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SITREP

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CPL PHIL CHEUNG, 32 CDN BRIGADE GROUP, CANADIAN FORCES COMBAT CAMERA

Lindy Georgekish of 2 Canadian Ranger Patrol Group watches soldiers from 34 Canadian Brigade Group as they participate in Exercise Polar Strike I with 2 Canadian Ranger Patrol Group.

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From the Editor's Desk

Well into the summer and with the recently completed rotation of troops assigned to Afghanistan being sourced from Quebec, Quebec's support for the mission has become an issue. One could be forgiven if they thought that the two-thirds of Quebecers polled that disapprove of Quebec's soldiers being sent to Afghanistan was a reflection of earlier times and moods, when large Quebec families preferred to remain on the farms to work the then primarily agrarian based economy rather than sending troops to Europe. However Quebec society has become more urbanized, the "Quiet Revolution" has changed the culture of the province and immigration has changed the 'face' of the province so much so that the ghost of the "Conscription Crisis" is no longer relevant. Quebecers, like many other Canadians continue to question the commitment to Afghanistan. The Prime Minister has recently announced that he would look for "some degree of consensus among Canadians about how we move forward." In addition he has stated the Canada will not "cut and run". However he does believe that options for other roles should be examined and a broad consensus among Canadians, supported by a vote in Parliament is an option. Should Canada elect to exit, a year's notice to NATO is necessary in order to find troops to backfill the Canadian area of responsibility. Therefore the options to change role or withdrawal will need to be examined this Fall and made in early 2008.

Dr. Rob Huebert's research and excellent article highlights the necessary renewed interest in Canada's Arctic. Recent Canadian Governments have been very vocal in their acknowledgement of the need for better Arctic Security. Further fuelling this re-growth in Canadian Arctic Security has been interest generated by the national media in several stories involving Canadian Arctic sovereignty and security have been events such as the dispute with Denmark over Hans Island. All of this has suggested that Canada is "rediscovering" the need to improve its ability to defend the north.

Dr. James Schneider's examination of the Principles of War seeks to renew the debate by examining the question of whether the principles have changed and, if so, how. He argues implicitly that changing the principles of war is fundamentally an act of leadership, a way to lead military change and transformation.

Victor Mair, professor of Chinese language and literature, argues that China is one of the most diverse nations on earth. Linguistically, ethnically, religiously-on virtually any basis, China has always had an enormous range of populations and cultural phenomena. It is precisely because of this great social and cultural variety that it has been hard to keep the country together. To maintain political unity has invariably necessitated the exercise of heavy-handed government from the centre.

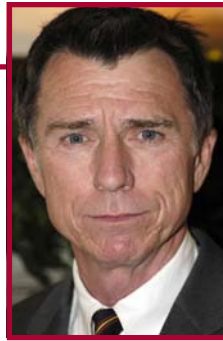
Our very own Eric Morse closes by calling on his Soviet experience to counterpoint and illustrate Dr. Mair's comments on the thought processes of a totalitarian society,

The Defence Studies Committee is always receptive to new members. If you wish to pursue defence and security issues in greater depth, consider joining us.

Sincerely,



Colonel (Ret'd) Chris Corrigan
Editor and Chair Defence Studies Committee



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THE RISE AND FALL (AND RISE?) OF CANADIAN ARCTIC SECURITY

by Dr. Rob Huebert

(The Editor thanks the Conference of Defence Associations Institute for this article which previously appeared in the Vimy Paper 2007.)

Introduction:¹

In the summer of 2002 Canadian Forces had their first joint exercise in the Canadian arctic in over twenty years. Three years later in the August of 2005 two Canadian warships entered Hudson Bay for the first time in over thirty years. The Canadian Forces are eagerly waiting for the launch of RadarSat II this year to give Canada the capability for the first time ever to know what surface vessels are in Canadian northern waters. To top this off, recent Canadian Governments have been very vocal in their acknowledgement of the need for better Arctic Security. Further fuelling this re-growth in Canadian Arctic Security has been interest generated by the national media in several stories involving Canadian Arctic sovereignty and security such as the dispute with Denmark over Hans Island. All of this has suggested that Canada is “rediscovering” the need to improve its ability to defend the north.

The security of the Canadian north has always been a problem for Canadian policy makers and the Canadian Forces. The challenges of operating over the vast distances of the north, combined with the complex nature of the security threats in the north in the face of the extreme weather conditions have combined to create a security requirement that often appears insurmountable. As such, it often appears that Canadian political leaders and defence planners have preferred to ignore these challenges and hope that nothing would happen. When decisions were made, they were

usually made to respond to the specific actions of one of Canada’s northern neighbours, i.e. the United States or USSR/Russia. Furthermore, even when the Government of Canada has decided to act, it has proven unwilling to commit the resources to meet the commitments of those decisions.

However, despite its weak past record, there are signs that the Canadian Government and the Canadian Forces are now beginning to take the security of the Arctic seriously. In order to understand what the Canadian Government is now doing the following questions need to be answered: what has been Canadian Arctic Security? How well has Canada met its needs to protect its Arctic region? Is Canada improving how it provides for its Arctic security? If so, why is this the case and is this effort likely to be sustained?

Historical Development

The full historical story of Canadian Arctic security remains undiscovered. There is little known about Arctic security for the indigenous populations before the arrival of the Europeans. There are some suggestions that there may have been some low level conflict between the Inuit and Dene, but little has been yet documented. Likewise there are limited observations of some conflict between the Inuit and early European explorers such as Martin Frobisher and Henry Hudson.²

The modern record of Canadian Arctic security begins with the Japanese attack on the American naval base at Pearl Harbour. Following their failure to catch and sink the American aircraft carriers at Pearl Harbour, the Japanese tried again to engage the American fleet off Midway Island in the early summer of 1942. In order to confuse the Americans, the Japanese also launched a diversionary attack on the Aleutian Islands of Attu, Agattu and Kiska. They held these islands until they were defeated by a joint American-Canadian invasion in the summer of 1943.³ Both the American and Canadian Government feared that the Japanese might use the islands as a staging point for further advances into North America. The decision was made that there was a need to build a road that would connect the existing North American road system into Alaska. This would allow for the transfer of personnel, ammunition and other goods to defend against any further Japanese advance. The Highway began at Dawson Creek BC and

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proceeded for 1422 miles/2288 km. to Fairbanks Alaska.⁴ Started in March 1942, it was completed eight months later.⁵

When the Second World War ended, the Soviet threat soon replaced that of the Japanese to the Canadian north. As the Soviets acquired nuclear weapons, then long range bombers and then ballistic missiles, the Canadian Arctic became one of the Cold War's main theatres of operation. While there was little fear of a Soviet ground invasion, the polar route was the direct means of attack on North American cities for the Soviet bomber and nuclear missile forces. In order to defend against either a bomber attack or deter a missile attack, the Governments of Canada and the United States entered into a number of agreements that provided for the surveillance and protection of North America's aerospace. These included the construction of the Distant Early Warning (DEW) line of radar sites and the establishment of the North American Aerospace Defence Command (NORAD). The DEW Line was placed across the entire northernmost land boundary of North America starting in western Alaska, going completely across northern Canada ending at Greenland. It was modernized in Canada in 1985 and is now known as the North Warning System. In May 1958 Canada and the United States agreed to the establishment of NORAD. This provided for the joint command that provides for the surveillance and joint control of North American airspace. It remains in force as one of the key security arrangements between the two states.

In both the case of the DEW line and NORAD, Canada and the United States act as political equals. However, it was the United States that has provided the bulk of the financing and technology required in their construction and maintenance. Nevertheless, the general consensus is that both served Canadian northern security requirements well. There were inevitably some minor disputes in their developments, but no significant difficulties arose regarding their impact on Canadian-American security requirements.⁶ The fact that the system of deterrence was maintained between the Warsaw Pact countries and NATO also can be partly attributed to the success of both the DEW Line and NORAD.

However, when examining Canadian actions in defending its northern security taken without American assistance, it becomes apparent that the Canadian Government has historically preferred to minimize its presence. The largest force that has been maintained in this region are the Rangers. This is a volunteer militia force whose purpose it to protect Canadian Arctic Sovereignty through their presence and to provide a means of surveillance. These units are primarily made up of Northern Canadian aboriginal personnel who bring with them their outstanding skills in navigating and surviving in the north. However, these forces are not heavily armed and have not been employed in patrols very far from their communities until very recently.⁷ The permanent deployment of members of the regular forces in the north has been small and from the 1970s onward did not normally exceed over 500 personnel. This includes both the electronic listening post in Alert and Northern Area Command headquarters in Yellowknife.⁸ The Canadian Forces did engage in large scale north-

ern exercises throughout the 1960s and 1970s but these declined in importance and size towards the end of the 1980s.

