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EXERCISE/EXERCICE NEW HORIZONS

CLAUSEWITZ IN THE INFORMATION AGE: A MODIFIED MODEL OF CONFLICT

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Karl von Clausewitz

War has been called the most serious endeavour that a state can undertake.² The price of failure at war has frequently been the very existence of one of the states involved. As a result, throughout the history of human conflict, philosophers, kings, soldiers and generals have sought to understand the conduct of war and its underlying theory as a means to better ensure success in this most fundamental of human endeavours.

Despite the imperative of success in the conduct of war, few comprehensive theories of war and its conduct have been formulated, and even fewer have survived to this day. Those theories that have survived have had a great impact on the conduct of modern warfare, from the cryptic and essential Sun Tzu, through the descriptive Frederick the Great to the prescriptive Jomini; none have had a greater impact on the Western view of warfare than the theories of Karl von Clausewitz.

Much of modern Western military theory of conflict has, in fact, been based on Clausewitz since the turn of the century. Indeed, it is still considered heretical in many camps to even consider challenging "the eternal Clausewitz,"³ such is the dominance of his writings.

¹ Clausewitz, as summarised in Paret, Peter, ed, <u>The Makers of Modern Strategy – from Machiavelli to the Nuclear Age</u>, (Princeton New Jersey: Princeton University Press, 1986) 194. Taken from Clausewitz's additions of 1808 and 1809 and an essay on strategy originally written in 1804 published under the title Strategie (Hamburg, 1937)

² Dwyer, Gwynn. <u>War</u> (London: Guild Publishing, 1986) 4

³ Van Creveld, Martin. "The Eternal Clausewitz" in Michael I. Handel, ed, <u>Clausewitz and Modern</u> <u>Strategy</u>, (Totowa, NJ: Frank Cass & Co, 1986) 1

One of the most enduring aspects of Clausewitz's body of work is his model of conflict: indeed, it is a cornerstone principle of the doctrine of many Western countries, including that of Canada.⁴ Yet many aspects of modern conflict have changed since the time that Clausewitz wrote his seminal work, not the least of which is the Revolution in Military Affairs and the increasing dominance of the concept of information operations. Because of these changes, some effort has been made to revisit or re-interpret elements of Clausewitz's theories in recent years, and yet the underlying and foundational model of conflict has yet to be challenged. Hence, the Canadian doctrinal model of conflict is based on a theory written in the 19th century, for 19th century warfare.

The Clausewitzean model of conflict is based on two planes – the physical and the moral. This paper will propose a new this model of conflict that incorporates a third plane – the intellectual.

After establishing the relationship between military theory and doctrine, this paper will consider Clausewitz the man, and discuss the nature of the Clausewitzean model of conflict. This model will then be placed in the context of the increasing dominance of Information Operations, and a new model will be proposed. Finally, the benefits to the Canadian Forces of adopting this re-interpreted model will be examined.

What is meant by the term military theory? Quite often, the concept of military theory is confused with and used interchangeably with military doctrine. Prior to delving into the details of the predominant military theory of our time, it is essential to clearly define military theory and doctrine, and establish the hierarchical links between these two terms.

⁴ Canada, Department of National Defence, <u>Canada's Army We Stand on Guard for Thee B-GL-300-</u> <u>000/FP-000</u> (Ottawa: Department of National Defence, 01 April 1998) 41

Military doctrine is defined as the "fundamental principles by which military forces guide their actions in support of objectives. It is authoritative, but requires judgement in application."⁵ Essentially, it is a collection of best practices, and becomes, as stated in the Concise Oxford, the body of thought that is taught. By its very canonical nature, it serves to define the profession of arms, and its purpose is to "guide, explain, and educate, and to provide the basis for further study and informed debate".⁶ Military doctrine then requires an intellectual foundation that derives or deduces the "body of thought" upon which it is based. This function is provided by military theory.

