is focused on thought, not action. He is interested in showing us how to think through an item from beginning to end, getting a better result than we could realize using less disciplined methods. OE, on the other hand, is concerned with process, looking at multiple decisions occurring over time.

Organized environments tend to be concerned with streams of activities rather than single instances. Working committees typically make many decisions to satisfy their charter. Departments discharge their responsibilities over long periods, repeatedly engaging in the thought process that leads them to making many thousands of decisions. What matters in most organized environments is not a particular thought or action but rather the character of a stream of such occurrences. The Perfector strategy is focused on that stream and seeks to continually monitor and improve its functioning. Again, it may be legitimate to create another hat that speaks of the systematic refinement of the ideas generated using De Bono's methods.

The author's call this role the silver hat. Silver has a sheen that bespeaks of value and newness. It is a universal color than fits into almost all situations. It suggests the disciplined brilliance of the HA and the energy of the RI in the reflections that bounce off of a silver surface. If tarnished, "elbow grease" can return it to its original luster just as a worn idea might be refreshed by the application of new embellishments or modifications.

The role characteristics associated with the silver hat include:

1. A focus on the enhancement or improvement of an existing idea. The age of the idea does not matter. It could have been born 10 years ago or 10 minutes.
2. The contribution of new refining ideas that build on what exists rather than replacing it.

3. Critical thought centered on evaluation of the refinements rather than the whole idea. In other words, the base idea is accepted. The only issue is the amendments.
4. A focus on mid-to longer term strategic improvement, not short term pickups.

Adding the Silver Hat to the De Bono model has a bonus well worth consideration in our organized environments. The natural tendencies of the Performer (brown hat) pattern will be to lock in what exists. That is the way maximum production can be realized. The existing boundaries are accepted and within those tangible limits production is optimized. The silver hat reminds us that new variables are being introduced continuously. What was perfect yesterday could be suboptimal today. By putting on the silver hat, groups can be lead to never consider a thought, process or idea as "done." The focus becomes one of process, not event.

The relevance and value of silver- hat thinking hardly needs to be explained. The 1970's and 1980's witnessed a wounding of the U.S. domestic auto industry as the result of the onslaught of foreign autos because of new ideas. First the Germans served notice with the successful Beetle. US carmakers ignored it. Next came the Japanese with a process that continually ate away at market share, finally waking up the semi-comatose executives of our domestic industry.

Expanding De Bono's model with insights provided by OE yields a symmetrical diagram, one that matches the OE model in all of its dimensions. With these additions the excellence of the thought process is wedded to the world of action and behavior.

It is important to note that the addition of two hats does not reflect any deficiency in the work of Dr. De Bono. All models have to be confined within a scope or boundary if they are to have any value. For example, a model airplane can be very useful in determining the flight characteristics of a full size version. However, you cannot walk inside of it. Its scope is that of the relative surface areas involved. In Dr. De Bono's case, the scope of the model is the thought process. The additions offered here are due to the fact that OE has a different scope. By combining them we get to something that is useful in more dimensions of the organized environment.

CONSULTING APPLICATIONS

The development of these two additional "hats" shows just how OE describes behavioral regularities present in all human beings.

Both models arrive at recommendations by using social techniques. In De Bono's model individuals in a group adopt a role playing posture when the group calls out specific roles, i.e., to advise other participants of the specific "contour" being used. The use of a specific role or role sequencing is not specified but rather it is seen as dependent on the particular circumstances and issue being confronted. Nonetheless, simple knowledge of the roles and their coordination potential is alone sufficient to create a major gain in clarity and quality of thought.

Salton's OE model is both similar and different. On the similarity side, simple knowledge of an individual's strategic posture is often sufficient to yield a level of understanding that instantly improves group functioning. On the difference side, OE shows how consciously orchestrating a group's thought styles can be predictive of the results it will produce. Alternatively, if groups are already formed, OE can show how specific styles (e.g., roles, rules, processes, procedures, etc.) can be adopted by a group to cause it to think and act in a manner that would be more effective, or satisfying.

Earlier in this article we suggested that OE reveals strategic profiles. These profiles were seen as representing the relative probability that a particular behavioral sequence will be exhibited. It can be shown that, because OE uses information processing as a basis, multiple people can be combined to produce specific behavioral performances. In other words, the group may have different "inclinations" than any individual within it. This means that a profile of a group can be constructed, as shown in Diagram 8.