Likewise the role of both the Air Force and Maritime Command decreased as the Cold War progressed into the 1960s and 1970s. The navy had an icebreaker only in 1954. However, it quickly made the decision to transfer it to the Coast Guard. The navy then was reduced to sending the occasional vessel into the Arctic during the short open water period in the summer. However, these stopped in 1989. When the USSR developed its nuclear powered submarine force and began to deploy them into Arctic waters, there was no effort by the Canadian Government to meet this threat. Periodically the Government toyed with the idea of purchasing nuclear powered submarines. In 1965, the possibility was raised of buying a small number of American Skipjack submarines but this was soon dropped.⁹ The most serious consideration was made in the middle 1980s when the Government stated its intention to buy/build up to 12 nuclear-powered submarines in its 1987 White Paper.¹⁰ This would have given the navy the ability to go anywhere in Canadian Arctic waters. This could have then deterred Soviet Submarines from entering Canadian arctic waters. Canadian nuclear powered submarines would have also forced allied navies to establish an underwater management scheme when operating in Canadian waters to avoid collision. Thus Canada would have gained an excellent picture of all submarine activity in its arctic waters. However because of the end of the Cold War and costs, the programme was abandoned just as a decision was about to be made as to what design was to be selected.

The Air Force has also been continually cut back throughout the 1970s and 1980s in terms of its ability to operate in the north. 440 Squadron is the only permanently based air assets. It comprises of 4 twin otters. These aircraft were built in the 1950s and are only now being replaced. There are also four forward operating locations (FOL) for Canadian and NORAD (ie American) fighters at Inuvik, Iqaluit, Yellowknife and Rankin Inlet, but are seldom used. With the exception of the Twin Otters, there are no other search and rescue aircraft or helicopters that are permanently stationed in the north. The northern sovereignty overflights of the Canadian north by the long range aircraft (first the Argus and then the Auroras) reached a high of 22 flights per year in 1990 and were then drastically decreased so that by 1995 there were only one or two flights a year.¹¹

It is obvious that the ability of the Canadian Forces to respond to security threats in the North was never strong. At its zenith, the Canadian Forces cooperated with the United States to be able to respond first to the Japanese threat and then to the Soviet. However, there was little effort to develop an ability to act on its own. There are several reasons for this. First, the costs associated with any independent effort have always been formidable. In the 1950s Canada might have had the resources to build up its northern military capabilities, but then it would have come at a cost to its other defence capabilities. Since the Americans were willing to pay for the vast majority of the costs, there seemed little reason to spend more Canadian funds. Second, the threat

posed by the Japanese and then the Soviets to the north were always overshadowed by other elements of the security threat at the time. Thus, the war in Europe completely dominated the focus of Canadian decision-makers as the Japanese moved into Alaska. The assessment (and correct one) was that the German military threat was the most dangerous threat to Canada. Likewise, in the 1950s and 1960s the action of the Soviets in Europe and Asia tended to divert attention from the growing Soviet aerospace and maritime threats to the Canadian Arctic. Third, the threat perception of the time was shared by the United States. With their much larger military capabilities, they were in a better position to provide the necessary resources to ensure that North America's northern security needs were met. Thus Canada was willing to entrust the North American undersea Arctic security entirely to the USN. Fourth, once the Alaska Highway, DEW line or NORAD were built and/or created, the Canadian decision makers tended to believe that there was little more to be done. Thus Canadian decision-makers were able to focus on other needs thereby tending to forget the Arctic.

The End of the Cold War

The end of the Cold War accelerated the process of the de-securitisation of the Canadian north. Almost all activities that DND took in the north were either stopped or substantially reduced. With the end of the Cold War, the view developed that the danger to the north was now over and nothing more needed to be done.

The Navy ceased its NORPLOYs in 1989. The Navy had been sending one to three of its vessels into the eastern arctic at least since 1971. Initially Canadian destroyers and replenishment vessels were sent, but by 1986 only smaller vessels (*Cormorant* and *Quest*) were being sent. The Canadian Forces also had the opportunity to purchase from the United States underwater listening devices for use in the Arctic. Consideration was given to buying three units to allow for a complete coverage of the choke points leading into the Canadian Arctic archipelago. While a Memorandum of Understanding was reached to allow Canada access to this very advanced technology, the Canadian government ultimately decided that the expected cost of \$100 million was too expensive.

The Air Force also cut back on its northern commitments. Throughout the 1990s 440 squadron continued to use the aging twin otters with no replacement. The Aurora CF-140 and the three CF-140A Arcturus had their northern sovereignty overflights (NORPATS) reduced from a high of 22 in 1990 to 1 in 1995. After 1995, seldom more than one or two flights a year occurred. Likewise, Canadian F-18 were seldom exercised at the four Forward Operating Locations.

The DEW line was modernized into the North Warning System starting in the middle 1980s. This included an updating of some of the radar systems. It also included a large scale reduction of personnel manning the system as many of the smaller sites were automated. However as the 1990s proceeded, less attention was given to maintaining the systems. This was clearly indicated

when the building containing the radar at one of the automated sites burnt down and was never replaced. The Canadian post at Alert also was modernized allowing for a decrease in personnel from over 200 to about 75.¹²

The one area of Arctic security that was increased in the immediate end of the Cold War was the Rangers. The overall number of Ranger patrols was increased from 25 in the 1980s to 58 by 2000. (Each patrol varies in size but the average is about 10-15 personnel.) However, funding limitations allowed for only 30 of the 58 units to actually go out on a single sovereignty patrols in 2000.

It is clear that the Arctic simply ceased being an area of concern for Canadian security in the 1990s. Indeed, when the Government did give any consideration to the role of the Canadian north in the emerging new international system, it was in the context of new multi-lateral institutions. The most important one was the Arctic Council. While it has done important work in the determination of environmental and social threats facing the arctic, its founding document specifically forbids it from addressing security related issues. This clause was placed in at the insistence of American officials who still considered their arctic security to be of a high priority and did not want an international organizations limiting their freedom of action.¹³

The 1990s were a time of substantial cuts for the Canadian Forces. Both personnel and budgets were substantially reduced as a result of the end of the Cold War. This required the Canadian Forces to make hard decisions that ultimately reflected its core priorities. It became clear that Arctic security was not a high priority. However as the new century began changes occurred and renewed interest in Arctic security developed. It became possible to start to note a renewed interest in Arctic security amongst a small number of Canadian forces personnel.

The Beginning of a Canadian Arctic Security Renaissance?

It was not until the end of the 1990s that the Government and the Canadian Forces began to reconsider their neglect of the security of the Canadian Arctic. The new policy framework addressing the needs of Canada originated from a relatively small number of officials who became alarmed by Canadian inaction. To a large degree, this was the result of initiatives taken within the Canadian Government and particularly by members of the Canadian Forces. Much of the initial recasting of Canadian Arctic security commenced at the Arctic Security Working Group (ASWG).

Arctic Security Working Group (ASWG).¹⁴

The Arctic Security Working Group (ASWG) (originally known as Arctic Security Intergovernmental Working Group - ASIWG) has become one of the most important instruments for the Canadian government to examine and coordinate Canadian Arctic security policy. Created in the spring of 1999, it has served a bi-annual forum by which Canadian federal and territorial gov-

ernment officials meet to discuss and coordinate activities relating to Canadian Arctic security. It is a non-classified meeting that includes academics and members of various northern aboriginal groups in a two-day meeting that is held on a rotating basis between the three territorial governments. It has provided a forum where each department can educate the others about security issues that they face. In this manner it has also been an important forum to provide for the coordination of policy and planning activities.

ASWG was created on the initiative of Colonel Pierre Leblanc while serving as commander of Canadian Forces Northern Area (now renamed Joint Task Force North). Issues that have been covered by this body, they have included problems associated with organized crime and the diamond industry, the security of oil and gas pipelines, security issues associated with a receding ice cover of the Arctic waters, and the spread of pandemic diseases.

These meetings have had three major impacts on the renaissance of Canadian arctic security policy. First, they have provided a means of developing relationships among members. Many of the officials were unaware of the activities of their colleagues until meeting through ASWG. Secondly, the meetings provided a means of improving coordination between these same officials. CFNA has used ASWG to coordinate exercises with other departments. When DND re-introduced joint northern exercises (Narwhal), it was able to include the RCMP, Coast Guard and the Space Agency. While such coordination may have occurred in the absence of ASWG, it was at the regular meetings that the invitation for the other departments to join was made. The ASWG model of interdepartmental cooperation at multiple levels of government pre-dated the current efforts of the Canadian Government to coordinate its security policy. The events of 9/11 caused a major re-thinking of how North American governments provided for the security of their citizens. One of the major "new" initiatives has been the creation of numerous interdepartmental security working groups. However, having been created in the fall of 1999, the ASIWG preceded them all. It is not surprising to note that many of the officials involved with ASWG in its early days now find themselves playing important roles on these new security bodies. Even the territorial governments have used ASWG as a means of coordinating their own security and sovereignty policies. Territorial officials attending ASWG soon became aware of the need to create their own policy. They then worked together to develop their own joint territorial policy paper on Canadian Arctic sovereignty and security.¹⁵

The third benefit of the meetings is that they have provided an open forum for the education of its members. One of the points of business at the meetings is presentations from experts from academia, business, foreign countries, NGOs and other government departments on new and emerging threats and security challenges in the north. In this manner, all members have an opportunity to discuss and debate the issues as they are put forward. The minutes of the meetings make it is clear that the attendees at these

meeting are becoming increasingly sophisticated about the threats posed by climate change, the resource industry and so forth.