According to the Concise Oxford, a theory is a system of ideas that explains something; especially one based on general principles independent of the phenomena to be explained. Military theory then is a study of the systems of military thought that serves as an "intellectual guide to arriving at an educated understanding about the character and conduct of war."⁷ Its purpose is to provide structure to our knowledge of war, and this provides an intellectual framework for military doctrine. Moreover, it serves as a basis for both developing doctrine and considering the impact of change on the nature of war:

"Military theory involves the historical observation and the systematic study of organisations, strategies, techniques and procedures from antiquity to present. It educates military professionals and defence policy makers, provides the basis for developing doctrine and serves as an intellectual foundation for speculation about the character of future warfare"⁸

⁵ AAP-6 NATO Glossary

⁶ Canadian Forces. Draft <u>The Strategic Framework of the Canadian Forces</u> (Ottawa: NDHQ 1999) 25

⁷ Evans, Michael, <u>From Kadesh to Kosovo: Military Theory and Future Land Warfare</u>, (Sydney, Australia: Australian Land Warfare Centre, 2001) 4

⁸ Evans 4

As military theory provides the intellectual basis for doctrine, and doctrine represents the body of knowledge that is taught, it follows that as the character and nature of war changes, so must the fundamental underlying theories be re-visited if the doctrine of the day is to remain relevant. This suggests that if the nature of war has changed, so must the theories describing its conduct change, including those of Clausewitz. Having established the relationship between military theory and doctrine and laid the foundation for the requirement to revisit Clausewitz's theories of war, let us now examine Karl von Clausewitz and his work.

Karl von Clausewitz was a Prussian soldier who served from the age of twelve until his death some thirty-nine years later in 1831. During this time, Prussia suffered a series of defeats at the hands of Napoleon, and like many thinkers of his age, Clausewitz set about trying to understand the nature of Napoleonic genius and the evolution (if not revolution) of military affairs that occurred in the shadow of both the Industrial and French Revolutions.⁹ Under the wing of Gerhard von Scharnhorst, Clausewitz was encouraged to develop his theories on the nature of war.¹⁰ He was a dedicated academic and prolific writer, and began the writing of his seminal work, "<u>On War</u> (*Vom Kriege*)" in 1819. By 1827, he had finished the first six of eight planned parts, as well as the drafts of Books VII and VIII. He then realised that his work failed to sufficiently explain his two main ideas, and started to rewrite the entire *oeuvre*. His work was interrupted by his new assignment to the Artillery Inspectorate in 1830, and his eventual appointment as the Chief of Staff of the Prussian Army that same year. His death in the cholera epidemic of

⁹ French, Major K.M., <u>Clausewitz vs. the Scholar: Martin van Creveld's Expanded Theory of War</u>, (Quantico, Virginia: United States Marine Corps Command and Staff College, 1992) 5

¹⁰ Gerhard von Scharnhorst was Clausewitz's instructor at a military school in Berlin, was later Chief of Staff of the Prussian forces engaged with Napoleon in 1806, and eventually Clausewitz's Commander

1831 left his work incomplete and partially re-written – it was published posthumously by his wife in 1832.

Clausewitz's approach to writing and thinking about the nature of war was very much influenced by the dominant ideas and thinkers of his time. In On War, he used a dialectic approach that enabled him to synthesize the dominant yet almost mutually exclusives ideals of his time: the rationality of the Enlightenment and the passionate nature of German Romanticism.¹¹ He contrasted war in theory with actual war, and derived many insights and observations from this contrast. In this approach, he was almost certainly influenced by Kant.¹²

This methodology caused Clausewitz to argue in polarities¹³. He always proposed both a thing and its opposite: theory and practice, absolute and limited war, offence and defence, the moral and the physical, thesis and antithesis. From a study of these opposites, he was able to derive a synthesis. This approach demonstrated an enormous amount of intellectual rigour and is one of the key reasons that his theories have survived the test of time relatively intact. However, it also served to make his writings impenetrable to the casual reader, and prone to misinterpretation. This has not prevented Clausewitz from becoming the predominant influence on Western military theory, although it has been pointed out that he is the most oft quoted, superficially read and least understood military theorist.¹⁴

In summary, Clausewitz was inspired to write "On War" because of a series of defeats that the Prussian Army suffered at the hands of Napoleon. His intellectual

