

CHANGE AND CONTINUITY IN WARFARE : AN INDIAN EXPERIENCE

Every age has its own kind of war, its own limiting conditions, and its own preconceptions. Each period, therefore, would have held to its own theory of war.

Carl Von Clausewitz

Introduction

Conflict is as old as human existence. As the human race progressed, the nature of warfare also changed. Development of weapons led to creation of organizations which in turn depended on technology. Requirement of ideas or doctrines or strategy came up to use the equipments and organizations optimally.

Large number of theories exist on trends in change in warfare. There is no common "fit" in these theories. Military theorists have propagated Clash of Civilisations (Huntington), Wave Theory (Tofflers), Revolution of Military Warfare (RMA), Fourth Generation Warfare (4GW) etc. Presently the theories of Information Warfare, Network Centric Warfare, Effect Based Operations, for conventional warfare with extensive use of technology specially Information Technology (IT) have been propagated. For age old Counter Insurgency Operations (CI Ops) theories of Revolutionary Warfare, Guerilla Warfare, Low Intensity Conflict Operations (LICO), Asymmetric Warfare, Peoples War, Proxy War, Irregular War, Restricted Warfare, Unconventional Warfare, Gray Area War, Sub Conventional Warfare, Military Operations Other Than War (MOOTW), Limited War, Small War, Three Block War etc are in vogue. All these types of warfare have overlapping characteristics. Warfare situations are much richer and more complicated than any single theory can cover.

The then British Indian Army fought in World War one and two with distinct glory. Field Marshal Bill Slim considered his Indian divisions as one of his best. India since independence has fought four conventional wars in 1948, 62, 65 and 71 with Pakistan and China. Kargil conflict (May to July 1999) with a nuclear backdrop gave a new dimension to warfare we are likely to fight. In addition Indian Armed Forces have taken part in Hyderabad and Goa Operations, Op PAWAN in Sri Lanka, counter insurgency operations in North East since 1955 and ongoing proxy war in J and K. We have been successful in Punjab, Mizoram, West Bengal against Naxalites in early 70s and GNLG agitation in North Bengal (though Armed Forces did not take part). No other country in the world after World War two has such varied experience in warfare in the two extreme spectrum of war. There is likely to be a paradigm change in warfare as well as continuity. We should be ready for both and initiate action in terms of weapon and equipment, organization, doctrine and leadership.

Theories of Warfare

Clash of Civilisations This is propagated by Professor Samuel P Huntington. He predicts a "clash of civilizations" between Western, Confucian, Japanese, Islamic, Hindu, Latin American and African cultures. The clash will occur along cultural "fault lines" between people, groups or non states who struggle for control over political

military and economic power, territory and religious values. He asks, “ What will be the fundamental source of conflict in this new world?” and answers, “My hypothesis is that it will not be primarily ideological nor economic. The great divisions will be cultural. The clash of civilisations will dominate global politics.”

Wave Model by Alvin and Heidi Toffler. It describes human history going through a series of waves. Each wave is based on the means by which wealth is created. First and Second wave civilisations were based on agricultural and industrial revolution. Presently we are in the era of third wave civilisation based on knowledge revolution introduced by computer related technology. The strength of the small and the many will dominate the large and the few of the second waves. Smaller adaptable organizations have the potential to defeat a large adversary by adapting and reacting faster to the changing situation.

The Revolution in Military Affairs(RMA). In the 1990s, Andrew Marshall, head of US DOD’s Office of Net Assessment, advanced the idea, calling it the Revolution in Military Affairs. He espoused linking new technologies with emerging doctrine and organizations to make fundamental, far-reaching changes in how the military conducts operations. The basic idea is that advances in technology have made the need for mass armies obsolete. Wars can be fought by small numbers of well-trained professionals equipped with high-tech devices and weaponry centrally coordinated with "networkcentric" warfare.

RMA consists of an array of technological innovations in a number of areas that induce significant changes in the conduct of military operations. These changes include:-

- Over-the-horizon targeting and fire.
- Use of unmanned vehicles for reconnaissance, targeting, and combat operations.
- Use of Precision Guided Munitions (PGMs) in both strategic and tactical environments.
- Use of space and the employment of a "system of systems" for combat-related command and control activity.
- Information Warfare.