Beyond its direct benefits, ASWG has also given the commanders of CFNA the forum from which to advance the case on the need to improve Canadian Arctic security to the senior leadership of DND. All four commanders have pressed their superiors on this case and have resulted in several important initiatives. The first was the *Arctic Capabilities Study* (ACS),¹⁶ and the second was the re-commencement of joint CF exercises in the north.

Arctic Capabilities Study (ACS)

The aim of the Arctic Capabilities Study ACS was: "to provide information, analysis and recommendations with regard to the need for and the feasibility of an increased CF presence in and surveillance of the Arctic region."¹⁷ It was undertaken on the assumption that the strategic situation in the Arctic was changing.¹⁸ The report was divided into four sections. The first provided a review of DND arctic policy; part 2 reviewed the activities of other departments regarding Arctic security; part 3 reviewed DND activities in the Arctic and; part 4 examined options for increasing DND/CF capabilities in the Arctic.

Part 1 showed that there was limited mention of the Canadian north in the main policy documents.¹⁹ Part 3 of the ACS - the review of DND actions and capabilities in the north- found that, "CF activities in the North have decreased over the years and our ability to monitor activity and to respond in an appropriate manner remains limited. This shortcoming is likely to become more significant as activity in the Arctic increases."²⁰ Thus the ACS acknowledges the weakened state of the department of defence to provide for Canadian Arctic security.

The report then made a series of short/medium and long-term recommendations that called for improved Canadian Forces capabilities in the north.²¹ In total, the report provides an excellent summary of Canadian efforts to provide for Arctic security up to 2000. It found that the Canadian efforts were limited. However, it also found that while there were signs of developing threats, they currently remained vague.

While the report called for improved exercising of the Canadian land forces and air forces in the north, the commanders of CFNA have actually been successful in initiating a new series of large scale joint exercises involving the land, maritime and air forces along with the Rangers entitled Operation Narwhal. There have been two such exercises in 2002, 2004 and 2006. There has also been a third exercise centred on the Canadian Forces return to Hudson Bay called Hudson Sentinel.

Resumptions of Northern Operations/Exercises:²² Operation Narwhal and Hudson Sentinel

In August 2002, Narwhal 1 focussed on the deployment of two Canadian Maritime Coastal Defence Vessels sent to the eastern arctic to exercise with land and air units of the Canadian Forces. This was the first time that the navy had deployed a ship since

1989 and the first time such a large joint exercise was held in the north since the end of the 1970s. Two years later in August 2004 an even larger exercise was held in the Pangnirtung region. This time, a Canadian frigate HMCS *Montreal* was utilized along with other land (including Rangers) and air elements. It was the first time since the 1982 deployment of HMCS *Saguenay* that a Canadian destroyer or frigate sailed into Canadian Arctic waters. The Canadian Coast Guard and the RCMP also participated in the exercise. In 2006 Narwhal III was held in the area north of Baffin Island.

In the summer of 2005, two Canadian Maritime Coastal Defence Vessels, HMCS *Glace Bay* and *Shawinigan* circumnavigated Hudson Bay in an operation entitled Hudson Sentinel.²³ The last time that any Canadian warship had been in these waters was 1975 when the HMCS *Protecteur* entered these waters. At the same time that the MCDV vessels were in Hudson Bay, the frigate HMCS *Fredericton* was engaged in a northern fishery patrol off the east coast of Baffin Island. There has been a renewed effort on the part of the Canadian Forces to re-acquire the skills necessary to operate in the north. However, as significant as these new efforts are, they are occurring only in the most benign environmental conditions. There has yet been any effort to conduct large scale exercises in the winter months with the exception of several expanded Ranger patrols. The Forces are re-discovering that operating in the Canadian north is just as challenging (and perhaps even more so) as deployments to regions such as Afghanistan or East Timor.

New Equipment

Following the release of the Arctic Capability Study, there have been some steps to improve the quality and quantity new equipment for use in the north. Radarsat II is a Canadian designed and built satellite that uses radar for the purpose of earth observation. Its specific Synthetic Aperture Radar (SAR) allows it to “see” through cloud and darkness, making it an ideal technology for use over the Arctic.²⁴ It will be used to monitor surface vessels in Arctic waters. The utilization of RadarSat II for this specific mean is called Project Epsilon (the satellite will also perform other duties). Assuming that the satellite is successfully launched, this will be the first time that Canada will be able to maintain vessel surveillance in its arctic waters twenty-four hours/seven days a week in almost real time terms.²⁵

Another area where there is real intent to improve the Canadian northern capabilities is showing in the specifications for new maritime forces ship construction. Both the proposed Joint Support Vessels (to replace the current Auxiliary Oil and Replenishment (AOR) Vessels) and the replacements for the Destroyers and Frigates are being designed with a capability to operate in limited ice conditions. While this will not mean that these ships can be considered icebreakers, it will allow the Canadian navy to proceed into Arctic waters earlier and later in the season than is now the case. But a note of caution needs to be injected in that the final decision on the design of either class has not been finalized

and so, it is not confirmed that they will be given this limited ice capability.

Efforts are now being made to reach a decision on the type of aircraft that will replace the Twin Otters. Likewise the modernization of the CF-140s is continuing, but the three CF-140A are in the process of being removed from service. So while the individual remaining long-range aircraft will be more capable, there will be fewer suggesting that it will be hard for the Government to actually increase the number of sovereignty over flights that now occur.

While there is some optimism within DND, other key departments are not doing as well. Most notable is the continued inability of the Coast Guard to have its ice-breaking fleet re-capitalized. It has one heavy ice-breaker, *Louis St. Laurent* - commissioned in 1969, five medium *Pierre Radisson* (1978), *Sir John Franklin/Amundsen* (1979), *Des Groseillers* (1982), *Henry Larsen* (1987) and *Terry Fox* (1983).²⁶ They range in age from 36 years to 22 (with the exception of the 17 year old *Larsen*). While the Coast Guard has been attempting to gain Cabinet approval to begin examining a new shipbuilding programme, there are no indications that any such decision will be made anytime soon. It is difficult to see how the Government is serious about improving northern security unless it begins to take this problem much more seriously.

Commitment of the Canadian Government to Arctic Security

The clearest indication that the senior political leaders of Canada have come to accept the need for a re-examination of Canadian Arctic Security can be found in recent statements and policy papers. Both the Martin Liberal Government and Harper Conservative Government have issued strong statements in support of improving Canadian Arctic Sovereignty and security. Martin's support was stated in the Canadian *International Policy Statement*.

Released in the Spring of 2005, this document brought together Canadian foreign, defence, international aid, and international trade policy in one package. In the overview document, and the defence and diplomacy documents, the government accepted that it had neglected Canadian Arctic security and now needed to act because of emerging changes.²⁷ This theme is brought out even more clearly in the Diplomacy and Defence documents where the need for Arctic security figures prominently in the sections on protecting North America. The Defence IPS states, “the demands of sovereignty and security for the Government could become even more pressing as activity in the North continues to rise.”²⁸

The Defence Paper then makes it clear that there is a need to move beyond simply words and lists specific improvements that are to be carried out by Canada's maritime, air and land forces. The Maritime forces are to “enhance their surveillance of and presence in Canadian areas of maritime jurisdiction, including the near-ice and ice-free waters of the Arctic.”²⁹ The air force is

to “increase the surveillance and control of Canadian waters and the Arctic with modernized Aurora long-range maritime patrol aircraft, unmanned aerial vehicles and satellites.”³⁰ In addition the Air Force will receive replacements for the Twin Otters of 440 Squadron and consideration will be made to basing search and rescue aircraft in a northern location. The Land Forces have been tasked to improve the communication abilities of the Rangers and increase Regular Forces sovereignty patrols.³¹

The Martin government’s commitment to improving its Arctic sovereignty and security was also found in domestic policy initiatives. The most important was the “Arctic Strategy.” It was led by officials from the Department of Indian and Northern Development, and includes various members of the Federal Government and three territorial governments (most with some association with ASIWG).³² One of its six main objectives was “Reinforcing Sovereignty, National Security and Circumpolar Cooperation.” However before the Martin Government was able to complete this review, it was defeated by Stephen Harper’s Conservatives in January 2006.

Even before the election was decided, Harper stated his commitment to strengthening Canadian ability to protect its Arctic Sovereignty and Security. Speaking in Winnipeg on December 22 2005, Harper took the unusual electoral step of announcing his commitment to the Arctic. Diefenbaker was the last party leader to campaign on the issue.