 ¹¹. Handel, Michael I, ed, <u>Clausewitz and Modern Strategy</u>, (Totowa, NJ: Frank Cass & Co, 1986), 6
¹² Cimbala, Stephen J., <u>Clausewitz and Chaos: Friction in War and Military Policy</u>, (Westport CT: Praeger Publishers), 12

¹³ Van Creveld, Martin. "The Eternal Clausewitz". 37

¹⁴ Handel 1

methodology was influenced by both the Enlightenment and Romanticism, which led to a dialectic approach. Perhaps of greatest import was the fact that his theories were formed at a time of great societal upheaval: the confluence of both the Industrial and the French Revolutions.

Having garnered an understanding of Clausewitz the man, and placed his works within the context of the times in which they were written, let us now delve into the Clausewitzean model of conflict.

Apart from his theory on the duality of war (the absolute and the real) and his assertion that war was composed of three elements that are referred to as a "remarkable trinity", ¹⁵ it is the dominant theme of moral and physical forces that have had the greatest impact on military theory, and hence doctrine.

In the opening paragraph of Book Two of "<u>On War</u>", "On the Theory of War," Clausewitz states, "fighting is a trial of strength of the moral and physical forces by means of the latter."¹⁶ This theme of two intertwined and inseparable aspects of war run throughout the work.

"Therefore most of the subjects that we might go through in this book are composed half of physical, half of moral causes and effects, and we might say the physical are almost no more than the wooden handle, whilst the moral are the noble metal, the bright-polished weapon."¹⁷

In discussing the nature of militaries, he establishes that there are two types of forces: the physical and the moral. Each will be discussed in turn.

In his analogy of war as a duel between two wrestlers, Clausewitz states that the intent of conflict is to "strive by physical force to compel the other to submit to his

¹⁵ Clausewitz 121

¹⁶ Clausewitz 171

¹⁷ Clausewitz 252

will."¹⁸ Clausewitz devotes much of his writings to the use of physical forces. This emphasis on the physical derives from his comfort in analysing the concrete and measurable, or as he put it, "the relations of material things are all very simple; the right comprehension of moral forces which come into play is more difficult"¹⁹.

Remembering that Clausewitz argues the thesis, antithesis, and finally synthesis, let us examine all three aspects of his analysis of the use of physical force. In his thesis, he states that only physical forces can be used to destroy the enemy, and the destruction of the enemy is always the means to attain the object of combat. In his antithesis, he examines indirect approaches in which the object of combat is to seize a piece of ground, or to drive an enemy away through demonstration or feint. Finally in his synthesis, he concludes that the destruction of the enemy is but one of the objects of combat, but that "the destruction of the enemy's military force is the foundation stone of all action in War".²⁰

Hence physical forces are the primary means of destroying enemy forces, and are also the means by which an enemy is forced to submit to ones will. Nevertheless, these means in and of themselves are clearly not enough. Moral forces must also be considered.

Although the vast majority of his writings on the forces themselves relate to the more easily defined and grappled with physical forces, Clausewitz considers "moral forces to be among the most important subjects in war."

Clausewitz expands on this theme by stating "(t)hat the moral cannot be omitted is evident of itself, for the condition of the mind has always been the most decisive

¹⁸ Clausewitz 101

¹⁹ Clausewitz 242

²⁰ Clausewitz 133

influence on the forces employed in War.²¹ He bases the importance of moral forces on the fact that they "fasten themselves soonest and with greatest affinity on to the Will.²² Clausewitz considered Will to be that "which puts into motion and guides the whole mass of powers²³ and likens it to the qualities that animate his trinity of the Army, the People and the Government. Hence, one affects an opponent's "moral forces" by attacking his Will, albeit primarily through the destruction of his physical forces.

What then is the relationship between these two components of a military force? As previously stated, it is primarily through physical force that one attacks an enemy's moral force and his will. Moreover, Clausewitz contends that the two are inseparable: "The effects of the moral forces and the physical forces are completely fused and are not to be decomposed like a metal alloy by a chemical process."²⁴ Hence, the outcome of a war is determined by the successful wielding of these forces, in order to impose one's own will upon the enemy. Ultimately, success is determined by the strength of both moral and physical forces, for "every combat is the bloody and destructive measuring of the strength of forces, physical and moral; whoever at the close has the greatest amount of both left is the conqueror."²⁵ This fundamental relationship has led to the formulation of a bi-planar model of conflict.

