

The impact of non rational elements on strategy and warfare

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Abstract— *As the world famous critic of Strategy and Warfare General Von Clausewitz argues, much could be learned about strategies of warfare from a careful analysis of war; it could always be a highly unpredictable affair shaped by factors such as friction, uncertainty and chance as well as non- rational factors such as psychological, moral and creative factors that influence the strategists' behavior. The point of the rational approach is that strategists should try to use systematic procedures to arrive at good decisions. However, research into strategic decision making shows that strategists often are unable to follow an ideal procedure. Also the time pressure, a large number of internal and external factors affecting a decision and the ill-defined nature of many problems make systematic analysis virtually impossible.*

The focus of the paper is to examine the limits of rationality and the impact of non-rational elements on strategy and warfare and to present a multifaceted conceptual model to that affect. In particular the paper illustrates the impact of non-rational elements such as intuition, experience, emotion and imagination of the strategists in shaping the overall strategy. Critics of war, strategy and intelligence argue that the logic of war and its paradoxical nature are best understood through the analysis of military history with cautious reference to personal experience of military leadership in war. In view of the theoretical underpinnings and experts' insights this paper suggests a conceptual model and it argues that strategies of war cannot be studied accurately following a scientific procedure.

Keywords— **Rationality, Warfare, Strategy**

I. INTRODUCTION

Critics of war, strategy and intelligence argue that the logic of war and its paradoxical nature are best understood through the study of military history with cautious reference to personal experiences of the upper echelons of leadership in war (Handel, 1996). In view of the suggestions made by the leading critics of strategy and warfare, this proposal underlines the importance of studying the theoretical and practical insights of the upper echelons of military leadership who confronted the critical battles launched against terrorists of Sri Lanka.

The main argument in this paper is that strategies of war cannot be studied accurately as in the case of a scientific analysis. Further, the research assumes that the study of war is more of an art than a science. As the world famous critic of strategy and warfare, Clausewitz (1982), suggests much could be learned about strategies of warfare from a careful analysis of war; it could always be a highly unpredictable affair shaped by factors such as friction, uncertainty and chance as well as by non-rational factors such as psychological, moral and creative forces that influence the strategists (Clausewitz, 1982; Handel, 2001). Unlike those who are convinced that the strategy will ultimately be transformed into an accurate, predictable discipline, many critics assumed that theory – and therefore the practice of war – could be influenced by certain limitations (Mintzberg, 1976; Clausewitz, 1982).

The focus of this research project is therefore to examine the limits of rationality and the impact of non-rational elements in strategy and warfare.

A. The Literature Survey

The rational approach to strategy making emphasizes the importance of employing a systematic analysis of a problem followed by choice and implementation in a logical step-by-step sequence (Daft, 2006). The model does help strategists think about decisions more clearly and rationally and the decision makers according to this perspective should use systematic procedures to make decisions whenever possible.

When strategists have a deep understanding of the rational decision making process, it can help them make better decisions even when there is lack of clear information. The authors of a recent book on decision making use the example of the US Marines, who have a reputation for dealing with complex problems quickly and decisively. However, Marines are trained to quickly go through a series of mental routines that help them analyze the situation and take action (Dillon, 1998). In reality, however, strategists face decision premises for which the rational approach is not a good fit.

Furthermore, decision makers have only so much time and mental capacity and, hence, cannot evaluate every goal, problem, and alternative. The attempt to be rational is

bounded (limited) by the enormous complexity of many problems. (Daft, 2006, Simon, 1987) There is a limit to how rational decision makers can be.

The point of the rational approach is that strategists should try to use systematic procedures to arrive at good decisions (Dean, 1993: 610). But research into strategic decision making shows that strategists often are unable to follow an ideal procedure (Eisenberg 1984). Also, the rational perspective suggests that decision often must be made very fast. Time pressure, a large number of internal and external factors affecting a decision and the ill-defined nature of many problems make systematic analysis virtually impossible (Klein, 2002; Minitzberg, 1976).

B. Bounded Rationality in Perspective

It is argued in this paper that decision makers have many time and mental capacity constraints and hence, cannot evaluate every goal, problem and alternative.

The attempt to be rational is bounded (limited) by the enormous complexity of many problems (Simon 1987). There is a limit to how rational strategists can be. Not only are large organizational decisions too complex to fully comprehend, but many other constraints impinge on the decision maker, as illustrated in Exhibit 1 The circumstances are ambiguous, requiring social support, a perspective on what happens, and acceptance and agreement. For example, in a study of the decision making surrounding the Cuban missile crisis, the executive committee in the White House knew a problem existed but was unable to specify exact goals and objectives. It showed that rational procedures cannot be adapted to complex strategic processes.