Harper also committed to several major capital projects if he was elected. Among these were promises to: create a new national sensor system for the north; the building of three new icebreakers; the construction of a new military/civilian deep water docking facility in the Iqaluit region; deployment of new search and rescue aircraft and unmanned aerial vehicle; and a new army training base in or around Cambridge Bay.³³

Since the election, there have been no official pronouncements by the Conservative as to the status or even if they intend to honour their pre-election promises. However, at the time of writing, there have been unofficial suggestions that the Government has been facing challenges from various departments as to the need for the promised measures.

Not surprisingly, the main reason for the “push-back” has been concern over costs. For example, the Department of National Defence has been said to be reluctant to accept the three armed icebreakers or to pay for the building of new port facilities in the north. Likewise the Department of Foreign Affairs has also been rumoured to be questioning the need to spend resources on any new enforcement capabilities for the north.

Ultimately, there are signs that senior government leaders are willing to acknowledge the problem. There simply has yet to be any recent government that has had the political capability of fulfilling their promises. Thus the final question to be addressed is: what is the likelihood that the will to improve Canadian Arctic security will remain? The answer to this will depend on the severity and longevity of the threats that are now developing. What then are they and how can they be evaluated?

The Sustainability of the New Arctic Security

Thus it is clear that the Government had become focussed on addressing the neglect of Arctic Security in the last decades. The final question that needs to be addressed is the willingness of the Government to maintain its resolve and spend the resources necessary to provide the means of providing for the surveillance and protection of the Canadian Arctic. This ultimately depends on the factors that have driven the Government to recognize the need to act and whether or not there is the political will to provide the resources that will be needed in the long term.

There are four factors that have led to this new renaissance in Canadian Arctic security: 1) The attacks of September 11, 2001 drew attention to the vulnerabilities of North America to terrorism. 2) The impacts of climate change are increasingly seen as leading to the melting of the Arctic and thereby making it more accessible to foreigners. 3) The demand for natural resources and especially energy sources pointed to an increase exploration and exploitation of the resources that are found in the Canadian north. 4) A series of well published international incidents have revived the interest of both the Canadian political elites and the general public in defending Canadian Arctic sovereignty and security.

The attacks of 9/11 drastically changed the manner that North Americans viewed security. The attacks drove home the existence of new threats that replaced the danger posed by the USSR. While debate remains as to the causes of the new threat and the best means of countering it, the attacks made it clear that new, dangerous and unexpected security threats still existed. Thus the end of the Cold War did not mean the “end of history”. The attacks also drove home the fact that in order for North Americans to remain protected, all borders must be made secure. While no one is expecting an immediate attack by Al Qaeda from Inuvik, potential dangers do exist in the long term. If southern borders are made more secure and the northern is not, it stands to reason that they will provide a vulnerability. Terrorists could be willing to exploit such openings. (It is unsettling to know that there is still no security screening of passengers boarding aircraft in many of the Canadian northern airports outside of the territorial capitals.) Nevertheless, the attacks of terrorists have demonstrated that there is a need to be on the guard for these new threats.

The debate on the impact of climate change cannot be fully assessed here. However, the most comprehensive review of literature by the leading international experts in all fields makes it clear that the Arctic is already being transformed. Furthermore the Arctic will continue to experience the most pronounced changes in the entire world due to Climate Change. The Arctic Council commissioned a multi-year study that reached an extremely high degree of consensus. *The Arctic Climate Impact Assessment (ACIA)* is clear the Arctic is warming and that it will continue to warm at an alarming rate.³⁴ For Canada and the other Arctic nations, this means that their Arctic regions will become more accessible as the extreme environmental conditions moderate. However, what is not yet clear are the specific local effects. While considerable concern has been raised regarding the pros-

pects of international shipping in an increasingly ice-free Northwest Passage, it remains uncertain as to whether or not international shipping companies may find it more attractive to sail on the Russian side through the Northern Sea Route, or even perhaps over the pole itself rather than sail through the Northwest Passage.³⁵ All of this depends on how the ice actually melts as climate change warms the Arctic. However, it is clear that the Arctic is physically changing. And perhaps even more important than the reality is the *perception* that is being created that the north is becoming more accessible.

The accessibility issue is central to the need to maintain Arctic security because the Canadian north has tremendous resource potential. The discovery of diamonds in the Northwest Territories has moved Canada from a non-producer to the third largest produce behind Botswana and Russia. However, the greatest interest still remains in the potential of Canada's northern gas and oil. There is renewed interest in Canada in developing gas and oil exploration in the region around the MacKenzie River delta.³⁶ This area had undergone extensive exploration in the 1970s but the collapse of oil and gas prices at the end of the 1970s and early 1980s, combined with the decision not to build a pipeline along the MacKenzie River Valley, postponed most of these projects. As energy prices rose in the 1990s and continue to skyrocket in the 2000s, combined with a renewed interest in building a gas pipeline along the MacKenzie Pipeline, the expectation is that substantial oil and gas resources will be developed around the MacKenzie River Delta into the Beaufort Sea. While it is uncertain when the oil and gas resources will be developed and bought to southern market, but with skyrocketing energy prices, it appears that this will occur sooner rather than later.

The issue that follows is how these resources can be protected for Canadian interests. While much of the security will remain at the level of police enforcement, the need to protect oil and gas resources will require capable armed forces that can operate in the north.

Finally, the national media is increasingly developing an interest and capability in providing coverage on the issue of Arctic sovereignty and security. There has been tremendous interest by the Canadian media in issues relating to climate change, sovereignty and the Northwest Passage. However, as demonstrated by the coverage provided by the *National Post* and the *Globe and Mail* on the Hans Island issue, there is also a growing willingness to give stories concerning Arctic security detailed examination. It seems likely that all future issues featuring northern security and sovereignty will continue to be given good coverage.

Conclusions

In summary, the factors that have pushed Canadian policy-makers to re-examine Arctic security will not soon dissipate. Terrorism will remain a threat to North American security; climate change is not going to reverse itself; at one point oil and gas development will occur in the Canadian north; and the expertise on Arctic sovereignty and security issues developed by the national media will not soon disappear. All of the security threats faced by

Canada in its Arctic regions cited in the *Arctic Capability Study* and the Martin Government's *International Policy Statement* and the Conservatives' electoral platform will remain relevant.

Canada is now experiencing a renaissance in how it addresses the issues of Arctic security. It has recognized the cost of its neglect and seems poised to develop the tools that it needs to meet the challenges that are already re-shaping the Arctic. Of course nothing is for certain with regard to the Governmental action, but it seems likely that the Government will remain - and needs to remain - committed to improving Canada's ability to be truly the "True North Strong and Free." ♦

The views expressed are those of the author and do not necessarily reflect the views of the Institute or its members.

Notes

¹ An earlier version of this chapter appeared as "The Renaissance in Canadian Arctic Security?!" in *Canadian Military Journal* vol.6 no.4 (Winter 2005-06). <http://www.journal.dnd.ca/engraph/Vol6/no4/04-North1_e.asp>.

² James Delgado, *Across the Top of the World: The Quest for the Northwest Passage* (New York: Checkmark Books, 1999), 19, 40.

³ Operation Sandcrab took back Attu. This was a costly battle and on the allied side was fought only by American forces. The battle to take back Kiska (Operation Cottage) was a joint US-Canadian operations comprising of approximately 30,000 American ground troops and 5,500 Canadians. However, unknown to the allies, the Japanese evacuated their troops three weeks before the invasion.

⁴ Bell's Travel Guide, "The Alaska Highway," 2001 [http://www.bellsalaska.com/alaska_highway.html].

⁵ The Milepost, "History of Alaska Highway," 1998, [<http://www.themilepost.com/history.html>]

⁶ For the story on the development of early Canadian sovereignty and security policy see Shelagh Grant *Sovereignty or Security: Government Policy in the Canadian North 1936-1950* (UBC Press, Vancouver: 1988) 1-385.

⁷ For a detailed examination of the role of the Rangers see the Lackenbauer article in this volume.

⁸ For a history of Alert see David Gray, *Alert: Beyond the Inuit Lands: The Story of Canadian Forces Station Alert* (Nepean: Borealis Press, 2000) 1-97.

⁹ Marc Milner, *Canada's Navy: the First Century* (Toronto: University of Toronto Press, 1999), 230.

¹⁰ Department of National Defence, *Challenges and Commitment: A Defence Policy for Canada*: (Ottawa: Supply and Services, 1987).

¹¹ Rob Huebert, "Steel, Ice and Decision-Making: The Voyage of the *Polar Sea* and its aftermath: The Making of Canadian Northern Foreign Policy," unpublished Ph.D. thesis (1993) 366.

¹² Alex Urosevic, "High Alert From atop the world: Canada's Cold Warrior spies now fight terror at 82.30 north latitude" *Toronto Sun* (November 14, 2004).

¹³ Rob Huebert "New Directions in Circumpolar Cooperation: Canada, The Arctic Environmental Protection Strategy, the Arctic Council and Canada," *Canadian Foreign Policy* vol5, no2 (1998).

