RHYTHM AND TEMPO OF WARFARE – A COMPARATIVE READING OF A SAMURAI CLASSIC AND NATO PLANNING GUIDELINES

JAN HANSKA

Kirjoittaja on yleisesikuntamajuri ja YTT ja työskentelee Puolustusvoimien Tutkimuslaitoksessa

TIIVISTELMÄ

Nykypäivän yhteiskunnan kiihtyneessä rytmissä ajan merkitys kaikissa toiminnoissa, myös sodankäynnissä, on korostunut ja pyrimme voittamaan, säästämään ja manipuloimaan aikaa kaikessa mitä teemme saadaksemme aikaan enemmän. Aika on paitsi neljäs ulottuvuus, myös selkeästi resurssi, jonka hyödyntäminen koetaan tärkeänä kaikilla elämänaloilla.

Tämä artikkeli tutkii, millaisena ajan merkitys sodankäynnissä ilmenee kahden hyvin erityyppisen tekstin sisältöanalyysina. Toiseksi tekstiksi on valittu Miyamoto Musashin samurai-klassikko Go Rin No Sho ja toiseksi NATO:n Comprehensive Operations Planning Directive (COPD). Tekstit ovat kaikin puolin hyvin erilaisia luonteeltaan ja kirjoitettu erilaisina aikakausina vastaamaan erilaisiin sodankuviin. Kuitenkin molemmissa niissä käsitellään aikaa ja miten komentajan ja strategin tulee käyttää aikaa operaatiotaidossaan ja tämä on valittu tulkinnallisesti niitä yhdistäväksi teemaksi.

Tämä artikkeli tuo esiin eroavaisuuksia esiteollisen ajan ja nykyisen verkottuneen yhteiskunnan sodankäynnin tapojen välillä, mutta korostaa, että ajan merkitys on säilynyt pohjimmiltaan aivan yhtä tärkeänä.

Artikkelissa kuvataan, kuinka Musashin rytmin ja sen hallinnan käsite rinnastuu pitkälti COPD:n korostamiin aikatekijöihin, mutta joiltakin osin on filosofisempi ja syvällisempi kuin myöhempi tulkinta. Jos sotataito todellakin on taidetta (*Art of War*) meidän on syytä tarkastella millainen sinfonia saadaan aikaan yhdistämällä eri vaikuttamisen keinoja siten, että sodankäynti tapahtuu tiettyä rytmiä noudattaen.

Rytmin merkitys sodankäynnin aikauttajana on käytännössä unohtunut vuosien varrella operaatiotaidon kehittyessä, mutta sen merkitys on kiistämätön. Aika itsessään on merkityksetön tekijä operaatiotaidossa, sillä se yhdistyy aina siihen, mitä kyseisessä ajassa saadaan aikaiseksi suunnittelussa tai toteutuksessa, liikkeessä tai vaikuttamisessa - eli näiden asioiden rytmissä ja synkronoinnissa. Jotta sen merkitystä tietynlaisena sodankäynnin metatason tekijä voitaisiin arvottaa oikein, tulee sen tutkimisen olla aktiivista ja kokonaiskuvan saamiseksi ymmärtää perinpohjaisesti kuinka operaatioita ja taisteluliikkeitä tulee aikauttaa ja millainen rytmin operaatioille on valittava, jotta eri tekijöiden yhteisvaikutuksesta synergian myötä tulisi enemmän kuin osiensa summa.

PRELUDIO – SETTING THE RHYTHM

In this article we take two military texts from two completely different cultural contexts as far removed from each other as is humanly possible. We contrast the classic samurai doctrine Go Rin No Sho or "The Book of Five Rings" by Miyamoto Musashi (1584 – 1645) with the Allied Command Operations Comprehensive Operations Planning Directive COPD Interim V1.0 issued by Supreme Headquarters Allied Power Europe in Belgium, henceforth referred to in text and citations as COPD with corresponding page numbers.

Naturally since the aforementioned is a philosophical work of thirty-something pages and the latter a doctrinal text of over four hundred pages they cannot be considered to answer to the same needs of the aspiring military minds. Musashi and the other samurai were men of few words because they understood the importance and impact of words (Tokashi 2004, p. xvi) while today we are more eager to squander them. Nevertheless, the thoughts of Musashi continue to influence not only military but all kinds of strategic thought in Japan. - including business. (See. e.g. Tung 1994) Therefore we shall juxtapose the two texts by choosing one topic they both treat as important and compare their ideas of time and temporality in warfare.

Mushashi was a philosopher of war and this is not an expression to be used lightly. While certain classical military theorists have attempted to bind the complexity of art of war into mathematical and

geometrical equations (see e.g. Du Picq 1987, p. 166; Jomini 1992) and other approaches using methodology from natural sciences (Fuller 1926; Triandafillov 1994, p. 165) are abundant, perhaps in the western context Clausewitz is the closest example to a philosophical Still, even Clausewitz approach. attempted to create a synthesis of his philosophy to be employed. Clausewitz was a practical philosopher of war. (Palmgren 2014) Musashi's writings only point the reader in the right direction and to truly understand his teachings would require thousands of hours and days. I fully acknowledge my difficulties in understanding the nuances of Musashi's philosophy because due to development of language the ideas and expressions are challenging for even the Japanese to understand. (See Tokitsu 2004, p. ix-x) But in a way there is a similarity between our contemporary conjunction and the time of Musashi. We live in a time in which warfare is reconfigured anew since the period of mass armies and total war supposedly is bygone. (Toffler 1995) Musashi lived in the final stages of feudal wars in Japan at a time when the society was about to stabilize. In this sense, both texts have been produced during a time of drastic change in warfare.

Musashi lived in feudal Japan of late 16th and early 17th century and wars had a different outlook from contemporary warfare. Whether combat was between two men or two armies the chain of command was short and the swordsman or the general was able to lead his troops personally and issue commands rapidly. In

antiquity battlefields were smaller, spaces more constricted and men easier to lead since they fought in groups close together. (von der Goltz 1914, p. 34; du Picq, 1987, p. 124-126) Leadership was immediate and reactive. The entire idea of COPD is preparation beforehand. The purpose is to create plans for battle in due time to allow subordinate commanders to initiate and complete their respective plans and preparations. (COPD 3-78) The aspect of timeliness in command is crucial in both texts but it is generally emphasized differently. The idea of "fast track decision making" (FTDM)(4-19 and 4-33) always was a part of the way of the warrior, but the idea of what is fast is totally different in today's armies. Despite the quick operability and transportability of the troops of today the cumbersomeness of the huge modern armies do not allow for the same simultaneous decision-making that was at the disposal of Musashi.

If the FTDM is chosen as the way to proceed, one of the things involved in being quick to plan is to "conduct hasty planning" to adhere to the situation and mission requirements. (COPD 4-19) For Musashi even the idea of "haste" was an abomination. There was the correct pace and rhythm for every activity. Most of Musashi's work revolved around the concepts of "rhythm" and "timing". Mushashi argued that the "warrior's is the twofold Way of the pen and sword, and he should have a taste for both Ways." (Musashi 2002, p. 3) We should not be deceived by the drastically altered context of our networked societies from those of feudal Japan. Even if technology has

changed the way we live our lives the essence of warfare as human interaction remains unaltered. Even if it often seems like the Way today is that of the drone and the PowerPoint, the art of war and its practitioners still have to answer the same dilemmas. Fighting a war and writing about it are two different things and the art of combat is about acquiring a capacity for sensory-motor reactivity beyond the reach of mental reflection. In other words, intuitive movement and comprehension are valuable skills of a soldier without lengthening the timegap between perception and reaction. (Tokitsu 2004, p. xiv-xv) Nevertheless, this is what western theorists at least from John Boyd onwards (Coram, 2002) have tried to emphasize. Keeping rhythm means avoiding cessations of activity.

