

DISCUSSING THE NATURE OF OBJECTIVES-BASED PLANNING: THE EVOLUTIONARY APPROACH

A CÉLALAPÚ TERVEZÉS TERMÉSZETÉRŐL: AZ EVOLÚCIÓS MEGKÖZELÍTÉS

The authors state that the process of strategy development in the Western militaries is very much shaped by Clausewitz. However, they also claim that this approach is too narrow for today's military engagements dominated by counter-insurgency operations. The Clausewitzian process of strategy development proceeds hierarchically through the various levels of war, despite the fact that links connecting the levels can become weak or even disappear as events unfold. The biggest shortcoming of this approach is the limitation it provides for adaptation to changing conditions. The authors examine the subject and detail the factors that hamper the utility of such an approach.

A szerzők véleménye szerint a nyugati hadseregekben alkalmazott stratégia alkotás folyamata Clausewitz-i. Szerintük ez a megközelítés túl szűk keretet biztosít a jelenkori, zömében felkelők elleni katonai műveletek megtervezéséhez. A Clausewitz által felvázolt stratégia alkotás a háború egymást követő szintjeit összekötve épül fel annak ellenére, hogy az események alakulásának eredményeként a szinteket összekötő kapocs gyengülhet, vagy akár el is tűnhet. Ennek a megközelítésnek a legnagyobb hiányossága, hogy a változó feltételekhez való alkalmazkodás számára korlátokat jelent. A szerzők bemutatják ezt a fajta megközelítést és részletezik azokat a tényezőket, amelyek a megközelítés alkalmazhatóságát korlátozzák.

1. INTRODUCTION

The authors state that during the last two centuries armed forces were trained to become able to realise predefined objectives at every stage and level of war. This approach, they argue, can greatly be attributed to Clausewitz for whom strategy meant nothing more than *"the use of an engagement for the purpose of the war"* (Clausewitz, 1993, p. 207). For Clausewitz, strategy served as a unifying structure to the entire military activity that decided on the time, place and forces with which the battle had to be fought. However, even he admitted that strategists had to consider the *"numerous possibilities, each of which [would] have a different effect on the outcome of the engagement"* (Clausewitz, 1993, p. 207). Clausewitz's contribution to Western strategic thinking is unquestionable. However, his goal-seeking, rather narrow understanding of strategy development excludes a whole range of aspects such as logistic, social and technological issues that must be considered as equally important in war. Clausewitz's focus should not come as a surprise as he believed that every human activity is a rational undertaking and governed by reason. This explains why he understood strategy as an objective-oriented, goal-seeking phenomenon (Howard, 1979; Millett, Murray, 1988/89; Ehrenreich, 1997).

His understanding of strategy development dominated most of the 20th century and is still dominant today. However, the complexity of war, especially waged against insurgents indicates clear problems. Despite the neat and clean logic behind, planned strategies often resemble gambling. Although they rely on planning and careful evaluation of numerous factors, it is impossible to predict in advance which risk is more reasonable in selecting a particular course of action. Thus there will always be a certain error in the estimation regarding what we know and what we expect. The inherent contingency of war limits the ability to control causes sufficiently well in order to produce a desired future. Friction, chaos and complexity of war always include the probability of failure since they provide only for an insufficient basis for any

estimates regarding odds. Strategic calculation is by definition vague, which also limits the possibility of achieving intended effects (Betts, 2000).

The personal character of decision-makers often distorts strategy. Thus power is as much applied for manifest political purposes as for subliminal personal ones, which can heavily influence the link between military means and political ends. Strategic decisions always go through non-logical filters such as bias and prejudice. Thought processes are influenced by cognitive constraints, which limit the decision-maker's ability to see or calculate linkages between causes and effects in a comprehensive way. Conscious calculations can often be non-rational as we tend to see what we expect to see. Strategies, especially coercive ones aimed at influencing will depend mainly on communication. However, due to cultural blinders the receiver often cannot hear the message sent by the signaller. Logical strategic calculations only have reference within their own cultural context (Betts, 2000).

Normal operational friction, which is a proverbial attribute of war, can significantly influence the way plans are executed and decouple assumed causes from expected effects as coercive signals that depend on coupling often collapse. Through deflection the process of implementing stated political goals can often be influenced, even resisted, by established organisational routines. Habits and interests can distort the way means are applied with the result that stated goals and objectives become closer to parochial priorities reflecting organisational stability rather than larger political aims. Strategy has the purpose of shaping the courses of action that suit policy. Unfortunately, the enemy does not cooperate, but naturally opposes any neat and clean execution of plans. Thus the proper sequence of causes and effects is usually disturbed or reversed and does not unfold according to expectations. Opposing preferences also constrain options since they require compromise, which is useful politically, but can be harmful militarily. Political compromises can result in military half-measures that serve no strategic objectives. Such options can be acceptable to all, but ideal for none since not doing or over-doing is often better than doing something in-between (Betts, 2000; Beyerchen).