¹⁴ Until November 2006 this body was known as the Arctic Security Intergovernmental Working Group. However, in recognition of its increasingly complex membership, the decision was made at its November 2006 meeting to drop word "intergovernmental" from its title.

¹⁵ Government of Yukon, Northwest Territories and Nunavut, *Developing a New Framework for Sovereignty and Security in the North: A Discussion Paper prepared by the Governments of Yukon, Northwest Territories and Nunavut* (April 2005), [http://www.gov.nt.ca/research/publications/pdfs/sovereignty_and_security_in_the_north.pdf].

¹⁶ Department of National Defence, *Arctic Capabilities Study 1948-3-CC4C* (DGSP) (June 2000).

¹⁷ *Ibid.*, 3.

¹⁸ *Ibid.*, 2.

¹⁹ *Ibid.*, 3.

²⁰ *Ibid.*, 11.

LEADING CHANGE: TRANSFORMING THE PRINCIPLES OF WAR FOR THE TWENTY-FIRST CENTURY

By James J. Schneider, Ph.D.

The philosopher, Michael Gelven, wrote, “The paradox of war is not only conceptual, it is also deeply existential. It is not merely an abstract problem for those who like to speculate about *principles*, it is a felt and endured agony of the soul that can be ignored only at the peril of self.”¹ Gelven’s point is worth emphasizing: that detached speculation ultimately confronts the real world of action. Any incongruities between the two can be dangerous and deadly. It is surprising, therefore, that despite the conceptual importance of the principles of war in their relation to action, their discussion typically offers little more than an argument for either their enduring relevance or their total reformulation.² The article seeks to renew the debate by examining the question of whether the principles have changed and, if so, how. *I argue implicitly that changing the principles of war is fundamentally an act of leadership, a way to lead military change and transformation.*

Have the Principles of War Changed?

It depends on what you mean by “principle.” Today the word principle tends to denote two meanings: the first embraces definitions related to fundamental laws, truths, assumptions or standards; the second signifies precepts, teachings, rules or norms prescribing a particular pattern of conduct or course of action: laws explain what happened; precepts make things happen. The two denotations, law and precept, have created a semantic impediment to common institutional understanding and has persisted at least since the early nineteenth century. The law-precept dichotomy was a natural consequence of a major intellectual revolution that culminated in the previous eighteenth century when the Enlightenment reached its pinnacle. The Enlightenment preached a doctrine of *scientific* reason that sought to understand—and more fundamentally—to control nature, most often conceived of as the natural material world. Scientific understanding, knowledge, and its application were couched in very precise operational statements called laws. These laws defined *reality* as it related to the material world. Natural laws were subject to empirical observation rigorously verified in the laboratory. Increasingly, this modern philosophy of science achieved its most extreme formulation under the doctrine of Positivism.

During the first half of the nineteenth century, the French philosopher, August Comte (1798-1857) advanced his idea of Positivism. According to Comte, the history of human thought had passed through three stages: the theological, dominated by religious belief and superstition; the metaphysical, dominated by

speculative belief; and the positivist, ruled by scientific truth. Comte believed that the method of science could be extended to the study of and his society. This extension soon included a scientific study of war. Even as early as the first decade of the nineteenth century military theorists like Antoine-Henri Jomini (1779-1869) could write: “It is universally agreed that no art or science is more difficult than that of war.... This art, like all others, is founded on certain and *fixed principles*, which are by their nature *invariable*; the *application of them* only can be varied.”³ Thus arose the fundamental claim that persists to this day: military principles are invariant law-like rules about war that only vary in their *application*.

The Positivist turn in military thought, apart from its claim for the existence of natural unchanging laws of war, had another important consequence. All natural scientific laws make claims limited to the material world: if something cannot be measured or expressed in terms of its physical dimensions (space, time, mass, force, direction) it cannot claim any objective existence in the material world. Fundamental military concepts like will, motivation, spirit, courage, leadership, genius had the same scientific status as angels and ghosts. Although Jomini would deny it, and his writings are replete with such denials, the Positivist core of the principles of war deemphasizes the human (moral and cybernetic) dimension: in Jomini’s framework the human domain cannot be discussed, because it does not objectively exist.

In contrast to Jomini’s position, Carl von Clausewitz (1780-1831) bore an intellectual outlook that continued in the classical rationalist tradition of Socrates, Plato, and Aristotle. For Clausewitz, principles were precepts or teachings that educated the mind for war, not law-like regulations that determined a particular course of action. He wrote that principles “are intended to provide the thinking man with a frame of reference for the movements he has been trained to carry out, rather than serve as a guide which at the moment of action lays down precisely the path he must take.”⁴ Clausewitz was against the positive, scientific application of the principles of war. In Book Two under the heading “Positive [i.e. scientific] Teachings are Unattainable,” he wrote: “Given the nature of the subject, we must remind ourselves that it is simply not possible to construct a model for the art of war that can serve as a scaffolding on which the commander can rely for support at any time. Whenever he has to fall back on his innate talent, he will find himself outside the model and in conflict with it; no matter how versatile the code, the situation will always lead to the consequences we have already alluded to: *talent and genius operate outside the rules....*”⁵

Asking whether war is an art or science, Clausewitz makes the clearest distinction yet between principles as laws and principles as teachings: “The essential difference is that war is not an exercise of the will directed at inanimate matter, as in the case of

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the mechanical arts [like masonry, carpentry, plumbing, etc.], or at matter which is animate but passive and yielding, as in the case with the human mind and emotions in the fine arts. In war, the will is directed at an animate object that *reacts*. It must be obvious that the intellectual codification used in the arts and sciences is inappropriate to such an activity. At the same time it is clear that continual striving after laws analogous to those appropriate to the realm of inanimate matter was bound to lead to one mistake after another. . . . So far all attempts at formulating any have been found too limited and one-sided and have been undermined and swept away by the currents of opinion, emotion and custom.”⁶

In examining the two interpretations of the word “principle,” we can now say with some precision what it is: a “Principle is also a law for action, but not in its *formal, definitive meaning*, it represents only the spirit and the sense of a law: in cases where the diversity of the real world cannot be contained within the rigid form of law, the application of principle allows for greater latitude of judgment. Cases to which principle cannot be applied must be settled by judgment; principle thus becomes essentially a support, or lodestar, to the man responsible for action.”⁷ In his short volume on the principles of war, Clausewitz was careful to note the principles are the “principles of the *art of war*,” to underscore that once identified, they must be creatively applied. For Clausewitz this act of creation was itself central to the whole task of military art.

How Are the Principles of War Changing?

In fact the principles of war, as of this writing, are *not* changing, though there is a dimly felt need that such change is necessary. As they are now rendered, the principles have remained virtually the same since the time of Napoleon. The question thus becomes: How could they change?

If the art of painting is to military art as painting-by-numbers is to the principles of war, then the principles must change to meet the needs of the military artist. From an aesthetic or creative standpoint, the principles of war are like the numbers on a paint-by-numbers canvas: they help guide the collective action of military novices learning the military art. The principles change as the shape, form and content of war change. They must change if they are to help educate an entire officer corps to new modes and methods of warfare. The principles serve as a kind of heuristic device: “rules of thumb” that offer initial solutions to practical problems of war. For the military expert—some might even say genius—the paint-by-number principles constrain his true creativity. This artistic genius is working off a palette known only to himself and contains more colors than the average paint-by-numbers canvas allows. In the nineteenth century it became increasingly recognized that such military geniuses were rare. The modern general staff system was devised to institutionalize military genius by making it a collective responsibility: the commander and his staff would *together* become the “writers of the numbers.”

Employing the planning process that falls under its purview, the general staff stamps a template—the “numbers”—or *plan* on a military canvas—or *battlespace*. The battlespace is then “painted,” stroke upon stroke, by military action. Thus the will of the commander is expressed, through the principles of war, into action. Of course, as Clausewitz pointed out, the enemy is not a passive canvas; he is animated with his own will and powers of resistance. Most military works of art, therefore, often resemble a painters’ drop cloth with chaotic splashes of color, randomly smeared upon an old remnant. Yet, because the principles of war are taught and known to all, they provide coherence of action. Cohesion is most often lost, however, when the principles of war change, and the change takes us unawares.

Military art requires a medium of expression and a medium of action. The first is the enemy who provides the necessary active resistance to the artist’s will, so he can do his creative work in the first place. The second is the tools that the military artist works with: the hardware and the organizations. Together, the two produce a creative *effect*. For the painter, the *effect* of a white cloud on canvas cannot be *expressed* without resisting canvas and active palette and brush. The genius of the guerrilla and insurgent is that he denies the conventional military artist his medium of expression by avoiding active resistance. When the media of expression and action change, military art is fundamentally altered, altering thereby the principles of war. In the analogy, the numbers no longer fit the canvas or match the paint: the canvas itself becomes changed, changing the tools that will work it. In warfare this becomes a complex dialectical process, as one medium of expression seeks to resist and overcome more effectively the other: tanks and battleships become more heavily armored, guns more powerful, aircraft swifter. These spiraling changes over time produce a military revolution. It can be argued what constitutes such a revolution; what is clear is that it often goes unrecognized for years until a crushing defeat captures our notice. The most tragic example is the First World War.