In the form it assumes, war is inescapably a reflection of the societies waging it. The feudal and agrarian Japan revolved with different pace and rhythm that the dromologic information societies of the 21st century. (Virilio 1986) Even if the speed of actors and events in warfare has escalated from the muscle-produced pace of the agrarian society into practically the speed of light that limits us today, the meaning of time remains unchanged. Elevated speed means doing more in the same amount of time consumed. It is a continuous lament that there simply is no time to act in warfare. This despair already peaked at the dawn of the missile age. (Borden 1946; Brodie 1946 and 1959) But is the ultimate limit of lightspeed the barrier warriors of today have to struggle against, or is the practical limit

still set by human perception and reaction time? While COPD attempts to master temporality by being faster and faster, Musashi argues for timing one's actions to a suitable rhythm.

There are fundamental differences in the texts since the COPD planning process responds to strictly operational needs with the focus of "operational" situated in the grey area between tactics and strategy. Musashi wrote about "strategy" but his idea of what strategy dealt with ranged from the skill of an individual swordsman to the handling of entire armies - the "Way" was the same. "If you master the principles of sword-fencing, when you freely beat one man, you beat any man in the world. The spirit of defeating a man is the same for ten million men. The strategist makes small things into big things, like building a great Buddha from a one foot model." (Musashi 2002, p. 5) To put it simply, for Musashi, "Strategy is the craft of the warrior. Commanders must enact the craft and troopers should know this." (Musashi 2002, p. 3) Indeed Musashi would have wished to employ his way more often in large battles of strategic level since he believed he had found a way applicable to all spheres of life. (Tokashi 2004, p. xx)

While the perspectives of the texts are different and they are aimed for bringing resolutions to essentially different types of wars the fundamental understanding of the importance of time and timing are present in both books. This makes their comparison an interesting intellectual experiment. Both concern themselves with the same dilemma of temporality but

address it with different terminology. The simpler shape of armies and ontology of warfare in Musashi's time encouraged him to use the expression "rhythm" to include everything connected with timing. This by no means implies that the concept was shallow – indeed it was a deep and philosophical theoretical construction. It was not meant to be comprehensible after a quick reading, but only after a lifetime of study in bushido, the way of the warrior. Rhythm enabled strategy to work.

COPD seems to comply with what Fuller demanded by arguing "to economize time in action will become the soul of every plan." (1943, p. 15) In COPD the idea of the entire comprehensive planning process is to manage time in a way where not a moment is lost. There are numerous expressions and concepts that highlight a single aspect of what Musashi labeled together under the unifying concept of rhythm. Still, I argue, that the whole idea of rhythm has been lost. Tempo, operational pauses, sequencing – all these are components of rhythm but as in many other things the sum is greater than its parts. COPD talks about synchronizing and rhythm can bring about synergy, when all these timerelated issues are unified by rhythm. This is something to be addressed in the course of the upcoming pages.

AD LIBITUM — THE COMMANDER IN CHARGE OF EVEN THE PROCESS

Musashi wrote his book as guidance to all aspiring strategists to help them perfect their mastery of their chosen trade. Even if COPD provides guidance to the planning staff on all levels, the ultimate purpose of the entire process is to provide a framework to help commanders. They are supposed to produce combinations of forces, space, time and information effectively and COPD as guidance helps them order their thoughts and understand what conditions are needed for success in campaigns and operations. (COPD A-1)

While at first glance the emphasis on the process itself takes center stage in the pages of COPD, it nevertheless has been written with the intention of enhancing operational art and making sure that it is applied throughout the operations planning process. The commander is the main "artist" since he has the responsibility to formulate the overarching idea and intent of the operation. The commander keeps the end-state in his mind, but the path there is constantly reconfigured, since it cannot be set too far in advance. (Moltke 1993, p. 45-46; Jomini 1992, p. 114) He envisages how the operation will unfold and ultimately determines how tactical use of forces is linked to the achievement of operational and even strategic objectives. And, ultimately the commander is in charge of "designing ways to achieve the end-state with available means and acceptable risks."(COPD A-2) The commander is the centerpiece of COPD and the staff, especially the planning staff, is relegated to its proper place as his instrument.

One of the primary means for the will of the Commander to be manifested in COPD is the "operational design" that provides a conceptual overview of the entire operation or campaign. The purpose of the operational design is initially to communicate the vision of the Commander to subordinate planners thus providing a common basis for developments and actions. From the perspective of this article the main function of the operational design is the "synchronization and coordination of the campaign over time." (COPD 4-45)

As a whole, COPD attempts to emphasize that the entire process of managing the battle from its planning phase to the end is "driven by the Commander" (COPD 4-1) Yet in all matters of providing guidance as to how the planning should be conducted, the system is rigid. Even if the COPD occasionally resorts to almost philosophical measures as in claiming that "planning is a combination of process and art" (COPD 4-1), the aspiring commander or staff officer in search of assistance may soon discover that process is the primary driver. As soon as it is set in motion, artistic measures diminish and there is a risk that the Commander is reduced from a decision-maker almost to a chooser from options churned out by the process and offered to him.

Even if the COPD recognizes that in each headquarters doing the planning the circumstances are different, guidance varied, and time and information constricted, the idea of each Commander's "own way and style" may not be able to blossom. Somehow, supposedly, "intuition, experience and military judgement remain paramount" (COPD 1-3) The risk is that the ultimate product

of the process through automated phases may resemble something created by the "stereotyped brains" and "military monks" that are the enemies of operational art. (Liddell Hart 1927, p. 182; Fuller 1923, p. xii) If the commander is not a proper strategist in the way Musashi described, the process may take control.

The COPD is not able to create a plausible balance between the importance of freedom and the rigidity of the process and the two remain juxtaposed. "Each commander will approach the problem in his own way and style." (COPD 4-1) Yet the military mind in general is not accustomed to being given ideas or possible pathways along which to proceed. Lesser military men thrive with orders and seek to employ the method exactly as it has been issued. This is a huge problem with any guideline and labeling it a "directive" does not actually open up vistas of imaginative measures. The "COPD, nevertheless is not an end in itself, but merely a tool" and should be "used to guide rather than slavishly followed." (COPD 1-3) All too often the process itself dictates the final product making it unimaginative. Then, again, a doctrine should not be too narrow, since it would only serve to confuse. (Svechin 1992) The commander has to have room to extrapolate.

Allegedly the COPD as a process is created to provide the "necessary tools to fully appreciate all elements of the most complex crisis and produce high quality operations plans." (COPD 1-3, italics mine) Practically just after this requirement there emerges an almost

complete nullification of what had just been written since "the detail provided in the COPD must not be mistaken as generating a requirement for a complex and detailed plan." (COPD 1-3) This is all too typical of military plans. At the same time they should be employable in the most complex contexts imaginable but should be able to be written in a short and simplistic manner. Having a cake and eating it is something only the military mind seems to be certain of accomplishing.