The physical and moral forces described in On War have been adapted by the Canadian Army to create a model of conflict that describes two "planes of conflict: the moral and the physical".²⁶ Each will be discussed in turn.

²¹ Clausewitz 171

²² Clausewitz 251

²³ Clausewitz 251

²⁴ Clausewitz 252

²⁵ Clausewitz 310

²⁶ Canada's Army 42

On the physical plane, conflict is a "clash between armed combatants."²⁷ The characteristics of the physical plane include a host of measurable and observable factors, including weapons, technology and force ratios. Conflict on this plane is considered a science "involving the management of resources and application of technology."²⁸ The focus of this plane is the destruction of the material capabilities of an enemy. Hence, on the physical plane, one attacks an enemy's capability.

On the moral plane, conflict is a "struggle between opposing wills" and is considered an art vice a science.²⁹ The characteristics of this plane are intangible and predominantly psychological, and centre on the desire or will of the enemy to resist. At the national level, these moral factors include will, unity of purpose, political leadership, and national character³⁰. In the military sense, it consists of force cohesion and the will to win. Hence, on the moral plane, one attacks the enemy's will.

In accordance with the Clausewitzean analysis that led to this model of conflict, the moral plane exerts "the greater and often decisive influence on the conduct and outcome of conflict."³¹ As Clausewitz states, "in combat the loss of moral force is the chief cause of the decision."³²

Canadian doctrine then has been formed and shaped through an entirely Clausewitzean view of conflict. It states that conflict is conducted on both the moral and the physical plane, and that of the two the moral plane has a much greater influence on the conduct and outcome of conflict. One attacks capabilities on the physical plane, and

²⁷ Department of National Defence, <u>Conduct of Land Operations B-GL-300-001/FP-000</u>, Ottawa: January 1998) 7

²⁸ Canada's Army 42

²⁹ Canada's Army 42

³⁰ Canada's Army 42

³¹ Canada's Army 42

³² Clausewitz 310

will on the moral plane. Given the pre-eminence of the moral plane, it follows then that the will (or the human element) directs the capability (or physical element). This model of conflict is based on a 19th century theory of war: is it still relevant today, or has the very nature of war changed to the extent that this theory needs to be revisited?

In 1993 the well-known futurists, Heidi and Alvin Toffler expanded on their 1980 work "<u>Third Wave</u>" to consider warfare in a Third Wave world – or a world in the throes of the Information Revolution.³³. The ensuing book "<u>War and Anti-War</u>" has had a significant impact on considerations of the nature of future warfare. Its publication coincided with the emerging dominance of the concept of Information Operations³⁴ following the Gulf War (and provided it with new impetus) and an impassioned debate on the advent (or not) of a Revolution in Military Affairs. In many ways, this confluence of the Information Revolution and the Revolution in Military Affairs echoes the times in which Clausewitz wrote <u>On War</u>.

Any exploration of the Information Revolution and Information Operations should commence with the Toffler's view of future conflict. The main thesis of their book is that the way that a society makes war reflects the way that they make wealth.³⁵ Hence, a First Wave or Agrarian Age society fought First Wave wars, characterized by small militaries, seasonal fighting, and an absence of formal compensation for soldiers. An excellent example of this type of warfare is the Greek phalanxes.