The traditional armies are aware of the advantages of RMA technologies. Yet, both financial and technological constraints and limitations on the supply of RMA technologies prevented them from adopting most of these technologies. The successful use of RMA technologies by the United States in Iraq stands in stark contrast to the ineffectiveness and irrelevance of most technologies in the cases of Low Intensity Conflict (LIC) in the region. Indian Armed Forces are aware of developments of RMA. Except for few upgradations of technology and acquisitions of modern weapons and equipment no conceptual, doctrinal or organizational changes have been done.

Nonstate actors have opted for primitive methods of warfare that have put significant dents in the doctrine and will of state actors and have rendered many of the technological innovations of the last two decades to be of limited relevance and effectiveness

Transformation. Today the term RMA has been supplanted by transformation, but its meaning is essentially the same, as it refers to applying new technologies, concepts, and organizations to bring about radical changes in the character and conduct of warfare. In its broadest context, transformation is about changing the character and structure of the military to meet the new security challenges.

Fourth Generation Warfare

Whenever you advise a ruler in the way of Tao,
Counsel him not to use force to conquer the universe.
For this would only cause resistance.
Thorn bushes spring up wherever the army has passed.
Lean years follow in the wake of a great war.
Just do what needs to be done.
Never take advantage of power.

'Fourth Generation Warfare' is a concept defined in 1989 by a group of American analysts including William S. Lind and John Boyd, to describe warfare's return to decentralised form or to a form where one of the forces in the conflict is a not a nation-state but a rather violent non state actor. Marine Corps Colonel (Retired) Thomas X. Hammes, considered by many in the defence community as the foremost expert in insurgent warfare, argues that it is time to recognize that future warfare will move from a purely military-technical arena to a fight that takes place across the entire range of human activity – political, economic, social, and military fields. Fourth Generation war is not a military but a political, social and moral revolution: a crisis of legitimacy of the state. All over the world, citizens of states are transferring their primary allegiance away from the state to other things: to tribes, ethnic groups, religions, gangs, ideologies and so on. Many people who will no longer fight for their state will fight for their new primary loyalty.

Generations of War. First Generation war was fought with line and column tactics. Its importance for us today is that the First Generation battlefield was usually a battlefield of order, and the battlefield of order created a culture of order in state militaries. Second Generation war was developed by the French Army during and after World War I. It dealt with the increasing disorder of the battlefield by attempting to impose order on it. Second Generation war, also sometimes called firepower/attrition warfare, relied on centrally controlled indirect artillery fire, carefully synchronized with infantry, cavalry and aviation, to destroy the enemy by killing his soldiers and blowing up his equipment. Third Generation war, also called maneuver

warfare, was developed by the German Army during World War one. Third Generation war dealt with the disorderly battlefield not by trying to impose order on it but by adapting to disorder and taking advantage of it. Third Generation war relied less on firepower than on speed and tempo.

Fourth Generation Warfare(4GW) has changed everything. It pits nations against non-national organizations and networks -- including oppressed ethnic groups, mafias, narco-traffickers and extremist quasi-religious cults. 4GW is the chosen weapon of the weak, the downtrodden, the criminal and the fanatic. Its evolutionary roots may lie in guerrilla warfare, the Leninist theory of insurrection and old fashioned terrorism, but it is rendered more pervasive by the technologies that the age of computers and mass communication has spawned. A diagram of four generations of warfare is given at Appendix A.

It uses all available networks—political, economic, social and military to convince the enemy's political decision makers that their strategic goals are either unachievable or too costly for the perceived benefit. In broad terms, fourth generation warfare seems likely to be widely dispersed and largely undefined. It will be nonlinear, possibly to the point of having no definable battlefields or fronts. The distinction between "civilian" and "military" may disappear. Tactically, fourth generation war will be fought in a complex arena of low-intensity conflict, include tactics/techniques from earlier generations, be fought across the spectrum of political, social, economic, and military networks, be fought worldwide through these networks and involve a mix of national, international, transnational, and subnational actors.

