# CRITICAL AND CREATIVE THINKING: ARE INNOVATION AND INITIATIVE WELCOME IN THE MILITARY?

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#### Introduction

The purpose of this paper is to discuss the direction in which the command philosophy of the Western militaries is moving. We live in a time of rapid change. The developed world has been living in an information society for some time now, the nature of post-Cold War conflicts seems to be different from previous conflicts, and since 11 September 2001, we have been facing a new and very serious enemy – international terrorism on a truly devastating scale. All of these factors influence the development of the military and pose new requirements for the command structures and arrangements.

This paper attempts to provide some insight into the factors influencing the development of modern armed forces. It begins with an outline of the nature of war, especially its unchanging features followed by a description of different command philosophies. The study then turns to the question of how the different aspects of modern warfare and the present armed forces influence the command philosophy used. An insight is provided through looking at the nature of joint planning, personnel policies, evolving leadership styles and the influence of modern technological developments. The article concludes with a summary and conclusions.

### The Phenomenon of War

Human history, the evolution of societies and their technological development have been closely interrelated and influenced by the need to achieve success and survive in armed conflict. So far it seems to be the permanent tragedy of human history and man seems to be unable to free himself from the menace of war<sup>1</sup>.

Nowadays, centuries later, the nature of war is still as described by Clausewitz in his famous book "On War". It is the realm of ultimate uncertainty.

<sup>&</sup>lt;sup>1</sup> **Hooker, R. D**. 2005. Beyond Vom Kriege: The Character and Conduct of Modern War. – Parameters, US Army War College Quarterly, June 22, 2005, p. 4.

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Almost three quarters of the factors on which action in warfare is based are wrapped in a fog of greater or lesser uncertainty<sup>2</sup>. It is highly ironic that of all human activities war most closely resembles a game of cards<sup>3</sup>. Battle is chaos on a grand scale, with chance playing an important role continually<sup>4</sup>. Chance makes everything more uncertain and interferes with the whole course of events<sup>5</sup>. After 2001 the enemy has also been changed, gone is the reassurance and safety of a well-known, predictable and easily-contemplated enemy. The conclusion is that, the individuals, units and formations have to be agile flexible and capable of responding to the unforeseen and unexpected<sup>6</sup>.

Presently, the conduct of war in the Western world seems to be changing. Modern democratic states employ extremely advanced means of waging armed conflict. Technology has increased the distance at which the targets may be effectively engaged, it has enhanced the precision and lethality of weapons used, and reduced the time needed to train for war. For developed and wealthy states, cutting-edge technology supports trend towards maintaining smaller, more professional, and more expensive militaries equipped with precision weaponry and networked sensors. However, there are other factors that are as crucial as technology to the outcome of armed combat<sup>7</sup>.

In addition, modern democratic states seem to have different war aims than they used to have in the past. Strategist Colin Cray asks with reasonable justification: "What defines success? Is it displacing Osama Bin Laden?" But anyway, all the solutions have to be politically and morally tolerable, he concludes<sup>8</sup>. This means that for commanders in the XXI century the options of using force are always restricted. Traditionally, an attack has been expected to lead to dominance over an opposing force, and the desired endstate of war has been the comprehensive defeat of the enemy. Yet even Clausewitz pointed out that the conquest of the whole territory of an opponent is not always necessary, and on the other hand – total occupation of his territory may not be enough<sup>9</sup>. The lack of desire to occupy the territory of an opponent is very visible in modern conflicts. It underlines the growing

<sup>&</sup>lt;sup>2</sup> **Clausewitz, Carl von** 1976. On War. Ed. and trans. Michael Howard and Peter Paret. Princeton, N. J.: Princeton University Press, p. 101.

<sup>&</sup>lt;sup>3</sup> Clausewitz 1976, p. 86.

<sup>&</sup>lt;sup>4</sup> **Clancy, Tom; Franks, Frederick M.** 1997. Into the Storm: A Study in Command. Kirkwood, N.Y.: Putnam Publishing Group, p. 129.

<sup>&</sup>lt;sup>5</sup> Clausewitz 1976, p. 101.

<sup>&</sup>lt;sup>6</sup> **Horn, Bernd** 2003. Complexity squared: Operating in the Future Battlespace. – Command and Control, Autumn 2003, p. 8.

<sup>&</sup>lt;sup>7</sup> Hooker 2005, p. 11.

<sup>&</sup>lt;sup>8</sup> Gray, Colin 2002. Thinking Asymmetrically in Times of Terror. – Parameters, US Army War College Quarterly, Spring 2002, p. 9.