ADAGIO ACCELERANDO - ACCELERATING SPEED OF WARFARE

While the COPD attempts to provide a guidebook for the efficient planning of operations and suitable to use even for those with little experience since it provides step-by-step guidance on how to proceed, Musashi's stand is different. "Step by step walk the thousand-mile road. Study strategy over the years and achieve the spirit of the warrior. Today is victory over yourself of yesterday; tomorrow is your victory over lesser men." (Musashi 2002, p. 16) Musashi himself was no exception to the rule of having to work hard and ceaselessly to understand strategy. He had his first duel at thirteen and before his thirtieth birthday had remained unconquered in sixty duels. At the age of thirty he realized that he did not master strategy and "after that I studied morning and evening searching for the principle, and came to realize the way of strategy when I was fifty." (Musashi 2002, p. 1) After thirty Musashi's focus shifted

and the rest of life exhibited less personal matches and he began to look beyond bouts to conflicts or a larger scale. (Wilson 2004, p. 63–64)

Out of the five rings or elements in Musashi's text the third -fire- is about fighting and his argument is that "the spirit of fire is fierce, whether the fire be small or big; and so it is with battles. The Way of battles is the same for man to man fights and for ten thousand a side battles." (Musashi, 2002, p. 5) Actually, to be faster and to master timing is interestingly easier in the context of large armies than individual combat. "What is big is easy to perceive: what is small is difficult to perceive. In short, it is difficult for large numbers of men to change position, so their movements can easily be predicted. An individual can easily change his mind, so his movements are difficult to predict." (Musashi, 2002, p. 5) This is intriguing since Musashi clearly argues that the bigger the force one wields, be it an entire army instead of a long sword, the less important is being fast in action and thus win time, since the relative amounts of time consumed during execution are so big already. What matters is the time consumed in making the decision to act. In a sense, then, the aim of the COPD is the same as that of Musashi, who argued that "the essence of this book is that you must train day and night in order to make quick decision." (Musashi 2002, p. 5) COPD aims for the same goal, but through different means. COPD wishes to streamline the process so, that it would churn out decisions quicker and quicker almost automatically. Musashi calls for

quick and almost instinctive decisions based on training and practice so that one can act informedly on a spur of the moment.

The idea that Musashi saw his "strategy" to be applicable to all levels of military art from a duel to a clash of armies may seem laughable at first and serve almost as an incentive to cast him aside as useless to modern operational art. How could a swordsman operate according to same principles as huge conglomerations of men? How could their actions adhere to the same ways of thought? Nevertheless this was the way Clausewitz perceived warfare as well. "War is nothing but a duel on a larger scale." (Clausewitz 1989, p. 75) The essence of warfare remains the same on all levels. But large scale is important for Musashi as well, since "if you do not look at things on a large scale it will be difficult for you to master strategy." (Musashi 2002, p.8.) If it is impossible to accept the logic of Musashi, how can we unquestioningly agree that the COPD "is applicable to all operations planning activities at the strategic and operational levels of command within the NATO Command structure." (COPD 1-4) After all, NATO is a complex entity and its command structure is very multi-leveled and hierarchical.

Musashi's text is short but full of meaning. We should not value a huge tome over a small leaflet based on length alone. Ludwig Wittgenstein's "Tractatus Logicophilosophicus" was despite its shortness his magnum opus. And he argued that while what he wrote was true the most important things were

not included in the text due to falling a long way short of what was possible to accomplish. (Wittgenstein 2001, p. 3–4) The same principle applies to Musashi. Repeatedly he instructs the reader; "If you want to learn this Way, deeply consider the things written in this book one at a time. You must do sufficient research." (Musashi 2002, p. 5)

In feudal Japan the warriors were a class of their own, constantly busying their minds with strategy and preparation. The COPD works in a situation where planning is initiated with requirements for necessary force generation and concentration in order to be able to engage in combat as soon as possible. (4-33) The forces of today are so multifaceted that their sheer complexity lays a burden on the intellectual abilities of the commanders on all levels. There are differences in command of large and small units and time and space have a different meaning. (Moltke, 1993, p. 130) Yet one of the objectives of the commanders is to be able to provide their subordinates and planners with sufficient clarity and logic to enable their planning and ensure the quality of the practical orders that emerge as the end product of the process. (COPD A-1) In a way the skill and intellect of the commander and the operational design management of the staff are joined together to optimize the final product.

In our globalized world even the wars take place on a global scale. – Or, at least, that is the nature of those wars COPD was created to serve. NATO forces are in almost all cases multinational and deployed elsewhere than the countries

of their origin. The forces used, thus, are more heterogeneous than traditional armies and the COPD as a process is an attempt to synchronize their internal proceedings and enable them to plan and execute operations adhering to the same principles. Even this is a huge requirement but the COPD attempts to go yet a bit further, since in its opening words it states that in an "increasingly complex world, peace, security and development are more interconnected than ever. This serves only to highlight the need for close cooperation and coordination among international organizations and the requirement that they play their respective, complementary and interconnected roles in crisis prevention and management." (COPD 1-1)

The COPD then wishes to take into account all other actors working in the crisis area. This is not to say that the other actors would in any way be using the COPD, but the NATO troops have to be able to incorporate their overlapping goals and activities into their own. In a sense all other actors in the crisis area are conditions the COPD must take into account and, if possible, manipulate and guide their activities so that all possible benefit could be squeezed out of them.

In the age of Musashi the feudal warlords went to fight their wars only with professional soldiers. This is not all so different from today, except that the "grunts" are a far cry from the samurai who chose war as their life vocation. Partially the difference is created by the fact that the samurai were more passionate about their vocation as well as their honor and

as warriors attempted to hone their skills to perfection. Mostly the difference comes from the fact that in ancient times the warlords were able to dictate the ways and means used in waging the war. Their actions were not so constrained by political decision-making, since they decided on policy as well. The generals of today operate under tight political control and have less freedom of execution. (Moltke 1993, p. 36, 44) If permission for action has to be obtained elsewhere and if the general is not "omnipotent" on the battlefield in regard to his own troops, the rhythm he has to abide to is not his own. This situation requires thorough planning. The permission to act has to be obtained early enough so that when the most opportune time comes or situation so demands, the general is able to initiate action in harmony with his own preferable rhythm.

In many cases in the wars of history the systems and structures of command were inadequate to respond to changing situations. Once the force of his troops were unleashed into battle, or even prior to that, when a marching order was given to create pre-battle troops concentrations, the possibilities to issue further orders or change existing plans was severely curtailed. Drills were instituted and troops were taught to march in cadence. In the battlefield drums, flags and horns were used to issue orders and when the troops were dispersed before entering the battlefield messengers on horseback were the quickest means to dispatch orders. (De Saxe, 1985, pp. 2020-203) Rhythm set the pace of battle.Modern

systems of communication have made it possible to issue and relay orders to subordinate commands practically without delay. Thus it is important to have similar flexibility and quick response in the planning process to react rapidly to altered conditions. Plans have to be amended and adjusted during the entire phase of execution that can last for years.