Recently Hizbollah's innovative use of guided anti-tank missiles has drawn the attention of military specialists eager to glean lessons from the recent fighting in Lebanon, where the high-tech Israeli Army, considered one of the world's most formidable fighting forces, was often stymied by militiamen using guerrilla tactics and advanced weaponry. Much discussion has been focused on Hizbollah's "swarm" tactics, which damaged Israel's Merkava tanks and heavy armored vehicles with missile volleys at their vulnerable sides and rear. Hizbollah's swarm tactics — firing multiple missiles against a single target — proved effective against both armored vehicles and infantry. Hizbollah's missile arsenal included old yet effective Russian-made Sagger wire-guided anti-tank missiles, as well as the newer Russian Metis-M and Kornet.

Relevance of 4GW in Indian Context

The presence of nuclear weapons in China, India and Pakistan makes the chances that these armies will have to fight large-scale conventional wars, extremely limited. The only conventional wars that can take place are of the "limited" variety, which confines conflict below the threshold levels. Under these circumstances, the better option is to indulge in 4GW, which enables avoidance of a devastating full blown conventional war with a nuclear scenario. It also enables a weaker side to offset the advantages of the stronger.

Pakistan is indulging in 4GW in Kashmir. China or India may utilize 4GW against each other. China can exert pressure on India by supporting the insurgents and militant groups in northeastern India, as it has done in the past.

The growth of mechanized forces made the army effective in mechanized plains warfare to the detriment of fighting 4GW. As a result, in the 4GW that the army was repeatedly called upon to fight, the following shortcomings emerged:

- The army was ill equipped to take on 4GW foes. Its weapons for close quarter battle, which is where 4GW engagements take place, were not effective enough,
- The army lacked essential elements like body armor, protective clothing and night vision devices,
- There was a lack of vehicles which were IED proof or had sufficient offroad capability,
- The army lacked language skills and cultural knowledge, even within its own country. This is not strange in a sub-continental country which has 15 official languages and hundreds of dialects,
- Since the army realized that it was fighting a new way of war, there was initially a shortage of manpower as large elements of the army were not released from previous commitments in view of conventional threats on Indian borders.
- The components of the Army, which were organized, structured, trained and equipped to fight Second and Third Generation Wars, were not organized, trained or equipped to participate in 4GW.

Doctrine For 4GW. India faces insurgencies in Kashmir and the Northeast. While the insurgencies in the Northeast do not directly threaten the security of the country as a whole, the insurgency in Kashmir does, because it threatens the country's secular structure. A part of the country breaking away because it is inhabited by Moslems is unacceptable for a country that has the third largest population of Moslems in the world. Doctrine for 4GW should stress the following features :-

- Light Infantry Forces in Sufficient Numbers.
- Restricted Heavy Forces.
- Synergy in Intelligence.
- Practical Transformation.
- The Conduct of War in political, social, economic and military fields.
- Adaptability.
- Jointness related to interoperability with other branches of the government, such as the civil administration and police forces.

Reorganisation. To arm and train an army conventionally and then make it fight in an unconventional manner is wasteful. While the skills of conventional warfare should not be consigned to the scrap heap, they do need to be adapted to make them suitable for 4GW. This involves organizational changes to enable the army to overcome weaknesses that conventional armies find in themselves when engaged in 4GW. These weaknesses are mainly an inability to gather the correct intelligence, emphasis on attrition, weakness in waging information and psychological warfare in the Fourth Generation environment and lack of skills in building a relationship of trust with the population. This requires focus on education and training from the grassroots level upwards. Finally, the weapons and equipment for conventional war are not suitable for 4GW. They are either too destructive or inappropriate. There is a requirement to identify the correct way to equip the army for 4GW.

A very large part of the army is engaged in Proxy War in J and K and CI Ops in North East. There is a fundamental difference in that we are fighting these operations in our own country whereas US and NATO forces are operating in foreign countries. We do not use Artillery, Armour and Airforce against terrorists or insurgents. Excessive involvement of the army in internal security duties adversely affects the combat potential of the army. In addition to army large number of Rashtra Rifles (RR) units along with Sector and Force Headquarters are also employed in J and K. RR units were raised for CT and CI Ops. The performance of RR units are excellent. A cursory glance of the award lists in any year will testify this. However, RR represents a contradiction in the army. Far from reducing the employment of the army in internal security operations, it has served to institutionalize and reinforce it.