Also, personal constraints – such as decision style, work pressure, desire for prestige, or simple feelings of insecurity – may constrain either the search for alternatives or the acceptability of an alternative. All of these factors

constrain a perfectly rational approach that should lead to an obviously ideal choice.

C. Bounded Rationality and Intuition

The bounded rationality perspective is often associated with intuitive decision processes. In intuitive decision making, experience and judgment rather than sequential logic or explicit reasoning are used to make decisions (Simon 1987; Eisenberg, 1984). Intuition is not arbitrary or irrational because it is based on years of practice and hands on experience, often stored in the subconscious.

When strategists use their intuition based on long experience with organizational issues, they more rapidly perceive and understand problems, and they develop gut feeling or hunch about which alternative will solve a problem, speeding the decision making process. The value of intuition for effective decision making is supported by a growing body of research from psychology, organizational science, and other disciplines. Indeed, many universities are offering courses in creativity and intuition so strategists can learn to understand and rely on these processes. (See Figure 2)

D. Rational Versus Non- rational Perspectives Further Compared

In a situation of great complexity or ambiguity, previous experience and judgment are needed to incorporate intangible elements at both the problem identification and problem solution stages. A study of manager problem finding showed that thirty of thirty-three problems were ambiguous and ill-defined. Bits and scraps of unrelated information from informal sources resulted in a pattern in the strategist’s mind. The decision maker could not prove a problem existed but knew intuitively that a certain area needed attention. A too-simple view of a complex problem is often associated with decision failure, and research shows strategists are more likely to respond intuition to a perceived threat to the organization than to an opportunity.

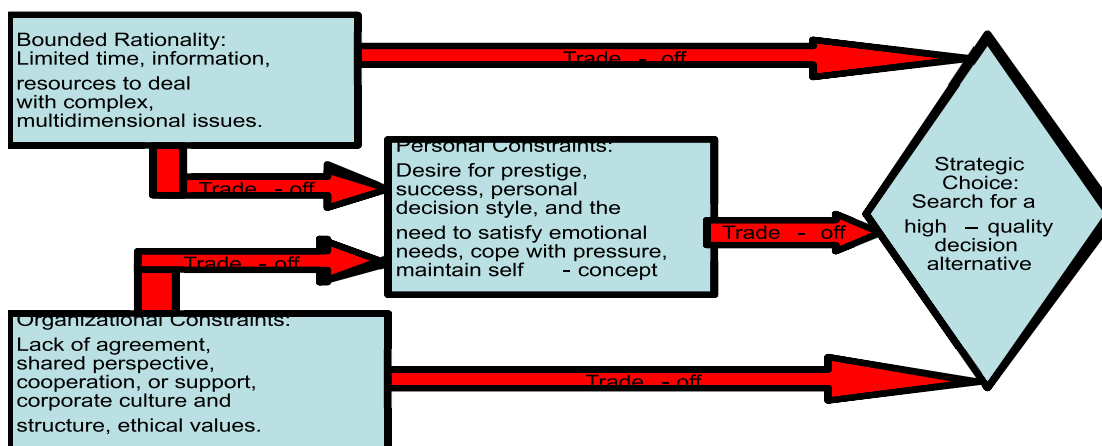


Fig 1. Impact of bounded rationality, organizational constraints and personal constraints on strategy

Intuition plays an increasingly important role in problem identification in today's fast-paced and uncertain business environment. A study of sixty managers from a variety of industries found that nearly half said they rely on intuition often for organizational decision making, while another 30 percent reported using intuition sometimes (Simon, 1987).

Intuition processes are also used in the problem solution stage. Strategists frequently make decisions without explicit reference to the impact on profiles or to other measurable outcomes. As we saw in Exhibit 1 many intangible factors – such as a person's concern about the support of other executives, fear of failure, and social attitudes -- influence selection of the best alternative. These factors cannot be quantified in a systematic way, so intuition guides the choice of a solution. Strategists make a decision based on what they sense to be right rather than on what they can document with hard data.

Often we see that managers may walk a fine line between two extremes: on the one hand, making arbitrary decisions without careful study, and on the other, relying obsessively on numbers and rational analysis. We should realize that the bounded rationality perspective and the use of intuition apply mostly to nonprogrammed decisions such

as the strategies made in war. The novel, unclear, complex aspects of nonprogrammed decisions mean hard data and logical procedures are not available. A study of executive decision making found that managers simply could not use the rational approach for nonprogrammed decision, such as when to buy a CT scanner for an osteopathic hospital or whether a city had a need for and could reasonably adopt an enterprise resource planning system. In those cases managers had limited time and resources, and some factors simply couldn't be measured and analyzed. Trying to quantify such information could cause mistakes because it may oversimplify decision criteria. Intuition can also balance and supplement rational analysis to help organization leaders make better decisions (Daft, 2006).