³³ Wriston, Walter B. "Bits, Bytes and Diplomacy." United States Institute of Peace, <u>Peaceworks No.</u>18, September 1997. (<u>http://www.usip.org/pubs/pworks/virtual18/bitbytdip_18.html</u> 11 Mar 2002

 ³⁴ This term is a Canadian term that encompasses Information Warfare and includes Public Affairs etc. Most nations use the term Information Warfare. The Canadian term will be used throughout this paper.
³⁵ Toffler, Heidi and Alvin, <u>War and Anti-War: Survival at the Dawn of the 21st Century</u>, (New York: Little, Brown and Company 1993), 3

Second Wave or Industrial Age societies also saw their means of conducting war echo their means of producing wealth. The production of wealth in an industrial economy relied on raw material and mass production, and wars of the industrial age relied on physical capability and mass destruction. Mass production tied fewer workers to the fields, and enabled the *levee en masse* or conscription of massive armies. Mass production techniques provided large amounts of standardized arms and ammunition, and the new dominance of reason led to the professionalization of the Officer Corps. World War I is an excellent example of this type of warfare.

The Tofflers' contend that we are entering into a Third Wave of change: that of the Information Age. A Third Wave economy that is knowledge based will clearly drive the creation of Third Wave warfare, just as has occurred during the last two "waves". Knowledge has become the central resource of productivity, and will become the central resource of destructivity. Hence, they claim "knowledge is at the core of military power."³⁶ The Tofflers conclude "no one has yet taken the final step in the progression (to this new form of warfare) – the formulation of a systematic, capstone concept of military knowledge strategy."³⁷ In other words, the evolution to a Third Wave way of making war will not be complete until the central role that knowledge plays is "understood and deployed".³⁸ So, what is the link between this concept of knowledge warfare and Information Operations?

The Tofflers were writing their book as the Gulf War was raging on, and they referred to it as the first war of the Information Age. Alan D. Campen, a US Air Force Colonel during the Gulf war stated that during the war "knowledge came to rival

³⁶ Tofflers 69

³⁷ Tofflers 141

³⁸ Toffler 136

weapons and tactics in importance.³⁹ As these ideas percolated through the American military, they coincided with the development of Information Operations as a dominant form of warfare.

The post Gulf War period saw a proliferation of Information Operations related books, articles and debate, all of it tied into the perception of an ongoing Revolution in Military Affairs. The discussion ranged from claiming that Information Operations was simply the digitization of existing tools⁴⁰, through claiming that it was a separate and potent weapon⁴¹ through to the assertion that it was a paradigm shift allowing completely bloodless victories.⁴² The debate eventually matured, and Information Operations has since been adopted as a battle operating system or element of combat power in most Western nations.

Many definitions exist of Information Operations, but most differ only slightly from the following: "those actions taken to affect an adversary's information and information systems while defending one's own information and information systems".⁴³ In a 1995 paper on the future of Information Warfare Lt Col David Komar noted "future wars for Third Wave civilizations will take the form of information-based warfare, with information as the primary center of gravity and the products of the information revolution as the tools/weapons."⁴⁴ Information in and of itself is of lesser value, as it is the raw material, and not the finished product. According to Bloom's Taxonomy,

³⁹ Campen, Alan D., ed., <u>The First Information War</u>, (Fairfax Va.: AFCEA International Press, October 1992). vii

⁴⁰ Stein, George, <u>Information War – Cyberwar – Netwar</u>, (Air War College 1993) 4

⁴¹ USAF, <u>Cornerstones of Information Warfare</u>, 1995. 2

⁴² Szafranski, Col Richard, <u>Neocortical Warfare? The Acme of Skill</u>, Military Review, November 1994, 42

 ⁴³ Department of Defence, <u>Joint Doctrine on Information Operations (JP 3-13)</u>, (Washington: 9 Oct 1998)
12

⁴⁴ Komar, David M. <u>Information-Based Warfare: A Third Wave Perspective</u>, (Maxwell Air Force Base, Alabama, May 1995) 29

information when processed and assimilated becomes knowledge. One can act on knowledge; one needs to process information. Hence, the "target" of Information Operations is the adversary's knowledge, or ability to process information into knowledge.⁴⁵

This is clearly seen in the US definition of Information Superiority, one of the goals laid out in Joint Vision 2020.

"Information superiority provides the joint force a competitive advantage only when it is effectively translated into superior knowledge and decisions. The joint force must be able to take advantage of superior information converted to superior knowledge to achieve "decision superiority" – better decisions arrived at and implemented faster than an opponent can react"

Information Operations then is dedicated to attacking the enemy's knowledge, while protecting one's own.