As paradoxical as it may sound, in the age of Musashi and "agrarian warfare" in general the time allocated for fighting a war was shorter. This sounds utterly illogical, but is valid. As COPD states, "Crises are dynamic and the planning process is iterative, influenced and crafted by the factors described earlier. Throughout the planning and execution process, there must be a continual review process to update the design, plan and execution of an operation." (COPD 1-3) A strategist of feudal Japan was not required to be so thorough.. The wars were less dynamic than those of today. On occasion they lasted much longer. We can use the European Thirty Years War as a example. But when we analyze the war as a sequence of wars of battles it becomes immediately apparent that war was not a causal continuum of action-reaction throughout the entire 30 years it lasted. (See. e.g. Parker 2006) We could rather say that the majority of those years were time of peace, interrupted on occasions by violent hostilities. Even when the war was heated, usually the cycle of seasons forced a pause on actual fighting. This usually commenced at the start of winter, only to let fighting resume with restored vigor as spring came about. (see e.g. Machiavelli

1965) In the conflicts the COPD was created to handle the operations continue ceaselessly from the moment troops enter the operations area to the time they are evacuated while the intensity of the conflict may slacken considerably for lengthy periods.

ANDANTE NOT PRESTISSIMO – NATURAL RHYTHM OR ELEVATED PACE

The approach represented by the COPD is mechanistic. It portrays the military decision-making system as an apparatus that produces results. For Musashi, "the Way of strategy is the Way of nature. When you appreciate the power of nature, knowing the rhythm of any situation, you will be able to hit the enemy naturally and strike naturally. All this is the Way of the Void." (Musashi 2002, p. 6) The juxtaposition of a natural rhythm and an artificially created one is evident, and likely to lead to different outcomes. An artificially created tempo or rhythm can be quickened or slowed at will, but natural rhythm dictates the tempo. The rise and fall of the tides, the cycle of seasons, these rhythms cannot be altered and the human and the warrior is wise to abide to their demands and seek to find a similar rhythm in both himself and warfare.

One must hold true to one's own rhythm. The tempo may be increased or slowed to counter the rhythm of the enemy but the enemy is not to be allowed to dictate the rhythm of battle. One must hold the initiative. When fighting commences one must get acquainted to

the enemy, time movements and actions and, "according to the enemy's rhythm, move fast or slowly." (Musashi 2002, p.29) This period should be spent in observation of the enemy's rhythm and by adjusting to it, learning it. This is a passive part of the battle and a prelude to the active part. Commencing the attack is different. "If you attack quickly and thoughtlessly without knowing the enemy's spirit, your rhythm will become deranged and you will not be able to win." (Musashi 2002, p. 29) One must not be too quick but being slow is just as hazardous. To interpret Musashi's meaning it is not sufficient to say that should not be too quick or hasty. The strategist acts at the right moment, with immaculate timing and appropriate speed without haste. (Musashi 1995, p. 99)

One must simply not strive for excessive speed. (Patton 1947, p. 349) "Speed is not part of the true Way of strategy. Speed implies that things seem fast or slow, according to whether or not they are in rhythm. Whatever the Way, the master of strategy does not appear fast." (Musashi 2002, p. 29) When someone looks speedy, when something occurs faster than usually, this implies that there is a dissonance in the rhythm. The appearance and the essence are two different things and if something seems excessively fast, it usually is. Whoever masters strategy becomes rapid in his actions, reactions and decisions, but he seems relaxed and controlled to the outside observer. There is no haste in his movements and they are performed naturally. This is because he follows a rhythm of his own. In those circumstances

even quick action looks, and indeed is, controlled. When something happens with accelerated speed, the activity may be uncontrollable by the mind behind it.

Musashi compares battle to a dance to illustrate how slow or fast rhythms cause difficulties. "Accomplished performers can sing while dancing, but when beginners try this, they slow down and their spirit becomes busy [...] very skillful people can manage a fast rhythms, but it bad to beat hurriedly. If you try to beat too quickly you will get out of time. Of course, slowliness is bad. Really skillful people never get out of time, and are always deliberate, and never appear busy." (Musashi 2002, p. 29) Timing one's actions is therefore tricky. If one is too slow, the spirit becomes busy and the mind is too restless to produce correct actions and decisions. If one is too fast, the rhythm will not hold and likewise the mind is too busy since it cannot follow the pace and "a fast busy spirit is undesirable." (Musashi 2002, p. 29) What is desirable, on the contrary, is to influence the enemy and make him act too rapidly or slow him down excessively and wait for the moment to take the initiative. "When your opponent is hurrying recklessly, you must act contrarily and keep calm. You must not be influenced by the opponent." (Musashi 2002, p. 29)

Ever since the dawn of the age of mechanized warfare the art of war has focused on infinitely accelerating the pace of one's operations and by being quicker than the enemy, stealing his time and freedom for action. (See e.g. Simpkin 1985, Hanska 2013) Musashi did not advocate being faster but adhering to the

natural rhythm. Rhythm is the heart and soul of battle. "Observing the enemy's spirit, we can make him think, "Here? There? Like that? Like this? Slow? Fast?" Victory is certain when the enemy is caught up in a rhythm which confuses his spirit." (Musashi 2002, p. 23) The idea behind Musashi's strategy is to disable the enemy from adhering to his preferred rhythm. To choose a suitable rhythm for one's own activities that is precisely the opposite rhythm from the one the enemy has chosen is the key to victory. If the enemy is fast, one must be slow to counter him and vice versa. One should not abide to the rhythm of the enemy but hold fast to one's own. The objective is to break the rhythm of the enemy forcing him either to accelerate his pace or slow it down to adopt the rhythm one has chosen for himself. (Musashi 2002, p. 23) Musashi views battles of all scales more as mental contests. "You must move the opponent's attitude. Attack where his spirit is lax, throw him into confusion, irritate and terrify him. Take advantage of the enemy's rhythm when he is unsettled and you can win." (Musashi 2002, p. 27)

In terminology and purpose the closest the COPD gets to Musashi's idea of rhythm is when it discusses the development of Concept of Operations (CONOPS). There are four criteria for evaluation of the success of the CONOPS and while all of them are directly concerned with time and temporality, only the first criterion seems to discuss rhythm. It argues that, "joint actions are synchronised in time and space and harmonised with cooperation relevant

national and international actors to create operational effects that set decisive points/decisive conditions." (COPD 4-52)

Even the expressions chosen create connotations to rhythm and I argue that in understanding the operational art even today one must be able to conduct his campaign adhering to a certain rhythm. If we cast aside the idea of the art of war being a huge landscape painted with blood - a kind of large-scale real-life Guernica created by the cubist generals and marshals of the two world wars - and consider it as a masterpiece of a composer, this perspective may provide us with insights. War as either art or science has not been properly defined. (Fuller 1926) Treating it not as a sculpture or a painting but rather as a symphony provides us a new perspective and alternative paradigms.