E. Use of Non Rational Analysis in Warfare

One can argue that the paradoxical nature of danger, risk and boldness in war also defy rational analysis. Boldness in war, as Clausewitz, asserted has its own prerogatives. Analysts of higher-level, non-rational dimensions of war has been neglected since Clausewitz' unique analysis. The study of strategy on the higher level has focused on what we can refer to as the rational calculus of war (eg: the measurement of power, the applications of power, planning, strategy and military operations and the relationship between means and objectives

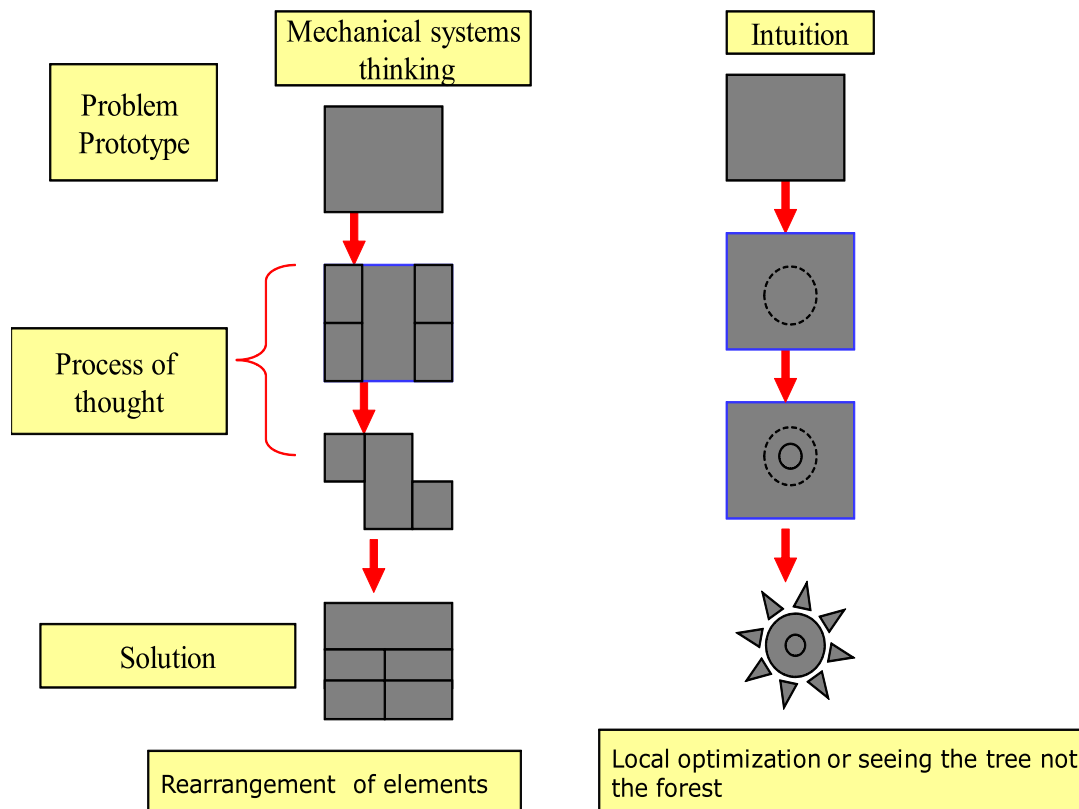


Fig 2. Rational Versus Non-rational (intuitive) Perspectives of Strategy

F. Common Non-rational Elements Which Affect Strategy and Warfare

In recent years, much has been written on the limits of human perception, which can be defined as the inability of human beings to view their environment objectively. Clausewitz recognized the importance of the problem but referred to it very briefly. The difficulty of accurate recognition constitutes one of the most serious sources of friction in war, by making things appear entirely different from what one had expected. Factors such as cultural bias, language differences, national historical experiences, ethnocentric bias, wishful thinking, and political influences all contribute to our misperception of reality.