-Diagram 8-

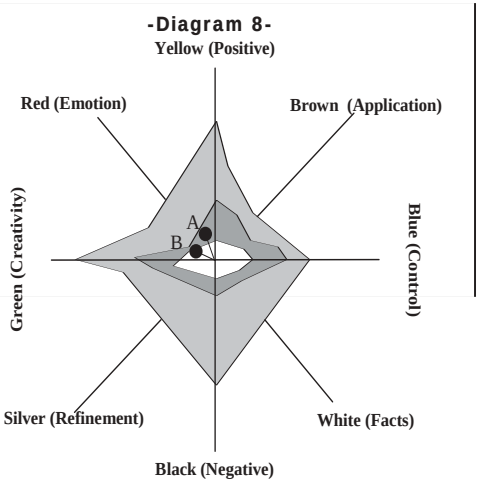


Diagram 8 shows the group profile of an actual high level functional group in a Fortune 100 firm. The white area shows the consensus preference of the group. In this case, if all of the team members were required to agree it is likely that they would adopt a red hat posture, with a green hat emphasis and a yellow hat secondary inclination. In OE terminology, these three hats are combined under the concept of a "Changer" pattern. This would be the dominant characteristic of the group as a whole operating under consensus rules.

The gray area shows the group operating under "majority rule". Here the overall Changer pattern stays the same, but the emphasis alters. The yellow hat takes more of a role with its inclination toward optimism and rapid realization of the opportunities that are seen. The green hat is still visible but the emphasis has moved from idea generation to rapid implementation.

While still not fully conceptualized, the authors believe that the red hat area has been given increased emphasis under majority rule. This is suggested by the greater distance of the midpoint of the consensus boundary ("a" in the diagram) to the midpoint of the majority rule boundary ("b" in the diagram). Intuitively, this makes sense because emotion is more easily and widely generated by potential action than it is by novel thought. The co-author to this paper has repeatedly witnessed the phenomenon in his interactions with groups.

This example illustrates one potential expansion of the use of De Bono's model within an OE context. Simply knowing the strategic profile of the group can alert an executive to the "natural" postures a group is likely to take. In the example just offered, the green, yellow and red hats are likely to be available in ample supply. However, the silver, black, blue and brown hats will probably be under used in their discussions. Depending on the issue being addressed, this may be okay. If it were not, the leader could be alerted to the likely biases existing in the group. If important, he or she could take action to offset the bias before it even occurs.

The required brevity of this article prevents full exposition of the possibilities inherent in the combined power of the OE and six hat models. For example, social roles can be constructed and awarded to individual team members to ensure that a particular hat receives a consistent voice in group meetings. Or, rules can be adopted that require that initiatives recommended be accompanied by an assessment of the possible downside consequences of a particular action (i.e., an automatic black hat role). Processes can be created and environments structured that could automatically bring into play particular hats. OE teaches that the range of options available is essentially only limited by human imagination.

Dr. De Bono says, "I am not suggesting that at every moment in our thinking we should consciously be using one hat or another. This would be quite unnecessary." However, by using the OE paradigm, we could "build in" known predispositions into groups whose purpose is accented toward one or another style. However, it will never be to a group's advantage to exercise this predetermined bias all of the time. In those instances where the bias is inapplicable, De Bono's hats can be taken off of the shelf and used to consciously guide the group in a more favorable direction. The two models fit together as a hand and glove. Both different but both complementary to the other.

This article has attempted to show that OE theory is entirely compatible with De Bono's renowned six hat prescription for improving the quality of thought. It has also derived two additional hats which arise when the area of thought is linked with the arena of action. Finally, it has alluded to the potential of orchestrating the use of OE and six hats together to create organizations that can systematically yield superior levels of both thinking and action. The theoretical and practical synergy between the two models is not surprising. It is a natural outgrowth of the fact that both theories have as their foundation the development and exchange of information. De Bono's hats tell us the character of information being exchanged. OE tells us the likely expression of that information in behavioral terms. Together, the theories hold promise of significantly enhancing the organizational capabilities of our institutions.

FOOTNOTES

[1]Edward De Bono. The Mechanism of Mind. Penguin Books, London, England. 1969.

[2]Edward De Bono. Six Thinking Hats. Penguin Books, London, England. 1985.

[3"]The Revolutionary Implication of Edward De Bono's Lateral Thinking. London Sunday Times by Nicholas Berry, 4 October 1992

[5]De Bono (1985); p. 198.

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Mr. Fuhrmann has staffed and organized team-based technical organizations from scratch. He has developed a unique, multifunctional team-oriented approach to effective project execution. This approach has resulted in a significant number of new food products-some with sales of greater then $100 million per year.