Similarly Assam Rifles (AR) units of Director General of Assam Rifles are also deployed in Counter Terrorist (CT) and CI Ops. This force comes under Ministry of Home Affairs (MHA). Army officers on deputation provide the command and leadership of the force. In operations AR functions under the exclusive command and control of the army. These two factors set it apart from the Central Police Organisations (CPO) Forces under the MHA.

No army in the world likes to get involved in prolonged CT and CI Ops. The Central Police Organisations (CPO) and the Para Military Forces(PMF) are approximately 17 lakh strong. They are getting MI 17 helicopters, transport aircraft, speed boats and flat bottom ships. Some of them have their own commando battalions. They are not as naïve as we think. We may consider handing over CT and CI Ops to them. Army should provide very good special operation forces to support these forces and carry out specific surgical tasks.

There is another school of thought for creating an Internal Security Force (ISF) as the police forces are still not capable of handling high grade insurgency situations. The ISF should be an integral part of the army and should be deployed, employed and controlled by Army Headquarters through appropriate headquarters. The AR should become the nucleus for such a force.

LICO are infantry predominant and manpower intensive operations. The army should carefully assess the number of infantry units and formations required to counter internal threats to national security. Suitable modifications should be adopted when committed in such tasks. Modifications should reinforce force protection, quick

reaction, intelligence and interrogation, reconnaissance and surveillance, language and interpreter, aviation, combat engineering, communications, transportation, provost, medical, army dogs, media, military civic action and legal affairs.

Counter Terrorism Operations

When I was a young officer, I was taught that if you have air superiority, land superiority and sea superiority, you win. Well, in Vietnam we had air superiority, land superiority and sea superiority, but we lost. So I realized there is something more to it.

America's greatest military theorist, Air Force Colonel John Boyd

Maritime Terrorism. Maritime counter-terrorism has received considerable attention in India. Over 80 per cent of the terrorist organisations with a capability for maritime terrorism operate in the areas and seas to the West of India. Almost our entire energy supplies come from this area. The security of the Malacca Strait has limited relevance for our energy security, whereas our entire energy security depends on maritime security in the areas to the West of India. One would have, therefore, expected that the concentration of our maritime counter-terrorism efforts would have been on building a database of capabilities, threats and risks from the areas and seas to the West of India, adopting a vigorous proactive policy of co-operation with the navies of this region and developing preventive and termination capabilities, which would have relevance in the areas to the West of India. Unfortunately, this is not so. The Americans do not want our Navy playing any proactive role in maritime security in the waters to the West of India lest it cause any undue concern in the minds of Pakistan. This tendency has to change. It is time the Indian Navy starts paying more attention to threats of maritime terrorism that could arise from the West. We should not leave the protection of our shipping and our energy supplies totally in the hands of the US-led coalition. We should develop our own capabilities and networking with the countries of the region. Maritime counter-terrorism experts now look upon the Bay of Bengal and the Indian Ocean region as highly vulnerable, if not the most vulnerable to such catastrophic acts of maritime terrorism. Amongst factors influencing their perceptions are:

- Presence in this region of terrorist or insurgent organisations with proven or suspected capabilities for maritime operations. Amongst the organisations are the LTTE of Sri Lanka, with proven capabilities for maritime operations, conventional as well as unconventional; the Free Aceh Movement of Indonesia with suspected capabilities for acts of piracy to find funds for its land-based operations and the Abu Sayyaf of Southern Philippines, with its proclaimed readiness to extend its operations from the land to the sea.
- Wide networking of the Al Qaeda across this region---either through its own members or through surrogate jihadi terrorist organizations.
- Long-known reputation of this area as the world's leading producer and supplier of heroin from the Golden Triangle and the Golden Crescent and its recent emergence as a producer and supplier of synthetic drugs.