2. EMERGENT AND SELF-ORGANISING ATTRIBUTES OF WAR

The authors do not claim that there is no need for deliberate planning in strategy anymore, but emphasise that it is equally important to take the emergent and self-organising attributes of war much more into account. An approach that emphasises exclusively the realisation of clear goals stated in the form objectives and demands to *"assess ... strengths and weaknesses, plan systematically on schedule, and make the resulting strategies explicit are at best overly general guide-lines, at worst demonstrably misleading precepts to organizations that face a confusing reality"* (Mintzberg, 1978, p. 948).

The war in Afghanistan waged against insurgents on difficult terrain, which has always constrained the ability to find and target the enemy thus turning activities into a very hard and frustrating process. In such warfare the enemy raids, evades, subverts, submerges and withdraws. This confuses carefully selected objectives, desired effects, and negates planned strategies. In a complex environment such as Afghanistan involving a multitude of players and motives strategic wisdom can be more important than any formalisation, as the latter can make strategic success very costly and in some cases impossible (Millet, Murray, 1988/89).

In the Clausewitzian version of strategy development objectives have the function to avoid confusion by reducing possible internal tensions as they make things focused, streamlined and quantifiable. However, in war it is difficult to see the end from the beginning resulting in the *"unpalatable fact that no one can predict the long-term ... environment with any accuracy. In war it is impossible to see the shape the future will take as there is not one predetermined future, but many possible. In traditional terms strategy development relies mostly on linear cause-and-effect relationships. However, if the dynamics of war blur temporal and spatial dimensions, such an approach is simply inappropriate"* (Williamson, 1999, p. 118).

In contrast, the emergent and self-organising attributes of war stand for creativity, constant change, evolving situations and limitations regarding comprehension, prediction and control. Conditions found do not provide for safe havens or free lunch. Thus a strategy development that rests on prediction and planning is marginally helpful at best and downright dangerous at worst. Dynamic interactions stand for chance and probability as possibilities always emerge and form a broad spectrum, with the result that narrow predictions in the form of objectives indicate an entirely wrong mind-set for a phenomenon that is inherently unpredictable (Pascale, 2003; Courtney, Kirkland, 1997, Beinhocker, 1999).

3. BIOLOGICAL EVOLUTION AS EXAMPLE

The emergent and self-organising attributes of war indicate that similar to biological evolution there are no certainties, but only possibilities in the form of options. Consequently, any strategy aimed at harnessing emergence and self-organisation must refocus from prediction and rationality (Macintosh, Maclean, 1999; Moncrieff, 1999). Thus the authors claim that these attributes of war require the creation or tracking of emerging opportunities that can be exploited rather than attempting to realise objectives outlined in a predefined and analytically elaborated plan. This approach however, demands qualities such as flexibility, robustness, learning, and adaptation. Although they do not help reducing uncertainty, but help exploit the constantly shifting opportunities it contains (Chakravarthy, 1997; Quinn, 2002).

In the case of counterinsurgency the three traditional levels of war often merge into a single integrated universe anyway, in which actions at the lowest level cause dramatic changes that ripple upward simultaneously. Although the evolutionary approach denies prediction, it is more robust and adaptive than the Clausewitzian strategy development with a narrow focus. From a traditional point of view these strategies may not be optimal in every scenario, but they can survive under a wide array of changing circumstances and always keep options open over time. In order to minimise irreversible commitments they refocus from certainty, efficiency and co-ordination, but offer flexibility and a higher probability of overall success (Quinn, 1999; Dent 2002).

Evolutionary strategies are powerful enough to account for the uncertainty of war and the probability of different potential outcomes. This approach indicates that selection pressures internally can better address external selection pressures that come from an ever-changing environment. Robust emergent strategies remind us that nothing is just out there as a separate entity, but is created through a constant co-evolution. The emergent and self-organising attributes of war indicate open strategic options and the possibility of various paths that can better contribute to a rapid change of directions as events unfold (Williamson, 1999; Luehrman, 1998).