Strategic analysis and most theoretical works on strategy mistakenly assume that our perception of the opponent is usually accurate, which therefore makes the design and selection of a rational strategy possible. American strategy in Vietnam, the Israeli strategy of reprisals and deterrence policy vis-a-vis the Arabs and the Arab Strategy vis-a-vis Israel, the Allied overestimation of the success of strategic bombing in the second world war, and the Japanese conception of what the American reaction in their attack on Pearl Harbor would be, all illustrate the extent of the gap between reality and perception and this unavoidable gap sharply reduces the possibility of choosing a "rational". This also, further limits the use of rational analysis in strategy and war

Several strategists have pointed out that the rational methodology is not applicable to most of the warfare related decisions and emphasized the importance of non-rational elements in complex scenarios. As Handel (1989) argues several non-rational elements such as the instinctive passion of hatred influence the strategy and war. A very strong proponent of this thesis Carl von Clausewitz argued that: it would be an obvious fallacy to imagine war between civilized peoples as resulting merely from a rational act on the part of their governments and to conceive of war as gradually ridding itself of passion so that in the end one could never really need to use the physical impact of the fighting forces – comparative figures of their strength would be enough. That would be a kind of war by algebra (1989: 67) Henry Mintzberg's (2004), Keegan, (1979) comparison between the deliberate strategy and the emergent strategy is similar to rational and non rational perspectives of strategy. Figure 3 points out that strategists, in the battle field, do often take the emergent dynamics into account to make their warfare related decisions more meaningful (see figure - 3)

The novice cannot pass through these layers of increasing intensity of danger without sensing that their ideas are governed by other factors, that their light of reason is refracted in a manner quite different from that which is normal in academic speculation. It is an exceptional man who keeps his powers of quick decision intact if he has

never been through this experience before (Clausewitz, 1989:113).

In game theory the metaphor of the prisoner's dilemma suggests that under certain conditions, the most rational decisions could be more counterproductive than decisions that appear at first to be less rational. This further discredits, as Handel argue, the assumption that the formulation of war can be infused with the spirit of rationality.

G. Risk: A Fundamental Paradox in the Rational Analysis

Also, the assessment of risk in war is so complex that in fact it very often defies rational analysis (Handel, 2001: 18). Handel argues that the greater the risk and the feasible the operation seems to be less hazardous in practice. Thus the greater the apparent risk the smaller it becomes in reality. This as Handel argues, risk is one of the most fundamental paradoxes in the rational analysis. "Was it rational for Britain or the Soviet Union to continue fighting instead of suing for peace when the Germans defeated France and almost won the Battle of Britain or when they stood 20 kilometers away from Moscow" (Clausewitz, 1989)

Under what conditions does it make sense to take greater risks and under what conditions does it not?

Indeed, these questions have no unequivocal or universally accepted answers (Handel, 2001:18)

One can argue that the best approach to a particular situation depends on specific conditions such as the creativity and imagination of upper echelons of military leadership and political leaders: the availability of other less risky opinions, the quality of intelligence, ability to achieve surprise, the probability of forthcoming help from allies and the unanticipated consequents of failure. It is hence, argued here that surprise is almost always unavoidable (Handel, 2001: 18).

As a result high risks are actually reduced when associated with the achievement of surprise. Clausewitz developed the role of the Genius, who best expresses the creativity, imagination, and intuition that allow him to operate on a higher plane. The Commanders instincts and creativity, similar to the inspiration of an artist cannot be taught. If it already exists within the individual as Handel argues it can however, be cultivated through education and experience.

H. The Influence of Emergent Variables in Realized Strategy

Cohen and March (1974) argue that strategists have to pay attention to the emergent aspects of strategy since the intended strategy is predominantly rigid in nature and limited to the aspects of strategy making induced by the rational perspective. When the smart strategist realizes the

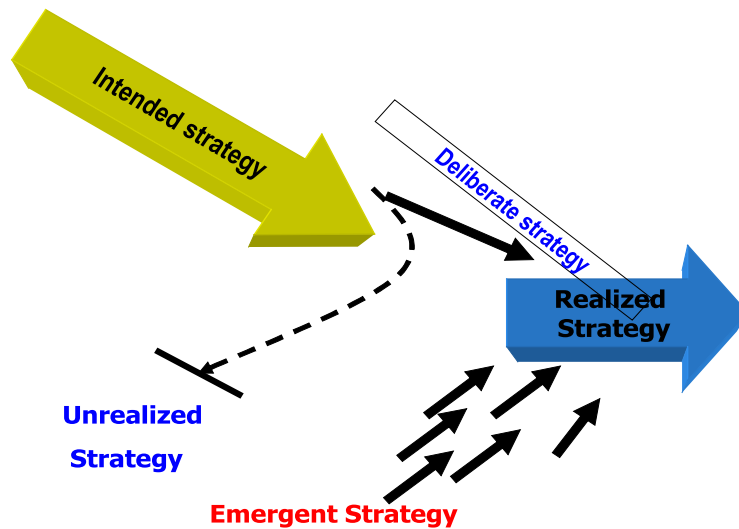


Fig 3. The Planning Mode and Evolutionary Mode of Strategy

importance of emergent elements of strategy he always addresses the emergent scenario very carefully.