If you can imagine giving a group of medieval alchemists a modern physics lab, you have some hold on the magnitude of the conceptual challenge that confronted the contending armies. All imbued with the principles of war set in the time of Napoleon and armed with the most modern technology the Industrial Revolution could spew forth, they turned military art into an unimaginative expression of mutual slaughter. The creative collapse of the European armies was most directly set in motion by the military principle of mass or concentration.⁸ Building on the writings of Jomini the forces sought to achieve decision through a concentrated massed battle. With the emergence of industrialized total war, this principle became harder to apply. First, the improved lethality of the new weapons, concentration invited destruction. This had already played during the American Civil War. Second, concentration made armies easier to detect and locate. Third, a massed force is difficult to supply for long periods of time and even harder to maneuver. More than a failure of imagination, the World War One was a failure in institutional leadership.

Very briefly, leaders of large institutions like military bureaucracies must at all costs provide direction, protection and order to the service.⁹ Order, in part, instills institutional stability by applying common norms and patterns of behavior and methods of problem-solving. In the military, doctrine fulfills this crucial role with the principles of war lying at its heart. New ideas create just the opposite effect. New ideas, like suggesting radical changes to tried and true principles of war, are dangerous heresies. They influence the military in three ways. First, novel ideas generate new modes of thinking that create intellectual divisions among an otherwise cohesive worldview. Second, they call into question the institution's past and tradition, creating an unsettling sense of corporate disloyalty. Finally, new ideas create a sense of professional insecurity and lack of confidence. For all these reasons the rank-and-file of an organization resists change. The commanders who marched into that meat-grinder over ninety years ago were not stupid men. Their problem was a recurring problem we see today: they did not know how to lead change. Any question concerning how the principles of war change is fundamentally about how to *lead change*.

The Principles of War as Agents of Change

The principles of war must be recast as the vanguard of military transformation for the twenty-first century. I offer the following merely as a starting point in a debate that has yet to take place.

1. The Zeroth Principle. Clausewitz wrote, "The first, the supreme, the most far-reaching act of judgment that the statesman and commander have to make is to establish by that test the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature. This is the first of all strategic questions and the most comprehensive."¹⁰ The Zeroth Principle says that the solution to any military problem must be consistent with the overall goals of policy and that in formulating a solution, those goals must not thereby be subverted. Stated inversely, no operational solution can overcome a fundamentally flawed policy: ultimate solutions formulated from defective policy will always contain the very seeds of their own failure. As a corollary, again derived from Clausewitz, we can say that all policy solutions tending toward conflict "...should never be thought of as *something autonomous* but as an *instrument of policy*;..."¹¹ Thus, all action guided by a set of principles insures rational integration and coherence from the high chambers of decision making down to the tip of the bayonet. That said, the Zeroth Principle asserts that a given policy, though wholly rational, may be thoroughly inept, insuring a cascading failure as the policy is implemented. It is the responsibility of all leaders to impede this collapse at their levels of war.

2. Conjugacy. Also known as "bypassing" or "indirection," it is the most important principle of all. It is derived from nature as the "principle of least action," whereby the laws of nature are integrated such that energy and effort are minimized from the local to the global level. It has obvious implications for the integration of complex military systems working toward a common

goal. The principle of bypassing and indirection captures intuitively simple common sense: To get past a wall that blocks your path, dig down one side, then tunnel underneath, and finally dig up a shaft on the other side.¹² The "strategy of the indirect approach" developed by B. H. Liddell Hart offers a classic example from military theory.¹³ Examples from military history abound: MacArthur's Inchon, Korea landing in 1950; T. E. Lawrence's guerrilla campaign in the Hejaz Desert, 1917-1918; Hitler's attack through the Ardennes Forest in 1940; and other instances that minimize effort (and casualties) in the accomplishment of the mission. Bypassing is ubiquitous: virtually all of technology enables indirection and bypassing: telephones, elevators, bridges, airplanes, artillery.

There is one corollary to the Principle of Conjugacy: maneuver. *Maneuver is movement to seize, deny or exercise freedom of action.*¹⁴ Obviously, in order to bypass in the first place one must have something to bypass and possess the initiative to move. This suggests some opposition or power of resistance.

3. The Center of Gravity. The center of gravity is the "present means to achieve future ends," the source of our strength to resist and overwhelm and the physical and moral expression of our creative will.¹⁵ It is our medium of action and, as the resisting opposing enemy, our medium of expression. This power of resistance is essential for military art to flourish at all. The sculptor, for instance, uses his hammer and chisel to shape a resistant but passive column of marble, to create a statue that stands as a creative expression of his will. In the realm of conflict willful opposition becomes our medium of expression; ideally, though, we would want a passive opponent, an empty pedestal, like the inert General Mack standing at Ulm in 1805 before the bypassing Napoleon.

Conflict is always a collision of motive centers of gravity: forces of impulsion colliding with forces of inertia or resistance, thus creating the need for maneuver, indirection and bypassing in the first place. This essential requirement leads to two corollaries: engagement and destruction. Under ideal circumstances we would always like freedom of action, if attacking; or achieve complete denial of freedom of action when defending. Because a willful opponent always has a vote in the matter, we may have to fix or even destroy the enemy center of gravity. Principle of the center of gravity says we must generate overwhelming force to engage, shock and destroy the enemy when indirection fails.

4. The Objective. All rational creative action is directed toward some common aim, usually a solution to a practical problem. The Principle of the Objective has three corollaries: purpose, direction and motivation, which taken together introduces heroic *leadership* into the system of principles and animates the center of gravity with the will of the commander. Direction provides a line of operations, vectoring our center of gravity toward its objective. Purpose infuses the troops with a sense of resolution, determination, persistence and intent. Motivation inspires, incites, encourages and propels the troops into action. This principle sets the center of gravity into motion and animates its power to resist.

5. Culmination. Because our center of gravity always moves against active forces of resistance, this opposition will degrade our strength over time and across space. Clausewitz was perhaps first to recognize the importance of culmination. Considering offensive action, he wrote: “The diminishing force of the attack is one of the strategist’s main concerns.”¹⁶ It is also the main concern of the logistician to prevent or at least delay culmination. Because our center of gravity also consists of moral forces, the leader, the power of victory and the force of defeat play a key role as well. This principle has two corollaries: friction and information. Friction is a general retarding force present in all military action. Information is a form of energy that helps to overcome friction; the “fog of war” or uncertainty is its inverse. The difference between information and uncertainty forms the residue of risk.

6. Pressure. Centers of gravity operate in one of two articulated force postures or attitudes: impulsion or inertia. Impulsion embraces coercion, compulsion and the offense; inertia comprises presence, deterrence and the defense. Force posture reminds us of the basic symmetry between the attack and the defense, as well as the fundamental transformation in the physics of modern warfare. Since the Industrial Revolution, conflict systems have grown increasingly more massively articulated and distributed across space and over time.¹⁷ The solid mechanics that characterized classical (pre-Industrial) warfare has been supplanted by the forces of fluid mechanics. Today we are on the cusp of a further phase transition in fluid dynamics, moving analogously from liquid to gas—from Industrial to Information warfare. Pressure applied persistently and rapidly introduces the corollary of systemic *shock*. The dynamics of the massive articulation of forces leads to the final principle.

7. Unity of Effect. The fluid nature of modern warfare has made difficult the integration of massively distributed forces, removing the space-time proximity of cause to effect. This principle directs that we merge all separate nested efforts, like the individual bristles of a brush, into a single virtual coherent stroke. More than any other principle, Unity of Effect will make the greatest demands on twenty-first century technology, especially the information technologies.

Change and the Challenge to Leadership

The principles of war are levers of institutional leadership. They provide conceptual and creative order for the military: changes in the principles will change the institution. Before this can occur the principles must be thoroughly debated and understood. Moving beyond debate and understanding, however, we must begin a major reconceptualization of the principles of war into broad *principles of conflict*. One thing is already clear as we move into the young century: our military tasks will embrace much more than the narrowly defined conduct of war. ❖

The views expressed are those of the author and do not necessarily reflect the views of the Institute or its members.