<sup>&</sup>lt;sup>o</sup> Clausewitz 1976, p. 595.

importance of political settlement as the desired end-state of conflict. Militaries should, then, plan carefully and act flexibly to achieve such an elusive goal.

The Human Resource Management theorists state that our future strength, and often survival, will depend less on physical or financial assets and increasingly on our adaptation and lifelong learning<sup>10</sup> and because of the rapid technological advances the "chaos" of battle and "fog of war" can be presently managed only by very qualified personnel. The level of experience of personnel involved in conducting armed combat operations is crucial. It seems to be the reality of life that if one is not personally experienced in war, it is hard to understand what the actual difficulties associated with war are, and why a commander must have intellectual brilliance and exceptional ability to lead<sup>11</sup>.

#### **The Command Principles**

How does the commander fulfill his duties then? How can he lead and direct his forces under the conditions of utter uncertainty? To introduce the topic, I would like to make a brief review of command and control methods.

Using the typology suggested by Czerwinski, we can reduce the command philosophies to three basic options – command by direction, command by plan and command by influence<sup>12</sup>.

**Command-by-direction** is claimed to be the oldest method of leading forces. It is neither centralized nor decentralized, but highly commander-dependant. This method is the so-called "play with one card" approach, which means that if the commander is a genius we win, otherwise we lose.

**Command-by-plan** was implemented by Frederick the Great. He tried to plan every move in advance, relying on highly trained troops and strict discipline to carry out the (battle) scheme as ordered<sup>13</sup>. The most important legacy of that time for modern militaries is the tendency to do everything by the plan and to have highly centralized decision-making. 'If we have a plan, the plan can go wrong, if we do not have any plan, everything will go wrong', is the slogan reflecting the importance of a plan.

<sup>&</sup>lt;sup>10</sup> **Glass, Neill** 1998. Management Master Class. London: Nicholas Brealey Publishing, pp. 11–12.

<sup>&</sup>lt;sup>11</sup> Clausewitz 1976, p. 119.

<sup>&</sup>lt;sup>12</sup> **Czerwinsky, Thomas** 1996. Command and Control at the Crossroads. – Parameters, US Army War College Quarterly, Autumn 1996, pp. 121–132.

<sup>&</sup>lt;sup>13</sup> Creveld, Martin van 1985. Command in War. Cambridge, Mass.: Harvard University Press, p. 53.

**Command-by-influence** is the use of mission type orders (or *Auftrags-taktik* – the control-free method of command used by Germans in World War II). This method provides the commander's intent in broad terms and the command is decentralized. Uncertainty is devolved to the lowest level possible by encouraging a subordinates' initiative to use the opportunities provided by local situational awareness. The units must be self-contained, joint or combined-arms, and semi-autonomous.

# Modern Warfare and Militaries: Stimulating Innovation and Initiative?

#### **Joint Operations**

The fundamental goal of the joint planning process is to tailor in the best possible way the capabilities available for a given operation, and at the same time to minimize the risk of fratricide among participating forces. In terms of the command philosophies outlined earlier, the joint doctrine tends to fall into the category of commanding-by-plan<sup>14</sup>. The reason for such a categorization is the approach adopted in joint planning that presumes the existence of linear and tightly coupled systems. The 'linear'<sup>15</sup> aspect corresponds to the mechanistic approach used largely in engineering and the sphere of technology<sup>16</sup>. It means that inputs are proportional to outputs, everything is carefully pre-planned and the success depends on a detailed monitoring and control. The pre-planning is done using simplified reductionist processes. The reductionist analysis consists of taking large, complex problems, and reducing them to manageable chunks<sup>17</sup>.

How has commanding-by-plan weathered modern conflicts? During Gulf War I – one of the most successful wars fought after the end of the Cold War – General Schwarzkopf intuitively rejected the battle-by-formula approach taught at the US Army schools and practiced by US forces in NATO. His decision was based on the poor performance of the Army in Grenada while trying to conduct operations by checklist<sup>18</sup>.

<sup>&</sup>lt;sup>14</sup> Czerwinsky 1996, pp. 121–132.

<sup>&</sup>lt;sup>15</sup> "Linear interactions are those in expected and familiar production or maintenance sequences, and those that are quite visible even if unplanned. Complex interactions are those of unfamiliar sequences or unplanned and unexpected sequences, and either not visible or immediately comprehensible." Cf. **Perrow, Charles** 1984. Normal Accidents: Living with High Risk Technologies. New York: Basic Books, p. 78.