4. WAR AS COMPLEX ADAPTIVE SYSTEM

Emergent and self-organising attributes indicate war to be a complex adaptive system in which causes and effects are separated in time and space. Consequently, focusing on objectives and desired effects stand for putting on blinders as we normally look either for the most immediate or the most obvious cause. We have to expect many hidden trigger points that are responsible for the extremely fluid and haphazard conditions, which so often turn confusion into the very essence of war (Geus, 1988; Warden 1989; Feld, 1959). An evolutionary approach to strategy development can better address problems in which threats are diffuse, uncertain and unpredictable, and make increasingly impossible to “*skillfully formulate, coordinate, and apply ends, ways, and means*” (Beinhocker 1999; Chilcoat, 2001, p. 207).

There is a profound difficulty in foreseeing the course of events in a complex adaptive system such as war since in dynamic and non-linear settings effects do not always directly follow causes. A creative and evolving enemy capable of initiating conditions that are far from equilibrium also defies assumptions regarding clear causality. Dealing with evolutionary strategies can cause internal tensions that seem to be inefficient as the simultaneous pursuit of contradictory paths runs counter to a traditional understanding. However, they can leverage core skills and assets by

creating various options, possibilities and choices. It is better to accept conditions of unpredictability and constant change in which strategy is not an exclusive mechanical downstream business, but something that can also emerge. Emergent strategies reflecting the evolutionary approach never assume that a particular input produces a particular output, but indicate probabilistic occurrences within the domain of focus (Pascale, 2003)

Strategy development as outlined by Clausewitz relies on the assumption that the enemy is known and rational. However, war is full of corrections where the pursuit of objectives on a once-and-for-all basis is mostly impossible and success often comes as a result of actions that respond to changing circumstances. The emergent and self-organising attributes of war require constant adjustments especially in the case of incomplete and changing information. They also indicate that in a dynamic and ever-changing environment a bottom-up inductive approach can often be more helpful than the pursuit of a top-down, deductive master plan (Wildawsky, 1973; Wall, Wall, 1995).

The effects and events in a complex adaptive system interact in a dynamic web of relationships and show all sorts of different and intricate behaviour. Their interactions often result in conflicting constraints that defy the logical rigor behind assumed cause-and-effect relationships. Although evolutionary strategies are of little help in predicting the future, but can be a valuable aid in promoting insights into how to become a good evolver. Traditional strategies require clear statements in the form of objectives. The emergent and self-organising attributes of war containing friction, chaos and complexity stand for a variety of possible futures in which objectives and desired effects, however clearly and concisely stated, can perform badly (Beinhocker, 1997).

Evolutionary strategies often conflict and are intrinsically difficult to manage, but the greater the uncertainty, the greater their potential value. They do not presuppose the identification of the most or least likely outcome, but cover a broad array of possibilities as they evolve over time with some succeeding and some failing. Thinking about war in terms of a complex adaptive system indicates that victory is less the result of a sustained competitive advantage, but more of a continuous development of learning and adaptation aimed at exploiting temporary advantages. The emphasis is on keeping things that work in order to maintain sufficient variation based on innovation and novelty (Beinhocker, 1997).

5. IMPORTANCE OF LEARNING AND ADAPTATION

Complex adaptive systems such as evolution and war are full of adjustments that require constant learning and adaptation. Both the interactions with the enemy and the environmental changes influence strategic options by forcing a certain pattern onto the stream of actions. In other words, war brings any strategy closer to a compromise position. Environmental factors neither pre-empt all choices nor offer unlimited choice. They just limit what the belligerents can do, and the process of learning and adaptation reflects the fact that messages from the environment cannot be blocked out. Evolution means searching for viable patterns or consistency in order to increase flexibility and responsiveness (Mintzberg, Waters, 1985).

In the history of war the most difficult and painful aspect of confronting an enemy has traditionally been learning, adapting and embedding the lessons learned into the collective memory of the armed forces. Learning on the battlefield is a nasty business that does not provide for a clear and distinct picture. War as a complex adaptive system stands for polarities to manage and not problems to solve. Therefore the meaning of strategy must rest not only on traditional constructs such as plan, implement, and pursue, but also on constructs that emphasise the impact of changing battlefield conditions. The character of the enemy, the threat it poses and the environment constantly change in a difficult-to-comprehend way as war displays both linear and non-linear attributes (Grant, 2003).

Learning and adaptation are especially important if the environment is either too unstable or complex to fully comprehend, or too imposing to buck against. They enable us to respond to an evolving reality properly without focusing on a stable and planned fiction. The emergent and self-organising attributes of war demonstrate that effects cannot

always be assessed a priori. Consequently, they must be discovered empirically through actions that test where the enemy's strengths and weaknesses are. Emergence and self-organisation surrender control to those who have actual and detailed information to shape realistic strategies. Thus it is often more important to respond to an unfolding and ever-changing environment than realise detailed, but inappropriate objectives (Luehrman, 1998).