Notes

- ¹ Michael Gelven, *War and Existence* (University Park, PA: Penn State University press, 1994), 18. *Emphasis added.*
- ² The most important works on the principles of war include: John I. Alger, *The Quest for Victory*, (Westport, CT: Greenwood press, 1982) and J. F. C. Fuller, *The Foundations of the Science of War* (London: Hutchinson & Co., 1926). An insightful study of the principles of war for the future can be found in Robert R. Leonhard, *The Principles of War in the Information Age* (Novato, CA: Presidio Press, 1998).
- ³ Antoine-Henri Jomini, tr. by S. B. Holabird, *Treatise on Grand Military Operations*, Vol. I (New York: D. van Nostrand, 1865, Fr. Trans of the 3rd ed., 1804), xi; emphasis in the original.
- ⁴ Carl von Clausewitz, tr. by Michael Howard and Peter Paret, *On War* (Princeton, NJ: Princeton University Press, 1976), 141.
- ⁵ *Ibid.*, 140; emphasis in the original. ⁶ *Ibid.*, 149; emphasis in the original. ⁷ *Ibid.*, 151. Lodestar often means “guiding principle;” emphasis in the original.
- ⁸ James J. Schneider, *The Structure of Strategic Revolution* (Novato, CA: Presidio Press, 1994), 56-62.
- ⁹ Martin Linsky and Ronald A. Heifetz, *Leadership on the Line* (Cambridge, MA: Harvard Business School Press, 2002), *passim*.
- ¹⁰ Clausewitz, *op. cit.*, 88-89.
- ¹¹ *Ibid.*, 88; emphasis in the original.
- ¹² Z. A. Melzak, *Bypasses* (New York: John Wiley & Sons, 1983), 4.
- ¹³ B. H. Liddell Hart, *Strategy* (London: Faber and Faber, 1967, 2nd rev. ed.), *passim*.
- ¹⁴ Note how this definition differs from the tactical notion of maneuver: movement to achieve positional advantage.
- ¹⁵ Thomas Hobbes, *Leviathan* (New York: Collier Books, 1962) 72. See also James J. Schneider and Lawrence L. Izzo, “Clausewitz’s Elusive Center of Gravity,” *Parameters*, September 1987, 46-57.
- ¹⁶ Clausewitz, *op. cit.*, 527.
- ¹⁷ Schneider, *op. cit.*, 11-53.

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- ²¹ This was done, but the report remains classified.
- ²² The Canadian Forces normally draws a distinction between exercises and operations. However, in the case of the north any exercise is deemed to be so difficult owing to the remoteness and climate conditions that the decision was made to blur the distinction. Thus the first exercise was labelled *Operations Narwhal*.
- ²³ Leah Jansen, “Canadian Naval Warships make Historic Churchill Visit,” *Winnipeg Free Press* August 18, 2005 p.A5.
- ²⁴ Rob Huebert, “Canadian Foreign Policy and Commercial Satellite Imagery,” in *The Need to Know: The Use of Satellite Imagery and Canadian Security Needs*, edited by Rob Huebert and Jim Keeley. (London: Ashgate Publishers, 2004) 193-206.
- ²⁵ There will be a delay in the download of the imagery, but depending on the urgency for the specific imagery, this can be very short, possibly less than an hour from when the imagery was taken by the satellite.
- ²⁶ Charles Maginley and Bernard Colin, *The Ships of Canada’s Marine Services* (St. Catharines, Vanwell Publishing, 2001) 152-158.
- ²⁷ Government of Canada, *Canada’s International Policy Statement: A Role of Pride and Influence in the World Overview* (Ottawa: 2005) 7.
- ²⁸ Department of National Defence, *Canada’s International Policy Statement: A Role of Pride and Influence in the World Defence* (Ottawa: 2005) 17.
- ²⁹ *Ibid.*, 19.
- ³⁰ *Ibid.*, 19-20.
- ³¹ *Ibid.*, 20.
- ³² Government of Canada, *The Northern Strategy*, May 2005, [<http://www.northernstrategy.ca/>].
- ³³ Conservative Party of Canada, “Harper Stands up for Arctic Sovereignty,” *Stand up for Canada* (December 22, 2005).
- ³⁴ Arctic Climate Impact Assessment *Impacts* (Cambridge: Cambridge University Press, 2005).
- ³⁵ For the debate see: Franklyn Griffiths, “Then Shipping News: Canada’s Arctic Sovereignty not on thinning ice,” *International Journal* vol.58 no.2 (Spring 2003); Rob Huebert, “The Shipping News Part II: How Canada’s Arctic sovereignty is on thinning ice,” *International Journal* vol. 58 no. 3 (Summer 2003); Franklyn Griffiths, “Is Canada’s arctic sovereignty threatened?” *Arctic Bulletin - WWF* no.1.04 (March 2004); and Rob Huebert, “The coming arctic maritime sovereignty crisis,” *Arctic Bulletin - WWF* no.2.04 (July 2004).
- ³⁶ Canadian Business Association “Oil,” (2002) [<http://www.canada-business.ro/info-point/overview/oil.html>].

CLASSICAL CHINESE THOUGHT AND CULTURE AND EARLY CHINESE HISTORY

By Victor H. Mair

Although scientist Jared Diamond famously called China an “empire of uniformity,”¹ in fact nothing could be further from the truth. China is one of the most diverse nations on earth. Linguistically, ethnically, religiously – on virtually any basis, China has always had an enormous range of populations and cultural phenomena. It is precisely because of this great social and cultural variety that it has been hard to keep the country together. To maintain political unity has invariably necessitated the exercise of heavy-handed government from the center.

China’s history for the last 3,500 years documents this lesson very clearly. Whenever the central government is weak or relaxes control, the nation rapidly dissolves into a mass of warring regional and ideological factions. The current government in Beijing is no doubt keenly aware of this history, and is consequently fiercely determined not to share power with any group or constituency, be it Falun Gong practitioners, Cantonese merchants and manufacturers, or Manchurian labor leaders and industrialists.

This essay is concerned not with politics, but rather with thought (*sixiang*), although the two are inextricably linked in the Chinese scheme of things. When I first started traveling to China in 1981, the country was still rather closed. Nonetheless, as the 1980s progressed, I became increasingly familiar with Chinese society, particularly the academic side of it. I noticed that at every level of the universities (the same thing was true of factories and all other organizations in China), there was a Communist party secretary (*dang shuji*) to match the administrative, academic, and technical officials. I was surprised by how many party secretaries there were in China and how influential they seemed to be. Still, I could not understand exactly what their purpose was, and during the early ’80s did not dare to ask for fear of compromising my Chinese friends.

In the late 1980s and early 1990s, when regulations governing relationships with foreigners started to be somewhat more relaxed, I was emboldened to ask how the party secretaries, who were given such a great amount of office space and equipment in addition to room and board, justified their existence. Every single person I asked gave the same response: “*Guan* (women *de*) *sixiang* (control [our] thought).”

For someone who has never lived in a totalitarian society, it is practically impossible to imagine how thorough is the apparatus for making sure that people’s thoughts do not go astray. Obviously, “thought” must be something of extreme importance in China to warrant devoting so many resources to controlling it.

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Modes of thinking were also very important in China’s past, and were referred to as this or that *jia* (“school”) before the more modern term *sixiang* was introduced. Chinese governments have always been obsessively concerned with the matter of what they perceived to be the necessity for “correct” thinking on the part of their subjects.

The foundations of classical Chinese thought were laid during the Warring States period (*Zhanguo shidai*), 475-221 BCE. Notwithstanding that this was a time of great bloodshed, it was also the Golden Age of Chinese thought. With one major exception that I will discuss later, all of the major schools of Chinese thought that lasted up to the modern era were established during this two-and-a-half-century period of incessant warfare.

The *Dao De Jing / Tao Te Ching-Jing* in book titles signifies “classic,” “scripture,” or “sutra” (Buddhist scripture); I will discuss the meanings of *dao* and *de* below - is the most frequently translated and best-known Chinese work outside of China, although Sun Zi’s *Art of War (Sun Zi bingfa)*, with its military and business applications, is starting to challenge it.² Often misunderstood as a mystical treatise, the *Dao De Jing*, like nearly all early works of Chinese thought, was primarily intended as a guidebook for rulers. Early Chinese thought, by and large, was socio-political philosophy; it was not concerned with abstract, theoretical, matters such as ontology, epistemology, or even logic. It was very much a practical affair. The *Dao De Jing* advised that the most effective way to govern was through *wuwei* (“inaction” or “nonaction,” but it is better to think of this elusive concept as “disinterested action” or “action without attachment”). It is similar to the principles advocated in the ancient Indian classic *Bhagavad Gita*.³

The *Dao De Jing*’s title serves as a good springboard to make some general observations about early Chinese thought. Virtually all early schools of Chinese thought accepted *dao* and *de* as basic components of their reasoning. Their interpretations of the terms differed greatly, however. For some, *dao* (literally, “the Way”) was a universal, cosmic principle, like Brahman in the Indian tradition. For others, *dao* was more like a method or technique, rather mundane in comparison with the former approach. The differences in understanding *de* were equally great. For those like the Taoists, who looked upon *dao* as universal, cosmic principle, *de* was its manifestation in the individual (“power” is one popular translation; I might prefer “charisma”), whereas for the Confucians, *de* was an ethical concept very close to English “virtue.”

Unfortunately, people have a tendency to translate *de* as “virtue” in all cases, and sometimes it is wholly inappropriate, as when we talk of “inferior *de*” or “evil *de*.” The source of our word “virtue,” Latin *virtus*, would do as a general translation for *de*, since it means “manliness,” “inner strength of character,” and that is very close to what the old Chinese word *de* meant.