<sup>&</sup>lt;sup>16</sup> **Perrow** 1984, p. 78.

<sup>&</sup>lt;sup>17</sup> Czerwinsky 1996, pp. 121–132.

<sup>&</sup>lt;sup>18</sup> **Trainor, Bernard E**. 1994. Schwarzkopf the General. – U. S. Naval Institute Proceedings, May 1994, pp. 110.

Clearly, joint planning is an invaluable tool for establishing inter-service synergy. However, considering joint planning, one should remember that there is always the possibility to choose at which level one wants to see more certainty. If we locate it at the top to achieve superior control, it is possible to have it only at the expense of bigger uncertainty in the actual battlefield<sup>19</sup> in other words in the place where men will meet the enemy. Hence, continual innovation should be encouraged in order to develop the ability of personnel at all levels to react quickly to unexpected developments.

## Personnel Policies after the Cold War

The end of the Cold War brought along downsizing of armed forces in the developed world. The lack of a major threat made it impossible to justify the need for large forces and obtain the necessary political support for their funding.

The process of downsizing has only increased the tension that exists because of the pyramidal shape of the career path. Downsizing compels personnel to develop a perfect career record and to comply with the rules. Such an emphasis on service could actually transform preparing units for combat into a secondary task.

This danger is not new. Almost 30 years ago, during the Cold War, Gabriel and Savage pointed out that "up or out" (or the "zero defect culture")<sup>20</sup> might come as a serious drawback to an army's ability to be critical and innovative. This means that personnel are afraid to give their opinion and defend it, they do not dare to take the initiative as complying with rules and being an obedient subordinate opens up a safe road to the top. Thus there are reasonable grounds to argue that the military culture today, because of the downsizing, is diametrically opposite to the risk taking<sup>21</sup> and command-by-influence philosophy.

However, if a country does not belong to a "superpower" category and cannot project overwhelming military might against its foes, it needs capable and innovative leaders, because the uncertain and chaotic nature of

<sup>&</sup>lt;sup>19</sup> Creveld 1985, p. 274.

<sup>&</sup>lt;sup>20</sup> Gabriel, Richard; Savage, Paul 1978. Crisis in Command: Mismanagement in the Army. New York: Hill and Wang, pp. 86–88.

<sup>&</sup>lt;sup>21</sup> Israeli army slogan "Risk, Risk, Risk" – to gain initiative on the battlefield against superior enemy. Cf. **Yale, Wesley W.; White, Isaac D. and Manteuffel, Hasso E. von** 1970. Alternative to Armageddon: The Peace Potential to Lightning War. New Brunswick, N. J.: Rudgers University Press, pp. 149–150.

war described by Clausewitz<sup>22</sup> has not changed. The commander on the battlefield still faces the two most fundamental choices: risk immediate action into the unknown or wait for information that might never come, while in the meantime the opportunity to win the battle has been missed<sup>23</sup>.

Despite the need to be innovative, we seem to live in times where militaries tend to return to command-by-plan or command-by-directive philosophies. It is facilitated by the "zero defect" culture that has made fear of failure widespread<sup>24</sup> among service personnel<sup>25</sup>. The situation is made even more difficult to reverse because of the modern tendency to over-rely on technology.

The straw of hope can be found in the words of British strategist Liddell Hart who has claimed that force can always crush force, given sufficient superiority in strength or skill, but it cannot crush ideas<sup>26</sup>. Hence, as long as the idea of need for innovation in armies is discussed and developed, the potential of armed forces to cope with the modern unpredictable security environment can be increased dramatically.

#### Leadership: Toxic Leaders

Recent research has shown that the term 'toxic' is becoming increasingly omnipresent in discussions focusing on modern organizations. It has been connected with a particular style of management. Flynn has provided one description of a 'toxic manager'<sup>27</sup>: such a manager bullies, threatens, yells and his mood dictates the climate in an office – the 'toxic manager' is a backbiting and belittling boss from hell. The definition of a 'toxic leader'

<sup>&</sup>lt;sup>22</sup> "The war is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty (**Clausewitz** 1976, p. 101) at the same time, many intelligence reports in war are contradictory; even more are false, and most are uncertain." Cf. **Clausewitz 1976**, p. 117.

<sup>&</sup>lt;sup>23</sup> Yale, White, von Manteuffel 1970, pp. 149–150.

<sup>&</sup>lt;sup>24</sup> Research of the 12,500 Army personnel. Cf. Ulmer, Walter, F. 2000. American Military Culture in Twenty-First Century: A Report of the CSIS International Security Program. Washington, D.C.: CSIS Press.