In this Third Wave or Information Age, knowledge is the raw material of the Information economy, and it has become the core element of military operations. Information Operations is the primary means by which this new kind of warfare will be waged, for it is specifically targeted at that essential element: knowledge. This is an essential change to the nature of war, with a shift from attacking the enemy's capability and will to attacking his knowledge. This fundamental change has come about as a result of a confluence of two revolutions: the Information Revolution, and the Revolution in Military Affairs. It also begs the question: how will the theory of warfare evolve to capture these new concepts?

⁴⁵Department of National Defence, <u>Land Force Information Operations (B-GL-300-005/FP-001</u>, (Ottawa: 18 January 1999) 8

This paper has established the roots of the Clausewitzean model of conflict in the 19th century or Industrial Age, and there is no doubting its validity in that context. The paper has then examined warfare as it is and will be conducted in the Information Age, where knowledge is the core competency of the military. Does the model stand up to this transition?

Clausewitz himself acknowledged the overwhelming importance of information, but given the unreliable means of its accrual in his time, he sees it wholly in the negative sense: "information about the strength of the enemy is inevitably false", and "most intelligence is false".⁴⁶ However, he is more than aware of the deleterious effects that a lack of information can pose to a commander, in that a lack of information will lead to most generals being "paralysed by unnecessary doubts."⁴⁷ The technological advances of the last 170 years have in most cases overcome the unreliability of information that characterized conflict in Clausewitz's day, and it is unlikely that he would have maintained his scepticism in light of the incredible impact that information (including intelligence) has had at both the strategic and tactical level since the penning of On War.

Clausewitz also acknowledged the impact of intellect and a thorough understanding of the situation. In his discussions of the importance of genius, he stated "everywhere intellect appears as an essential cooperative force; and thus we can understand how the work of War, although so plain and simple in its effects, can never be conducted with distinguished success by people without distinguished powers of understanding."48

⁴⁶ Clausewitz 160 ⁴⁷ Clausewitz 179

⁴⁸ Clausewitz 155

What then is the relationship between intellect and knowledge? The Concise Oxford defines intellect as the faculty of reasoning, knowing and thinking, and knowledge as a person's range of information, whereas the Tofflers define knowledge as including information, data, communication and culture.⁴⁹ Knowledge is processed information, and forms part of ones intellect. It follows then that knowledge is a subset of the intellectual, but how does one attack an adversary's knowledge, as is suggested by the Tofflers?

If knowledge were simply part of the enemy's capability, it could be attacked on the physical plane. If it were merely part of his will, it could be attacked on the moral plane. Some have suggested that Information Operations falls into the realm of capability, and hence is part of the physical component regardless of whether it is used to attack the enemy's will or his capability⁵⁰. This is in line with the view that centres of gravity are either moral or physical in nature. In the Future Army Capabilities Study (a Canadian Army document that seeks to define the operational environment of the next 20 years), it is asserted that the operational function Act (concerned with both moral and physical effects) is aimed at defeating opposing centres of gravity, both moral and physical.⁵¹ The document carries on to recognize that knowledge itself has become a potential centre of gravity, but fails to categorize it as either physical or moral.

There is clearly a disconnect here, that suggests it is the model of conflict that requires adaptation, to allow a means by which to attack a new centre of gravity:

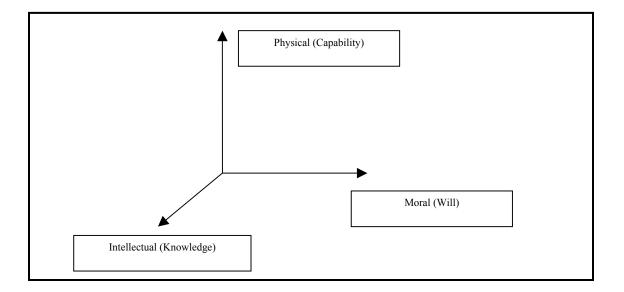
⁴⁹ Tofflers 4

⁵⁰ Whitehead, Yulin G., <u>Information as a Weapon: Reality vs Promise</u>, (Maxwell Air Force Base, Alabama: School of Advanced Airpower Studies, June 1997) 37

⁵¹ Department of National Defence <u>DLSC Report 01/01 Future Army Capabilities</u>, (Ottawa: National Defence Headquarters, January 2001) 23

knowledge. If capability is attacked on the physical plane, and will on the morale plane, how would one attack knowledge?