In today's world the time-factor in praxis is different from the age of Musashi, but on a philosophical level the meaning remains unchanged. As Clausewitz wrote, "like everything else in life, a military operation takes time." (Clausewitz 1989, p. 597) In contemporary warfare, with its elevated pace things still take their time, but the amounts of time consumed are different. Now as always, every action still takes its time and occurs at a certain moment in the flow of time. COPD states this as if everything today were different. It argues that "ever more effective means of transport, communication, multi-lateral agreements and political arrangements" of the globalized world have "led to the need to act and react rapidly. Time has therefore become another essential element of the

ever more complicated decision-making process." (COPD 1-1)

I disagree. The idea of the "need to act and react rapidly" has always existed. The dilemma here is rather one caused by the size of the actors. When the blade of a katana was swung towards the samurai, he had to react instantaneously. While in the age of Musashi the pace an army could produce was set by the maximum velocity human on animal muscle to propel it onwards. Today units converge faster and a full-scale joint operation can be executed at a pace Musashi would have considered surreal. The ability to communicate without a second's delay has burdened the commanders with the need to create such decisions that can be executed directly. In the age of Musashi a troop contingent could be ordered to move to a battlefield without a clear picture of its deployment in mind. The amount of time used in footmen or riders delaying the message and the time taken by the troops in moving to the designated location could be utilized in planning their future actions. Today, in the best of conditions, NATO forces are able to inflict some kind of damage on a designated target in a timespan of a few minutes. Orders have to be formulated differently. In that sense, then, the decision-making process has become more complicated out of necessity. Today, time has to be used in decision-making to avoid issuing incomplete or even counterproductive orders, but the problem is caused not only by the increased speed of warfare but rather by the complexity of the forces used in waging the war on both sides.

When it really comes down to setting the pace for the fighting Musashi and COPD have the same leading idea but discuss it with different terminology. When Musashi wrote about "rhythm" the idea corresponds at least partially with what COPD labels "tempo." For Musashi the strategist has to follow his own rhythm but in COPD the idea of "operational tempo" requires controlling "the timing and tempo of operations with the goal of remaining at least one step ahead of an opponent to gain and maintain the initiative." (COPD A-20) Still, there is a difference, since Musashi's rhythm is even more comprehensive. His strategist does not necessarily have to be ahead of his opponent. With his superb control of his own optimal rhythm he is able to respond to the actions of the enemy.

Musashi's rhythm is something the strategist attains with careful study of his art. The tempo of COPD is "the rate or rhythm of activity relative to the opposition." (COPD A-20) Tempo is to be found within tactical engagements and battles and between operations and enables for the troops and their commander to make the transition from one operational posture to another. (COPD A-20) This means a transition from the defensive to the offensive when time to do so is deemed right by the commander. As Napoleon wrote, "the transition from the defensive to the offensive is one of the most delicate operations in war." (1987, p. 62) Furthermore, the commander is supposed to anticipate actions of the enemy and prepare himself and his troops well in

advance. Staying one step ahead requires anticipating future outcomes and while this is a necessary skill, it is something that no-one can guarantee to be able to succeed in, no matter how thoroughly the planning process is carried out.

SINFONIA OR ARPEGGIO – MASTERING TEMPO ACCORDING TO COPD

COPD revolves around the "operational implications of time, space, forces/actors and information" (COPD 4-37) and their role in accomplishing desired outcomes. The commander requires constantly insights into these factors and temporal insights include an assessment of current trends in the area in relation to NATO capability to project its forces in the area. This, practically, concerns itself with identifying time imperatives for the deployment and employment of forces. (COPD 4-39) If these time imperatives cannot be achieved, the resulting operational risks have to be identified and, if necessary, addressed. However, the most important or intriguing temporal issue the planning must take into account is determining if there is "a point in time when a specific condition will decide the success or failure of the operation." (COPD 4-40) This point exists just as well in space (COPD 4-40) and it would be beneficial to analyze the two factors separately and then together.

Japanese concept of warfare hinges on the importance of moments. "If one fully understands the present moment, there will be nothing else to do, and nothing else to pursue." (Tsunetomo, 16) The idea on attempting to identify a particular temporal or spatial point in which the battle can be decided is as old as the art of war itself and in a way reducing its importance to just one point on the list in COPD bastardizes its crucial nature. In most operations such a moment indeed exists, but often it can be identified only through hindsight. Only when the final outcome of the battle has been decided, the vital point in time or space can be determined with certainty. Operation Barbarossa became a bad idea at the moment when the onset of Russian winter bogged down the *Blitzkrieg*. That moment broke the operation. Had Moscow been occupied by then, the operation would have been a success. In the view of COPD Hitler should have been able to identify the crucial nature of the beginning of the winter and evaluate its risks in the early stages of the planning. The COPD interprets risk as being typically concerned with the same quarter of crucial factors of the battlefield; time, space, forces and information. Each of these risks have to be analyzed based on what are the probabilities of the risks being actualized and something going wrong and if that should occur, what is the resulting impact on the course of the operation. (COPD 4-42

Operational planning process should be able to identify moments and places which are likely to have a huge impact on operations depending upon the possible courses of action taking place in them. Nevertheless, since COPD is primarily created to address the highly complex crises of today and only secondarily traditional military campaigns, the crucial times and places could be completely different. A moment prior to which certain action is to be completed may be dependent on factors other than purely military ones. It could be that a certain political resolution has to be either avoided or completed at a certain point for the military operations to succeed and proceed. Be it as it may, the demand on the planning process to augur these places and moments is a huge task and complete success would demand a military clairvoyant.

Any military operation is tightly concerned with numerous other critical timings as well. There are deadlines for products and crucial planning events and other times related to activation of forces, pre-deployment of enabling forces, initial entry and others. (COPD 3-56) But it is not enough to plan thoroughly. Timeliness requires that not only essential aspects are covered but that "planning and execution are integrated incrementally as required." (COPD 3-78; 4-72) In other words, mental conception must be followed by immediate execution. (Rommel 1953, p. 518)

In regard to planning time is saved in COPD by making the process iterative and parallel for different operational levels that conduct and participate in the formulation on plans. Parallel and collaborative planning with subordinate commands and additionally aiming to incorporate other relevant actors is designed for the purpose of synchronization of all activities. In optimal conditions "the activities of

all forces and operational functions are synchronized and coordinated to create the effects required to achieve the operational objectives." (COPD 4-70) Operational objectives contribute to strategic objectives and thus synchronization and harmonization need to occur. By making the planning process parallel it is not only easier to synchronize the plans of different levels of command but to save time in the course of the entire planning process since subordinate commands do not have to wait for their superior command to finalize the entire product but can initiate their own action so that plans are developed at the same time.

It is not enough that planning occurs in a parallel manner. Planning and execution have to be parallel and simultaneous activities as well. The co-mingling of planning and execution is an essential demand in an ever-evolving situation. Should the campaign be teleological so that the operation proceeds linearly through consecutive battles towards a pre-determined ending, planning and execution of the plan could be consecutive stages as well. Since the COPD is created to be iterative the planning evolves in a cyclical manner. The idea of parallel planning results in different levels of command being in different stages of the planning process simultaneously and the operation of a superior level can be already in effect while some subordinate commands still concern themselves with planning.