<sup>&</sup>lt;sup>25</sup> **Ulmer** 2000, pp. xxi–ii; xv; 36–37.

<sup>&</sup>lt;sup>26</sup> Liddell Hart, Henry Basil 1991. Strategy: The Indirect Approach. New York: Penguin Group, p. 220.

<sup>&</sup>lt;sup>27</sup> Flynn, Gillian 1999. Stop Toxic Managers Before They Stop You. – Workforce, August 1999, pp. 44–46. Cited in: Reed, George E. 2004. Toxic Leadership. – Military Review, July–August 2004, p. 67. See on-line at:

<sup>&</sup>lt;a href="http://www.au.af.mil/au/awc/awcgate/milreview/reed.pdf">http://www.au.af.mil/au/awc/awcgate/milreview/reed.pdf</a>, accessed 20 October 2009.

more related to the military is a bit different<sup>28</sup>: a destructive leader who is focusing on a visible, short-term mission accomplishment.

Such a leader provides his superiors with impressive, articulate presentations and enthusiastic responses to missions. He does not care about troop morale, being arrogant, self-serving, inflexible and petty. These leaders are sometimes called "career-orientated persons" in the most negative sense. Thus one could connect the "zero defect culture" and "toxic leadership" as the latter could be seen as a response to the need to have a perfect service record and the support of superiors to stay in service or advance on one's own career path.

In both cases – be it in civilian organization or the military – toxic leaders are focused on serving their self-interest in the short-term and could actually be detrimental to the accomplishment of the wider mission of the organization. This circumstance has a particular importance to the military.

It is a historical fact that armies that promoted flexibility, creativity and innovation, and did not try to control everything from the top have been most successful on the battlefield<sup>29</sup>. Confidence and trust between the commanders and subordinates is crucial to the application of command-by-direction philosophy. Toxic leaders are in this sense counter-productive: they undermine trust, create stress, and promote negative values and hopelessness<sup>30</sup> among subordinates. Such toxicity between people can lead to tragedies even in peacetime. Major Kern has noted the importance of positive leadership and command climate in the cases of plane crashes<sup>31</sup>.

#### Leadership: Managers

The reclusion of the military and some other large organizations (e.g. business corporations and public administration) is a well-known fact. The traditional understanding of military affairs by the people from outside military structures is simplistic – in the military everything looks simple, the knowledge required from service personnel does not look remarkable, the strategic options seem to be so very obvious to everybody that in comparison

<sup>&</sup>lt;sup>28</sup> **Bullis, Graig; Reed, George** 2003. Assessing Leaders to Establish and Maintain Positive Command Climate. Report to the Secretary of the Army, February 2003, p. 2. Cited in: **Reed** 2004, p. 67.

<sup>&</sup>lt;sup>29</sup> Creveld 1985, p. 270.

<sup>&</sup>lt;sup>30</sup> **Reed** 2004, p. 68.

<sup>&</sup>lt;sup>31</sup> **Kern, Anthony** 1995. Darker Shades of Blue: A Case Study of Failed Leadership. See online at: <a href="http://www.crm-devel.org/resources/paper/darkblue/">http://www.crm-devel.org/resources/paper/darkblue/</a> darkblue.htm>; accessed 20 October 2009; **Reed** 2004, p. 70.

with the simplest problem of higher mathematics gives the latter an impressive scientific dignity<sup>32</sup>.

Therefore, the military leadership has always struggled to convey the detailed aspects of military affairs to civilians and get the necessary resources. While during the Cold War, the existence of an overwhelming threat helped to secure political support, the situation after the Cold War has changed considerably. It has become more difficult to justify defense appropriations and gain the support of politicians.

Such a situation – the scarcity of resources combined with the "zero defect" mentality – has given rise to a new type of military leaders. These are the managers, who are skilled in getting such needed resources for the military. Bland has said that "winning resources" has become an important criterion for promoting senior officers nowadays<sup>33</sup>. Bercuson has added that this attitude is supported by organizations. The managerial and political skills and covering of the back have become keys to getting promotion<sup>34</sup>.

#### The Impact of Technology

The latest decades have shown a tremendous development in the militarytechnological sphere and it seems to be continuing<sup>35</sup>. One outcome of the technological development has been the tremendous increase in the ability to collect, analyze, display and share huge amounts of data. The quantity of processed information has increased so much that the person has become the weakest link in the decision-making system<sup>36</sup>. It has brought along the growing over-reliance on communication technologies – we are already addicted to them. This could be the evolving "Achilles' heel" of Western militaries.<sup>37</sup>

<sup>&</sup>lt;sup>32</sup> Clausewitz 1976, p. 119.