- Continuing availability in this region----in Pakistan as well as in Thailand, Laos and Cambodia--- of large quantities of arms and ammunition to anyone with the means to pay for them and with the capability for their clandestine transport to areas of intended use.
- Presence in this region of terrorist organisations such as the LTTE with a commercial shipping capability, which can be diverted for the clandestine transport of narcotics and arms and ammunition.
- Presence in this region of trans-national mafia groups such as the one headed by Karachi-based Dawood Ibrahim with vast financial resources, a capability for clandestine shipping and a willingness to place their resources and shipping at the disposal of the Al Qaeda and other jihadi terrorist organisations operating across the region.
- Role of Pakistan as the region's leading supermarket for nuclear weapon-capable material and equipment and the nexus of some of its scientists, enjoying the protection of its Army, with Al Qaeda and other jihadi terrorist organisations.
- Presence in this region of tempting choke-points such as Malacca Strait through which pass a half of the world's oil and a third of its trade.
- Reputation of this area as one of the most piracy-prone in the world.
- Presence of a large number of uninhabited islands in the region, which serve as sanctuaries and operational bases for the pirates and could similarly serve for the terrorists tomorrow.

There is an urgent need for a comprehensive approach to maritime counter-terrorism covering the various dimensions of it such as intelligence collection, analysis, assessment and dissemination; the need to strengthen the capability for the collection of technical intelligence (TECHINT) relating to maritime terrorism through monitoring stations on the coast and the islands as well as sea-based monitoring platforms; port security, strengthening coastal patrolling in the vicinity of sensitive establishments such as nuclear installations, oil refineries and off-shore oil platforms, intensive naval patrolling in the high seas, monitoring developments in coastal maritime communities, Coastal Radar Network, Vessel Tracking and Management System in all ports, an integrated communication network and regional coordination of maritime affairs, a rapid action capability to deal with a maritime situation if preventive measures fail a crisis management capability and regional and international co-operation.

Countering Use of Weapons of Mass Destruction (WMD) By Terrorists. The key to defeating a NBC terrorist threat is timely and accurate intelligence collection, analysis and dissemination. Surveillance and reconnaissance are also important. Improvements in individual and collective protection are necessary to sustain operations. We need to be prepared to find and destroy weapons before they can be used against us. Deterrence may not work with terrorists because deterrence is based on the adversary being a rational actor. Special Forces(SF) play a key role in combating terrorism, as they provide ground force option short of a major war, to

seize, recover, disable, render ineffective or destroy NBC weapons and associated technology.

Countering NBC attacks by terrorists requires adherence to three principles: avoidance, protection and decontamination. Avoidance includes both passive and active measures. Protection consists of hardening of positions, protecting personnel, assuming protective postures, physical defence measures and quickly reacting to an attack. Decontamination stops the erosion of combat power and reduces the possibility of additional casualties from inadvertent exposure or failure of protection.

Terrorism Affecting Energy Security. Four of these possible scenarios are or should be of major concern to national security managers:

- First, terrorists hijacking a huge oil or gas tanker and exploding it in mid-sea or in a major port in order to cause huge human, material and environmental damage. There were 67 reported attacks on oil and gas tankers by pirates during 2004. This despite the stepped-up patrolling by the Navies of different countries. What pirates with no ideological motive and with no suicidal fervour can do, ideologically-driven suicide terrorists can do with equal, if not greater, ease.
- Second, terrorists hijacking an oil or gas tanker or a bulk-carrier and exploding it or scuttling it in maritime choke-points such as the Malacca Strait in order to cause a major disruption of energy supplies and global trade.
- Three, terrorists smuggling weapon of mass destruction material such as radiological waste or lethal chemicals or even biological weapons in a container and having it exploded through a cellular phone as soon as the vessel carrying the container reaches a major port.
- Four, sea-borne terrorists attacking a nuclear establishment or an oil refinery or off-shore oil platforms.

India's plans for ensuring the supplies of energy to fuel its expanding economy through a network of pipelines from Turkmenistan and Iran via Pakistan and from Myanmar via Bangladesh would remain a pipedream till the already-established international jihadi terrorist infrastructure in Afghanistan and Pakistan and the fast emerging one in Bangladesh are neutralised by the international community through appropriate pressure on these countries.

Energy Security is closely linked with maritime security and has already been covered in details.

Cyber Terrorism. Terrorist groups today frequently use the Internet to communicate, raise funds and gather intelligence on future targets. Malicious attack programs currently available through the Internet can allow anyone to locate and attack networked computers that have security vulnerabilities, and possibly disrupt other computers without the same vulnerabilities. Terrorists could also use these same malicious programs, together with techniques used by computer hackers to possibly launch a widespread cyber attack against computers and information systems that

support the country's critical infrastructures like power, transportation, financial, communications and aviation sectors.