With sequencing COPD refers to a part of designing operations. Actions to be performed should be arranged so as to best achieve desired effects at decisive points/ conditions in proper order. This means that within a campaign or operations actions will have to be performed is such an order that it is most likely to produce the desired effect on enemy's center of gravity. (COPD A-19) From the very first stages of planning contemporary operations are viewed through the lenses of COPD as consisting of consecutive stages and phases. An operation is divided into several of these and the fulfillment of certain decisive points/conditions creates the condition of moving from one phase to the next one. In case the operation does not proceed as planned, prior to execution the planning staff develops Branches and sequels. They are defined as "contingencies (pre-planned options) that deal with the inability to achieve a decisive point/decisive condition or to take advantage of a positive rapid development." (COPD 4-87)

Periodically during the execution of the operation or campaign its progress is assessed based on achievement of decisive points/conditions to determine if the operation may shift to its next phase. Naturally, "operations conducted over one phase of a campaign directly impact on subsequent phases." (COPD A-1) Success or limited success is generally the requirement of moving from one phase to the next, but the level of success determines the shape of the next phase and the plan for it has to be amended before execution can begin.

The more we read COPD the more the meaning of time jumps out of the pages. Even decisive points or decisive conditions that are conjoined into lines of operations comprise a way to sequence and temporize the conduct of battles. Their suitability is one way to evaluate the success of the CONOPS and how the operation as a whole proceeds. (COPD 4-53) Lines of operations create cohesion into the plan and the decisive points and conditions are moments in time and space that need to be fulfilled in order for the campaign to be continued. They provide a means to divide the complex campaign into specific time periods with decisive points acting as points of closure and initiation of new action. Decisive points and conditions, therefore, create sequencing and causality into the activities of the troops and manage to show to even those not directly involved with the planning of the campaign that each and every action taken is carefully timed and connected to other actions instead of being an isolated and erratic activity. Decisive points and conditions both frame action by providing clear lines along which to proceed and ultimately focus activity in time (Clausewitz 1989, p. 583) and space since fulfilling them one by one leads to "accomplishment of operational objectives." (COPD 4-53)

Decisive points/conditions are meaningful for the synchronization of execution. Decisive points/conditions are joined together by critical lines of operations that act "as a basis for sequencing and synchronizing actions and effects." (COPD A-2) The creation of branches and sequels is often concerned with how the tempo of the operations can be restored when enemy action or external

conditions slow it down. If decisive points/conditions are not fulfilled in time, the tempo cannot be upheld as planned. In those situations a new rhythm has to be sought for and the line of operations rerouted around the decisive point/condition. In these situations it is possible to revive the rhythm or tempo but the idea of accelerating the tempo, if success is greater than presumed, is rather dubious.

If we wish to inquire into the possibility of acceleration of the tempo or rhythm in the case of unforeseen success, it is likely that on strategic level the rapidity of adaptation of a sequel is sufficient, on operational level certain benefits potentially gained by rapid action may be lost in implementation of the plan or sequel. On tactical level the chance has to be seized without delay, for victory goes to the quickest. (Rommel 1953, p. 225). In this sense the biggest benefit of branches and sequels may lie in revitalizing the rhythm through alternative means than attempting to accelerate the execution of operation proceeding as planned. No matter how fast or slow the rhythm or the tempo is, they cannot be upheld indefinitely. From Musashi we can read between the lines that fighting the war is in a way a continuous process. Even if there is a period of inactivity during the war, the slowing down of the rhythm into practically a standstill is still part of the rhythm itself.

In COPD there are moments in the course of the battle when activity ceases since in the long-term operations of today's conflicts it is often a sheer impossibility to indefinitely uphold the

tempo. That is why COPD speaks about "operational pause" which is "a temporary cessation of certain activities during the course of a major operation or campaign, usually at the conclusion of an operational phase." (COPD A-21) The commander had designated the direction of main effort keeping and phased the operation "to maintain continuity and tempo and to avoid unnecessary operational pauses." (COPD A-19) Yet, there have to be pauses in the tempo of the battle in order to regenerate the combat power necessary to accomplish the next stage of the operation. It is the task of the planners to be able to locate temporally the operational pause so that any phase of the operation does not wind down into a standstill. By finding the right time and place for the operational pause the course of the entire operation from one phase to another remains optimal and suffers no decreases in speed.

The simplicity of agrarian warfare enabled Musashi to think differently about pauses in operational art. In his philosophy, when the warrior picks up his sword, he should not think about striking or slashing but of continuing his movement to the very end. (Musashi 1995, p. 67) The continuous movement meant upholding rhythm even if the tempo slows down. In juxtaposition COPD acknowledges that action and movement may cease.

A point in time and space in which the operation can no longer continue is called in the COPD "culmination." Naturally such a point should not be reached before all of the objectives of the given operation

have been attained. In the planning stage of the operation special emphasis should be laid to ensure that the enemy is not able to influence the tempo and progress of one's own operation so that culmination would be reached and simultaneously the sequencing and phasing of one's own actions should be designed to bring the enemy to culmination before reaching its objectives. "The art is to achieve the objective well before any culmination. Therefore, the operations design should determine ways to speed the opponent's culmination while precluding our own." (COPD A-21)

Even if "immobility and inactivity are the normal state of armies in war," (Clausewitz 1989, p. 117) operational art revolves around the concept and skill on maneuver, that is, employing troops in an effective and surprising manner. COPD determines that in order to astound the enemy "the key is to find ways for forces to dominate time and space." (COPD A-20) An important part of maneuver is the skill to deny the enemy the possibility to anticipate one's actions. This happens by deception and maintaining high level of operational security to be able to act unpredictably and distort the rhythm of the enemy by doing something unexpected at all times. "War is the realm of the unexpected." (Liddell Hart 1950, p. 314) In order to be able to perform unexpectedly one has to be able to dictate the rhythm or operational tempo. It enables the commander to retain freedom of action and is the "key to bringing an opponent to his culmination point while preventing the premature culmination of

our own operation." (COPD A-21)

To avoid the risk of the operation culminating the commander may instigate an "operational pause" in the design of his operation. An operational pause, if held at the optimal moment may alter the rhythm of the operation favorably. It can be seen as a moment to estimate the momentary situation and to arrange to execute the right things for the foreseeable future. (Moltke 1993, p. 92) A commander may evade culmination with an operational pause and when the moment is properly chosen, the rhythm is slowed to a halt in concert with the rhythm of the activity of the enemy. Generally any slowing down of one's own operations increases the speed of the enemy. (Rommel 1953, p. 285) but if an operational pause starts at the moment when the enemy rhythm has fallen into discord, the commander is able to resupply his troops, give new orders, change troops or pace of operations or numerous other activities without seriously compromising either his rhythm or the success of the entire operation. The closer operational pause is to the point of culmination and the better the enemy is able to adhere to its own rhythm, the more damage having an operational pause causes. In choosing the operational pause at the correct moment the commander must be able to master his own battle rhythm superbly and incorporate or sync it with the rhythm of the enemy in accordance with the teachings of Musashi.

CRESCENDO – SYNCHRONIZING OR TIMING OPERATIONS

Rhythm is something often overlooked in our contemporary conjunction and especially in the discourse of Western warfare. Yet, time after time, what enabled commanders to win their battles was rhythm. Rhythm permeates all our actions and influences many things that we often overlook. There was a reason why drummers were introduced to the battlefields. They provided a rhythm for the troops to march to. And once the troops marched in cadence, following the beat of the drum they could keep a steady pace and a tight formation. Thus rhythm enabled proper planning of campaigns since it became possible to not only estimate but calculated how long it would take to transport the troops to the battlefield.