<sup>&</sup>lt;sup>33</sup> Bland, Douglas L. 1999. Canada's Officer Corps: New Times, New Ideas. – The Profession of Arms in Canada: Past, Present and Future (Conference of Defence Associations Institute XVth Annual Seminar), Ottawa, 29 January 1999. See on-line at: <http://www.cda-sdai.ca/english-frame.htm>, accessed 15 March 2008.

<sup>&</sup>lt;sup>34</sup> **Bercuson, David** 1996. Significant Incident: Canada's Army, the Airborne, and the Murder in Somalia. Toronto: McClelland and Stewart, pp. 103–105, 112, 114.

<sup>&</sup>lt;sup>35</sup> **Starry M.; Arneson, W** 1996. FM 100-6, Information Operations. – Military Review, November–December 1996, p. 5; **Ryan, Michael** 2000. Battlefield Command Systems. Trowbridge, Wiltshire: Redwood Books, p. 12.

<sup>&</sup>lt;sup>36</sup> Thomas, Timothy L. 2000. Kosovo and Current Myth of Information Supe-riority. – Parameters, US Army War College Quarterly, 10 March 2000, p. 13+. See online at: <a href="http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&paper=471>">http://ics.leeds.ac.uk/papers/vp01.cfm?outfit=pmt&folder=4&papers/vp01.cfm?outfit=pmt&folder=

<sup>&</sup>lt;sup>37</sup> **Starry, Arneson** 1996, p. 6; **Toveri, Pekka; Välivehmas, Heikki** 2000. Future Operational-Tactical Level Warfare. – Finnish Defence Studies, 13. Helsinki: National Defence College, p. 14.

What are the implications of such an extensive reliance upon information systems? The most general implication seems to be that by allowing technological developments to dictate the structure and functions of command, we will subjugate the people in charge to technical systems and that could actually narrow the overall understanding of what the command is for!<sup>38</sup>

It is not only the advanced technology that leads to victory and fulfilling the mission. Whereas it is an important aspect of warfare, one must grasp its limitations and have contingency plans for the case of technical breakdowns.

Therefore, it seems imperative to increase the creativity of personnel in peacetime<sup>39</sup>. The staff need to practice not so much what they have to do in war, but how to learn quickly what to do when the time comes<sup>40</sup> or when something unexpected happens. We live in times when many paradigms are sent to the dustbin and militaries have to adapt to a new environment and missions. It takes a considerable effort and constant analysis along the road. Liddell Hart has said that the most difficult thing with a military mind is not getting a new idea in, but getting an old idea out<sup>41</sup>. This is an important statement, especially in times when quick improvisation and innovation may be decisive in tackling successfully emerging asymmetrical threats.

#### **Summary and Conclusions**

In this short paper I have outlined some very basic aspects of war and command philosophy and compared them with the development of modern warfare. Whereas the nature of armed conflict has changed a little – there is still a huge amount of uncertainty and chaos – the post-Cold War militaries seem to move in the direction that little supports the most flexible and creative of command philosophies, command-by-influence. Joint planning, technological developments, personnel policies and evolving leadership styles in response to shrinking budgets and downsizing seem to push the military towards a much stricter and centralized command structure.

Is this a valid path considering the increasingly unpredictable security environment? It is difficult to say with absolute certainty on the basis of what I have presented. On the one hand – creativity, innovation and

<sup>&</sup>lt;sup>38</sup> Creveld 1985, p. 275.

<sup>&</sup>lt;sup>39</sup> Friction is the only concept that more or less corresponds to the factors that distinguish real war from war on paper (**Clausewitz** 1976, p. 119).

<sup>&</sup>lt;sup>40</sup> Mandeles, Mark D; Hone, Thomas C.; Sanford, Terry S. 1996. Managing "Command and Control" in Persian Gulf War. Westport, Connecticut; London: Praeger, p. 6.

<sup>&</sup>lt;sup>41</sup> As quoted in: Clancy, Franks 1997, p. 129.

freedom of action are the keys to deal with sudden changes of situation or exploit resources to the maximum. On the other hand – some military activities may require the authorization of the higher leadership of the country to be carried out.

Where is the reasonable balance? It is not clear yet, but one thing has always been clear, that it has always taken creative, innovative and daring commanders and leaders to win the battles and solve the security problems of their nations.

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