1. The conceptual framework

In view of the major arguments raised by the critics of strategy and warfare (discussed in the literature survey) it is conceptualized here that the upper echelons of the military leadership often could not act rationally and they were compelled to utilize various non-rational elements of strategy making in warfare: In other words, it is argued here that bounded rationality caused by various non-rational factors has become the bottom line of making strategy and warfare.

The proposed conceptual framework argues that:

(a) Rational elements of strategy mainly emphasize:

- availability of full information for strategy.
- use of logical analysis of information.
- employment of a step-by-step procedure in strategy making

(b) Non-rational elements of Strategy mainly emphasize:

- Intuition of the strategist
- Experience of the strategist
- Imagination of the strategist
- Emotions of the strategist.

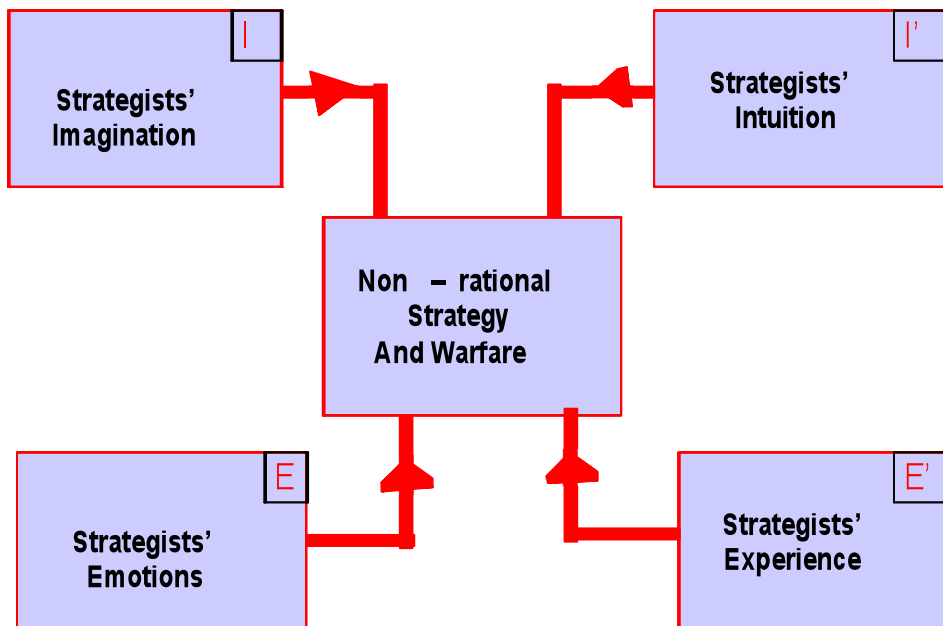


Fig 4. The Impact of Non-rational Elements (I,I,E,E',I') on Strategy and Warfare

Strategists' Intuition (I)

This refers to the hunch, gut feeling and judgment of the higher echelons of military leadership in strategy accomplishment.

Strategists' Experience (E)

This refers to the projection of strategists' own experience, doctrines or capabilities of the higher echelons of military leadership in strategy accomplishment.

Strategists' Emotions (E')

This refers to the emotional bias of the higher echelons of military leadership in strategy accomplishment.

Strategists Imaginations (I')

This refers of the imagination and creativity of the higher leadership in strategy accomplishment.

It is argued here that the two non-rational elements – Intuition and experience – are influenced by external factors while the other two – emotion and Imagination – are influenced by internal factors.

II. SUMMARY, CONCLUSION AND WAY FORWARD

The conceptual model presented in this paper is based on the theoretical underpinnings of non-rational decision making. The paper suggests that higher echelons of military leadership are mostly influenced by non-rational elements of decision making. In particular, the paradoxical nature of intention experience of imagination and emotions defy rational analysis.

The next step of this research study is to apply the model to a couple of real world operations to see whether it makes sense. In the conceptual model along with the survey and questionnaire will first be administered among 240 senior members of Sri Lanka military services. Subsequent to that it will be administered among 150 senior military officers each from both Canada and New Zealand to test its validity and reliability. Furthermore upon analyzing the data the theoretical model will be revised accordingly.

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