In a complex adaptive system such as war, significant strategic redirections can often originate in little actions and decisions often initiated by *"the foot soldier on the firing line, closest to the action"* (Mintzberg, 1987, pp. 70-71)

As stated earlier waging war on insurgency means that various levels interact and mutually adjust in order to reach consensus. Evolutionary strategies can rise everywhere. As time passes and interactions with the enemy evolve, some strategies may proliferate often without being recognized or consciously managed as such. Learning and adaptation indicate that strategy development is driven more by external forces and internal needs, than the conscious thoughts of the actors. Emergent strategies break with the Clausewitzian understanding of strategy development that often relies on the separation of planners and executants (Mintzberg, Ahlstrand, Lampel, 1998; Feld, 1959).

Learning and adaptation stand for the fact that it is sometimes better to let patterns emerge than impose an artificial consistency prematurely by stating highest level objectives and desired effects, and decomposing them into lower level actions and tasks. Those who are in constant touch with the enemy develop their own patterns that can lead to strategy development either spontaneously or gradually over time. In a complex adaptive system such as war it is not always possible to predict where strategies emerge or plan for them. They often just pop out as the various patterns proliferate and influence the behaviour at large. Thus strategy is often less the result of a conscious and formal process expressed as objectives, but more of collective actions that simply spread through. As they evolve through experiments new directions can be established and exploited, which indicate that it is important to have a climate within which a wide variety of strategies can grow and contribute to a good balance between internal variation and external demand (Mintzberg, 1989; Mintzberg, Ahlstrand, Lampel, 1998).

6. ACCEPTING AND ENGENDERING CHANGE

The evolutionary approach to strategy development requires responsibility for engendering change and opening up new possibilities. However, rapid and continuous responsiveness coupled to a minimum of organizational momentum emphasises a myopic and disorderly process. Learning and adaptation indicate that brilliance often does not come from foresight expressed in a carefully designed plan. War as a complex adaptive system requires the capacity and willingness to learn and adapt, which mostly come from qualities such as tolerance and commitment (Mintzberg, McHugh, 1985).

Learning and adaptation stand for trial-and-error and indicate that it is often more important to learn from failures than from success. Although failures are often costly and the temptation to bury and forget is traditionally large, some of the costs can be recouped and a thorough reflection can help hidden shortcomings to surface. Thus it is often better to make a sufficiently good decision in time than to make an excellent decision later, as it is often better to fire more shots than to start improving one's aim (McGill, Slocum, 1994; Kanter, 2002).

Murky battlefield lessons must be put into accurate and perceptive after-action reports in which reporting is consistently honest and the bearer of bad news is not punished. Individuals should be afforded the freedom to fail as only through failure is it possible to experience success. We have to strive for a constant improvement even if everything appears to be well at first sight. As an example Passchendaele was a disaster in World War I because of the *"combined effect of the [commander's] tendency to deceive himself; his tendency, therefore, to encourage his subordinates to deceive him; and their loyal tendency to tell a superior what was likely to coincide with his desires"* (Liddel Hart, 1938, p. 346; Mankins, Steele, 2006).

7. CONCLUSION

Structural inertia often prohibits detecting novel ways that might have the power to replace existing routines, systems and procedures. Emergent strategies assume that those closest to the frontlines know more than the remotely located headquarters, since traditionally “*staff information eludes comprehension because it is esoteric; line information because it is trivial*” (Feld, 1959, p. 18).

Learning and adaptation mean looking outside our own boundaries of knowledge. Mobilising this knowledge through various forms of interaction is important since it must be ensured that relevant knowledge finds its way to the unit that needs it most (Hamel, 1996; Lampel, 1998). Emergent strategy development might on occasion equal with the conduct of random experiments. However, it always requires the readiness to be exposed to the evolving interactions with the enemy and the willingness to learn from him. An evolutionary approach to strategy development emphasises less rationality and more common sense. It indicates strategic wisdom, which comes less as a result of a formalised intellectual knowledge backed by analytically written reports full with abstracted facts and figures, but stands for personal knowledge that comes from an intimate *sensing* of the situation. Emergent strategies reflect that the frictional, chaotic and complex reality of war forces us to accept surprise and situations of no choice. Thus learning and adaptation mean linking the present with the future through experience, rather than linking the past with the future through analysis (Mintzberg, 1996; Mintzberg 1987).

Key words: Clausewitz, strategy, emergence, self-organisation, learning, adaptation, biology, complex adaptive system

Kulcsszavak: Clausewitz, stratégia, felbukkanás, önszerveződés, tanulás, alkalmazkodás, biológia, összetett alkalmazkodó rendszer

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