This gives rise to the possibility of a new interpretation of the Clausewitzean model of conflict that enables the model to be adapted to the imperatives of warfare in the Information Age. A new model would incorporate a third plane: the intellectual, against which you attack the enemy's knowledge, as per the diagram below:



This re-interpretation of the Clausewitzean model accounts for the increasing dominance of Information Operations in modern warfare, and addresses the Tofflers assertion that knowledge is "the central resource of destructivity."⁵² However, in order for the model to be successful, it must establish the relationships between the moral, physical, and intellectual planes.

Recall that Canadian doctrine states that the moral plane is the dominant one within this model. Also, recall that this is reflected in the fact that the will directs the capability in order to dat thitall thenestes for the mrce dom.

the will, to determine the actions of the physical component in its attacks on the capability of the adversary? Clausewitz would state that it is based on the "genius of the commander"⁵³ whose cooperative force is that of intellect. Reasoned and reasonable decisions are based on a correlation of the available facts – in other words, knowledge. It follows then that the moral component derives its ability to direct the physical component from the product of the intellectual plane – knowledge. As Clausewitz stated:

But now the activity in War is never directed solely against matter; it is always at the same time directed against the intelligent force which gives life to this matter, and to separate the two from each other is impossible"⁵⁴

Thus, the relationship between the three planes of conflict in this new model is clear: the intellect directs the will to attack the capability. To use Clausewitz's analogy, intellect becomes the hand that wields the weapon consisting of the physical wooden handle, and the moral metal blade⁵⁵.

This re-interpretation of the Clausewitzean model of conflict acknowledges the increasing importance of knowledge as the dominant factor in modern and future warfare and proposes a new plane of conflict that will allow one to attack that knowledge. However, what is the benefit to the Canadian Forces of adopting this new model of conflict?

In the beginning of this paper, the link between military theory and military doctrine was established. Essentially, theory provides the intellectual foundation upon which doctrine is based, and doctrine becomes practice. If a body of thought or doctrine is to be relevant, it must be based on theory that is relevant and timely.

⁵³ Clausewitz 138

⁵⁴ Clausewitz 185

⁵⁵ Clausewitz 252

The fundamental shift in the nature of the world as characterized by the "Third Wave" and the increasing dominance of Information Operations has called into question the relevance of the existing theory of conflict. If this theory is not at least revisited and re-interpreted, if not reinvented, then the Canadian Forces runs the risk of basing its doctrine on an outmoded theory of conflict. In essence, it would be preparing for the last war, as opposed to the next one. The country cannot afford for us to make this essential error.

In conclusion, the Clausewitzean model of conflict is based on two planes of conflict: the moral, against which you attack the enemy's will, and the physical, against which you attack his capability. This model was fine for 19th and 20th century warfare, but its validity is questionable in the 21st Century. Clausewitz himself stated that every age and period had its own theory of war:

"We wanted to show how every age had its own kind of war, its own limiting conditions, and its own particular preconceptions. Each period, therefore, would have held to its own theory of war, even if the urge had always and universally been to work things out on scientific principles. It follows that the events of every age must be judged in light of its own peculiarities"⁵⁶

His work was created at the confluence of both the Industrial and French Revolutions. We are at a new confluence of the Information Revolution, and the Revolution in Military Affairs. If Clausewitz were alive today, he would be working on a revised edition of <u>On War</u> to reflect the period in which we now live.

The increasing dominance of Information Operations in modern warfare requires a re-think of the existing model of conflict. A new model would incorporate a third plane: the intellectual, against which you attack the enemy's knowledge. This new view

⁵⁶ Clausewitz 387

of Clausewitz's model will ensure the relevance of the Clausewitzean view as this century unfolds, and set the theoretical foundations to allow the development of doctrine for warfare in the Information Age.

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