The Confucians and the Taoists were at odds on almost every issue about how human beings should relate to each other in society. The Confucians stressed *li* (“civility, etiquette, ritual”), *ren* (“humaneness, benevolence”), and *yi* (“justice, righteousness”), among other related, ethical concepts. The Taoists, in contrast, believed either that these concepts were ineffectual or that they actually jinxed human relationships. They would permit people to behave more naturally, freed of artificial norms and constraints. But the Taoist and Confucian outlooks were by no means the only two positions on the spectrum of early Chinese thought. Among numerous other schools were the Mohists (followers of Mo Zi [Master Mo]), who displayed great affinity with Christianity in emphasizing the need for universal love; the egoists, or epicureans/hedonists, who advocated self-interest and personal enjoyment above all; the technicians, who believed that skilful methods were all that was necessary to run a smoothly functioning government, and perforce, society; and the Legalists, who insisted that the only way to ensure a peaceful, orderly society was through the rigorous, inflexible application of law. In the end, the Legalists won out, as might well be expected, considering the chaotic situation that had to be overcome. It was the short-lived (221-206 BCE), legalistic Qin Dynasty that established the fundamental bureaucratic institutions by means of which China was governed for the next 2,200 years—when it was governed at all, that is, since there was a succession of many dynasties and almost constant contestation for power, often erupting into rebellions, revolutions, and full-scale war.

Despite its brevity, the Qin Dynasty made some remarkable contributions. The tomb of the First Emperor of the Qin dynasty, outside the city of Xi’an in Shaanxi Province, provides a sense of his overwhelming power. Thousands of life-size terra cotta warriors protect him in death. He was the Mussolini of ancient China, as it were. He made the trains run on time. He unified axle widths, weights and measures, and the writing system, and even tried to shape thought into a single system. In the end, his totalitarianism was too harsh, and the Qin Dynasty was soon replaced by the Han Dynasty (206 BCE - 220 CE), which operated under a mixed Confucian Legalist-Taoist system of thought but steadfastly maintained the basic bureaucratic structures established by the Qin.

Han gradually ran out of steam, experiencing a brief interregnum in the middle when a renegade named Wang Mang (r. 9-23 CE) tried to institute radical policies. Still today, the majority of the Chinese people honor the Han Dynasty by calling themselves *Hanren* (“Han people”) or *Han minzu* (“Han nationality”) and their language *Hanyu* (“Han language”). (The Cantonese speak a language that is very different from the modern standard form of Hanyu that is normally called Mandarin, and they prefer to call themselves *Tangren*—i.e., “people of the Tang,” 618-907). By the first century CE, monumental transformations began to occur in the intellectual and religious landscape of China. This was when Buddhism arrived via three routes: Central Asia (the

Silk Road), the southwest (Assam, Yunnan, Sichuan), and the ocean (via Southeast Asia). The impingement of Buddhism was not just a matter of gaining a new (foreign) religion. Since Buddhism came with a lot of cultural baggage and social implications, its influences in many areas of life were enormous: language (some 35,000 new vocabulary items, more attention to grammar and phonology, polysyllabicization of words), literature (prosometric [alternating between prose and verse] form, fiction, belles letters, prosody, literary criticism), social relationships (life outside of the family unit, democratic impulses), economy (monastery holdings, mills, checks), politics (loyalty to the Buddha, not the emperor), etc.

It is amazing that Buddhism could take root and thrive in China, so alien was it from indigenous Chinese values and practices. This is not to say that Buddhism had an easy time of it in China. Indeed, it encountered tremendous opposition from Chinese intellectuals, and from time to time was even persecuted by the government. Ultimately, however, it became an essential part of the cultural landscape of China, stimulating the growth of Taoism as an institutionalized religion rather than simply a system of thought, and serving as the faith of hundreds of millions of devotees.

China is characterized by a multiplicity of intellectual approaches and outlooks and by a wide range of cultural styles and preferences. So, what then is China? Chinese history has witnessed a seemingly endless succession of dynasties and rulers, many of whom were wholly or partially non-Sinitic (e.g., Manchus, Mongols, Turks, etc.). What persisted throughout was a mode of governing and being governed—and that includes social organization—that was established more than 2,000 years ago. This mode was premised chiefly upon a combination of Confucianism, Taoism, and Legalism, with a significant, subsequent overlay of Buddhism. The coming decades will tell whether this mode of governing and being governed is compatible with democracy, especially now that it has been reinforced by Marxism. In particular, the immediate future, the run-up to and aftermath of the 2008 Beijing Olympics, are certain to prove eventful (if not tumultuous) for China and its people. ♦

The views expressed are those of the author and do not necessarily reflect the views of the Institute or its members.

Notes

¹ Jared Diamond, “Empire of Uniformity,” *Discover*, March 1996. See my review in *Sino-Platonic Papers*, January 1999.

² My own translation of the *Sun Zi* for Columbia University Press will come out in 2007.

³ See the Afterword and Appendix to my 1990 translation of the *Tao Te Ching: The Classic Book of Integrity and the Way* (Bantam Books).



PARTY AND STATE: POWER WHERE IT COUNTS

By Eric S. Morse

Prof. Victor Mair notes elsewhere in this issue that it can be very difficult for anyone not born in a totalitarian society to grasp the interrelationship between ideological (Party) and managerial (State) structures. The thought process is very alien, even more so now that there is a definite shortage of classic totalitarian states on earth – but less alien than one might think once a good teacher explains it.

Alexander Nikolayevich Yakovlev was Soviet Ambassador to Canada from about 1974 to 1986. When I was a young officer in External Affairs, coincidentally responsible for international sports policy *'bids, boycotts and the Bird (Alan Eagleson)'*, we shared the same Ottawa dentist, his waiting room, and a few chats off the record. From his Central Committee post, Yakovlev had supported legendary coach Anatoly Tarasov's political lobbying for the 1972 Canada-USSR hockey series, and so we had some shared experience and interests. He also knew that my background was Soviet Studies, and he seemed to enjoy playing Master Po to my Grasshopper.

He must have been good at this; a few years later he taught Mikhail Gorbachev all he knew about outside societies and set his feet on the path to *glasnost* and *perestroika*. He saw the August *putsch* of 1991 coming when no-one else did. He spent years rehabilitating Stalin's victims, one by one. He was a great and a good man.

Sometime in 1981 I accepted a late-night ride home to Ottawa from Montreal in His Excellency's car – a distinct no-no at the time – and in the course of it I confessed that even with a degree in Soviet Studies and a year in Leningrad under my belt I had no real understanding of the relationship between Communist Party and Soviet State.

"I'll tell you a story," said he, "that will make it all clear."

"At the end of the War I was in the Provincial Party Committee (*obkom*) of an oblast beyond the farthest German advance. And demobilization happened. You've heard about demobilization in Western countries, just imagine what it was like for us."

"One morning we woke up and there was this big Colonel General in the oblast – *with his army!* Can you imagine? We didn't have enough food or anything else for ourselves let alone anybody's army. They occupied *everything* – barns, barracks, tractor sheds, warehouses, schools, hospitals, you name it – and they ate everything!"

"The oblast government tried to reason with him. He wasn't listening. He wouldn't hear of it. 'My boys have been to Berlin

and back and they deserve a place to sleep and a bite to eat too' was all he'd say."

"This went on for a few days and finally we fell back on the Ultimate Recourse – we called a Party meeting, and as a member of course he had to come. And we tried it all again, all the same old arguments, you know how Russians love their children, we laid it on with a shovel about school starting and the kids having nowhere to sleep and nothing to eat. But this old General, he just stood there in his shoulder boards and his *kapusta* (*US* - 'scrambled eggs') and he wouldn't budge."

"It went round and round for hours. Finally a little rat-faced guy about six places down the table who hadn't said a thing the whole time – he was probably NKVD at that – put up his hand and said, 'Comrade Secretary, I move that this meeting examine the comrade Colonel-General's Party credentials'."

"That was a bolt from Heaven. The General turned white, then red, then white again. He whooped. He hollered. He yelled. He screamed. He used monstrous bad language. But it was no good. Comrade Whoozit's motion passed on show of hands, that if the situation were not resolved within twenty-four hours, a resolution to review the General's Party membership would be forwarded to the Central Committee in Moscow."

"The General let out a screech like a stuck pig and ran out of the room to the first telephone he found. He got on the horn to Moscow, to the Minister of Defence direct, to Zhukov himself. And Zhukov answered him:"

"'Comrade Colonel General, in any matter of operational doctrine or practice I will support you unreservedly. But any differences you have with the Party – that's between you and them.'"

"The next morning there wasn't a soldier in the oblast. Where they went, I never knew – probably off to plague the neighbours."

"And that, my boy, is Soviet Power." ♦

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**H.E. Alexander N. Yakovlev
1923–2005**

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