Even in the age of modern "technowars" (Coker 2004, Der Derian 2001, Huhtinen-Rantapelkonen 2008) we still commence the military training of our conscripts by teaching them military drills. While the idea of turning left or right according to commands issued might seem ridiculous, there is a deeper meaning in learning those activities. By having a squad or a platoon act in cadence and responding without a moments delay to an issued order a smallscale synchronization is achieved. This historically enabled the creation of big close formations of soldiers. (Frederick 1985, p. 396) While their usefulness on battlefields has dwindled due to the havoc wreaked by machine-guns in both World Wars effectively setting the precedence for

closed formations becoming yet another obsolete piece of military art, (see e.g. Liddell Hart 1936, p. 21, 68) there are still many ways in which troops must be able to act in unison, following the same rhythm. Rhythm is the backbone of all military action and only mastering rhythm enables one to synchronize and coordinate those complex joint operations required from officers of today and tomorrow.

At the latest since Milan Vego began to write about "Joint Operational Warfare" (2009) the military minds have been eager to talk of joint-this-and-joint-that. Vego built his theory essentially on the same ideas that influenced mechanized warfare in WWII. (Liddell Hart 1950, p. 263) The idea of joint warfare, concentrating all possible assets, pooling them and using them in the most profitable manner, relies on the ability to synchronize all those actions in time and space. No matter if the desired impact is kinetic or nonkinetic, in order to be able to achieve the hoped outcome the actions must be spatio-temporally conjoined. This was already recognized by Clausewitz when he wrote about compressing action "into a single point in time and space." (1989, p. 259) Right force, at the right time in the right place has become a catchphrase but the idea is as old as written records of warfare. "Strength, place, and time, each is helpful to the other," wrote Kautilya. (Kautilya, book IX, p. 2)

But producing this result is more difficult than it at first glimpse appears. If the planning, coordination, and execution are timely, no questions arise. If one or more elements fail to perform, the entire operational structure may crumble. In the age of joint operations, made possible by information technology, the art of war is one of synchronization and harmonization. Some generals have argued that saving time is more important than coordination, but they may not have fully understood the benefits of synchronizing effects. (see e.g. Patton 1947, p. 255) The general in charge of comprehensive operations should be like a conductor. In front on him are all the assets at his disposal in order to achieve the end-state he has been commanded to gain by political supervision. The art of the general is to get all his troops to "play together", to act in unison and produce a symphony just as perfectly timed as those of any big bands of orchestras.

In a way even the terminology of COPD occasionally seems to hint at the understanding of this idea of internal rhythm of warfare. It calls Operational Art "the orchestration of an operation, in concert with other agencies, to convert strategic objectives into tactical activity in order to achieve a desired outcome." (COPD A-1) Such terminology points at understanding of rhythm albeit nowhere else is the idea so clearly spelled out. If the commander is viewed as the conductor of operations, orchestrating, that is, synchronizing and harmonizing the actions of individual troops as a conductor would do with the instruments he directs, the result is greater and more harmonious than the sum of the components. Synchronizing produces synergy on the battlefield and the commander is

required to have "an understanding of the inherent and effective synergy that flows from properly coordinated joint operations." (COPD A-1) This seems to be a more difficult way of saying that the commander must understand how synchronizing of all efforts and actions greatly increase the combined effect they can produce. By COPD definition synergy is a result of several "physical, cybernetic and moral effects which -when combined- produces total impact that is greater than the sum on those individual effects." (COPD A-20)

Synchronization means that operational planners attempt to combine all possible effects available including "precision attack, decisive manoeuvre, information and psychological operations as well as civil-military cooperation to achieve desired conditions and effects." (COPD A-20) In today's operations synchronization is on one hand more complex and on the other simpler than in the age of Musashi. It is more complicated since there are many more possible factors for open options but simultaneously simpler since improved lines of communications make it easier and quicker to relay orders to the troops producing the desired effects. What the entire process of synchronization aims for is the "arrangement of actions and their effects in time, space and purpose to achieve maximum advantage and most favourable conditions." (COPD A-20)

Synchronization is a necessity in today's conflicts even more than before. In the agrarian age the most important moment on movement synchronization occurred while troops were being transported to

the battle site. This is what Jomini called "logistics." (1992, p. 13, 69) Today the focus on synchronization has shifted increasingly in synchronizing the effects on the enemy in the right time and place. Modern operations potentially consist of multiple "simultaneous military operations, across the spectrum of conflict, with predominant themes shifting over time." (COPD A-1) They cover the entire range of conflict from actual fighting to peace-building and supporting the local population by civil-military cooperation. The focus of the operation may shift suddenly from one objective to another across the same spectrum of operations and tasks. As COPD claims, that "all major operations are combinations of tasks some of which may be executed simultaneously." (COPD A-1)

Simultaneous activity should be the norm, but even COPD agrees that action on multiple lines of operation is just the ideal that often is not reached. Traditionally warfare has been conceived as a series of engagements linked together in a causal manner. (Clausewitz 1989, p. 582) Numerous factors force the commander to sequence instead of synchronize his actions. Lack of resources or the necessity to reduce the risk level may lead to focusing attention at a given time on one or two lines of operations. When the commander estimates what he can do by evaluating the time at his disposal, available forces and resources he prioritizes the goals and thus creates a sequence. (COPD A-19) Focus may be on a certain line of operations until a certain decisive point/condition is reached and

secured and then the emphasis may shift to the next line of operation. Sequencing is thus a natural product and outcome of limited resources, since even NATO often does not operate without any restrictions on resources.

Synchronization is thus not only concerned with planning albeit it saves time in that stage. Synchronization is far more crucial in terms of the art of war with the execution phase of the operations. While the operation plan is being executed, synchronization requires "the command and control of military forces and interaction with other non military means to conduct integrated, coordinated or synchronized actions that create desired effects." (COPD 3-96) The purpose ultimately is to get all troops and other actors that can influence the area of operations to work together for common and shared goals or to synchronize one's own actions with those of the other actors in a manner that is beneficial to the optimized efficiency to the military operations. Attaining the best possible outcome is therefore entirely dependent on every level of command achieving their tactical goals and combining them into operational and strategic goals. (Clausewitz 1989, p. 206) And even perfect military co-operation is not enough in the complex conflicts COPD attempts to resolve. "Harmonisation is needed between military and civil actors." (COPD 3-96) And to harmonize them into a symphony instead of a cacophony requires mastery of rhythm.

CODA

The purpose behind this article has not been so much to provide answers but alternative viewpoints hopefully to get the reader to rethink his conception of the art of war. Ars longa, vita brevis, but still we think of operational art of war as one that is relatively easy to learn, comprehend and teach. Each and every day of our lives as professional soldiers we should strive to master better our chosen form of art. All too often, however, we seem to be mentally stuck to a rut like the needle of an old gramophone; repeating and repeating the old "truths." The other option is just as harmful. By running after trendy doctrines professional armies like the U.S. develop, we might do irreparable harm to Finnish operational art - if it even exists as a separate distinguishable entity of its own any more.

Probably no war in the world has ever been won by copying the tactics and operational art of someone else verbatim. In order to be unexpected and master time and tempo of the battle, new twists have to be added to existing patterns. There are entire libraries of accumulated military wisdom throughout centuries where aspiring strategists and tacticians could find their inspiration. The entire idea of this article was to choose two military texts that seem totally contradictory and provide a comparison on one theme that both discuss.

The meaning of time and the necessity to be able to "conduct" the battles was common to both. Musashi had slightly different ideas and expressed them in

different terms than the NATO doctrine. Nevertheless, both considered the idea of setting the rhythm or tempo to warfare as a prerequisite of success. Furthermore, once the rhythm was established, all possible force had to be used in concert. All activity was to be synchronized to produce accumulative effect and synergy. Despite every war being different, some patterns remain unchanged. Every action takes time. Time is something the commander must master in order to perfect his art. If he has no idea of setting the rhythm and tempo for activities of his troops, the result will be a cacophony instead of harmony.

Musashi emphasized the role of "rhythm" in warfare as a skill or an artform a strategist should master. COPD highlights several different time-related concepts such as "tempo", "harmonisation", "synchronisation", and "sequencing." Nevertheless there is no

effort to effectively combine them into a discourse like "rhythm" and therefore all the concepts related to setting the tempo and temporizing warfare remain somewhat unrelated.

Rhythm, the way Musashi discussed it, is all about choosing a proper rhythm and tempo for oneself in order to manage and master the tempo of warfare. Reading between the lines it is possible to discover the idea of setting the rhythm for COPD as well, but the idea is slightly different. COPD aims to quicken the pace of rhythm thus making it more efficient and less time-consuming with the intention of stealing time from the enemy and his counter-maneuver. For Musashi the rhythm of warfare may just as well be rapid or slow. The purpose is to find a rhythm that simultaneously feels most natural to uphold and timing one's own actions so, that the enemy is deprived of the chance to follow his preferred rhythm.

Bibliography:

Allied Command Operations Comprehensive Operations Planning Directive COPD Interim V1.0, Supreme Headquarters Allied Power Europe Belgium 17 December 2010

Borden, William Liscum: *There Will Be No Time – The Revolution In Strategy*. The MacMillan Company, New York., 1946.

Brodie, Bernard:. Implications for Military Policy. In *The Absolute Weapon – Atomic power and World Order*, ed. Bernard Brodie. Harcourt, Brace and Company, New York, 1946, pp. 70–107.

Brodie, Bernard: Strategy in the Missile Age. Princeton University Press, Princeton, 1959.

Clausewitz, Carl von: *On War*. Edited and translated by Michael Howard and Peter Paret, First paperback edition, Princeton University Press. Princeton, 1989.

Coker, Christopher: The Future of War: The Re-enchantment of War in the Twenty-First Century. Blackwell Publishers. New York, 2004.

Coram, Robert: Boyd: The Fighter Pilot Who Changed the Art of War. Little, Brown, 2002.

Der Derian, James: Virtuous War – Mapping the Military-Industrial-Media-Entertainment Network. Westview Press. Boulder, 2001.

Frederick The Great: Military Instructions for the Generals. In *Roots of Strategy*, Ed. Thomas R. Phillips, Stackpole Books, Harrisburg, 1985, Pp. 301–400.

Fuller, J.F.C.: The Reformation of War. Hutchinson & Co., London, 1923.

Fuller, J.F.C.: The Foundations of the Science of War. Hutchinson & CO (Publishers) LTD, London, 1926.

Fuller, J.F.C.: Armoured Warfare – An Annotated Edition of Fifteen Lectures on Operations between Mechanized Forces. Eyre and Spottiswood, London, 1943.

Goltz, Field-Marshal Baron von der: *The Nation in Arms – a Treatise on Modern Military Systems and the Conduct of War.* Hodder and Stoughton, London, 1914.

Hanska, Jan: *The Meaning of Time in Land Warfare of the Mechanized Age* Yleisesikuntaupseerikurssin diplomityö, MPKK, Helsinki, 2013.

Huhtinen Aki. Mauri – Jari Rantapelkonen: Messy Wars. Finn Lectura, Helsinki, 2008.

Jomini, Antoine Henri de: The Art of War, Greenhill Books, London, 1992.

Kautilya, Arthashastra, Book IX, Chapter 1 page 2 http://www.sdstate.edu/projectsouthasia/upload/Book-IX-The-Work-of-an-Invader.pdf. Downloaded 7.10.2011.

Liddell Hart, Basil Henry: *The Remaking of Modern Armies*. John Murray, London, 1927.

Liddell Hart, Basil Henry: The War in Outline 1914-1918. Faber and Faber Limited, London, 1936.

Liddell Hart, Basil Henry: Defence of the West – Some Riddles of War and Peace. Cassell and Company LTD. London, 1950.

Machiavelli, Niccolo: *The Art of War*. A revised edition of the Ellis Farneworth Translation, Bobbs-Merrill Company, Inc., Indianapolis, 1965.

Moltke, Helmuth von: On the Art of War. Selected Wiritngs. Ed. Daniel J. Hughes, Ballantine Books, New York, 1993.

Musashi, Miyamoto: *Maa, Vesi, Tuli, Tuuli ja Tyhjyys*, Otava, Helsinki, 1995.

Mushashi, Miyamoto, Go Rin No Sho: A Book of Five Rings. Blackmask Online 2002.

Palmgren, Anders: Visions of Strategy – Following Clausewitz's Train of Thought. National Defence University, Department of Tactics and Operational Art, Series 1, No. 2/2014. Helsinki, 2014.

Parker, Geoffrey (Ed.): The Thirty Years' War. Routledge, London and New York, 2006..

Patton, George S. Jr.: Was as I Knew it. Riverside Press, Cambridge, 1947.

Picq, Ardant du: Battle Studies – Ancient and Modern Battle. In *Roots of Strategy, Book 2*, Stackpole Books, Harrisburg, 1987, Pp. 65–300.

Rommel, Erwin: The Rommel Papers. Ed. B.H. Liddell Hart. Collins, London, 1953.

Saxe, Maurice de: My Reveries Upon the Art of War. In *Roots of Strategy*, Ed. Thomas. R. Phillips, Stackpole Books, Harrisburg, 1987, Pp. 177–300.

Simpkin, Richard E: Race to the Swift: Thoughts on Twenty-First Century Warfare. Brassey's Defence Publishers, London, 1985.

Svechin, Alexander A: Strategy. Eastview Press, Boulder, Kindle Edition, 1992.

Toffler, Alvin – Heidi Toffler: War and Anti-War: Survival at the Dawn of the 21st Century. Warner Books. New York, 1995.

Tokitsu, Kenji: Miyamoto Musashi: His Life and Writings. Shambhala Publications, Boston, 2004.

Triandafillov, Vladimir K.: *The Nature of the Operations of Modern Armies*. Translated by William A. Burhans. Frank Cass, Portland, 1994.

Tsunetomo, Yamamoto: Hagakure, Book of the Samurai, Ebook,

Tung, Rosalie L: Strategic Management Thought in East Asia. Organizational Dynanics, Spring 94, Vol 22, Issue 4, 1994, pp. 55–65.

Vego, Milan: Joint Operational Warfare: Theory and Practice. Annapolis: Naval War College Press, 2009.

Virilio, Paul: Speed and politics. Semiotext(e), Foreign Agents Series. New York, 1986.

Wilson, William Scott: *The Lone Samurai: The Life of Miyamoto Musashi*. Kodansha International, 2004.

Wittgenstein, Ludwig: Tractatus Logico-Philosophicus. Routledge, London and New York, 2001.