The till now known weapons of mass disruption are hacking and the computer virus as a stealth weapon and there have been many reported instances of the use of these weapons by cyber-vandals, cyber-anarchists and other cyber-criminals for deliberate disruption, but not yet by cyber-terrorists. Though there have been instances of cyber attacks carried out by ISI-supported Kashmiri extremists against the Web sites of the army and other agencies of the Govt. of India. The dangers from these weapons are enhanced due to the following factors :-

- * The easy availability of the tools of mass disruption in various Web sites free of cost.
- * The easy availability of expertise in various chat rooms devoted to computers and hacking.
- * The ease with which large-scale attacks such as the recently-witnessed distributed denial of service attacks against Yahoo and others can be carried out through programmes and commands planted in the computers and servers of third parties without their knowledge.
- * The likely emergence of hackers as the mercenaries of the new terrorism, offering their services to any terrorist group for a price.
- * The facility of carrying out cyber acts of terrorism from safe sanctuaries, without having to cross international borders.
- * The likely use of hackers and terrorists with expertise in hacking by adversary States, thereby giving rise to State-sponsorship of cyber-terrorism.

It would be reasonable to anticipate that it is only a question of time before terrorist groups, acting independently or at the sponsorship of an adversary State, start experimenting with cyber terrorism. It is, therefore, necessary that the State remains well prepared to deal with such threats. Such preparations would include the enactment of necessary laws to empower the security agencies, the creation of the necessary intelligence collection capability, the setting up of special cyber-terrorism prevention cells and special cyber-terrorism crisis management drills, periodic rehearsals of such drills to locate and remove weak points, the setting-up of computer security and sensitive infrastructure security cells etc.

Changing Nature of Conventional Warfare

The more mechanical become the weapons with which we fight, the less mechanical must be the spirit which controls them.

--General JFC Fuller, Generalship: its Diseases and their Cure

War is likely to remain a chameleon, presenting itself variously in interstate, transstate, and nonstate modes—or as a combination of these. However, a word of caution is necessary: it would be a serious mistake to dismiss the possibility of interstate conventional war. Moreover, the conventional and the unconventional, the

symmetric and the asymmetric, may occur almost simultaneously, overlapping in time and space. Advanced warfare will be largely joint-service in character. The revolution in information technology, especially as applied to command and control, long-range precision strike, and stealth, has so compressed time and space in military operations as to create an unprecedented nonlinear battle space characterized by breadth, depth, and height. Future operations will favour simultaneous attack by joint air-ground forces that are "situationally aware"—that have substantially complete and current views of the battlespace via computer and satellite. Advanced forces are also likely to be networked from "sensor to shooter"—that is, surveillance capabilities will be electronically connected to strike forces, and all of them to each other. The scale of operations, as well as the number of troops and machines involved, will continue to decline even as their complexity and sophistication increases and in direct proportion thereto. Command and control systems will continue to evolve. They will permit much greater flexibility and speed; on the other hand, by increasing a commander's temptation to wait until he has all the information and threatening to overwhelm him, they may be counterproductive.

Joint, Combined or Integrated Warfare. As far as jointness and synergy between the services is concerned it is disappointing to note that in the 21st century the Indian army, navy and air force are still planning for conflicts essentially service wise. They have not yet started the journey. Even after four wars and innumerable crises we have failed to evolve joint doctrine and concepts. Transformation of the military must be based on a new joint doctrine which follows a top down approach and not bottom up approach. General Shankar Roychowdhury (Retd) states, "Indian Army individually as well as the defense forces, must no longer be allowed to function independent disconnected entities, without the required inter-service synergy for fullest exploitation of their respective capabilities. In some senses, provision of an enabling environment of jointmanship and stamping them on the individual ethos and culture of each service may well be the most challenging task, which should be accorded an overall priority higher than many other issues." Lt Gen P S Joshi (Retd), the first Chief of Integrated Staff to Chairman Chiefs of Staff Committee (CISC) has written a remarkable article on Synergy and Jointmanship in the Defense Services published in Pinnacle Journal October 2005 issue which is a must read for anybody concerned with jointmanship. The General in his forthright, candid and no nonsense manner has passionately argued for synergy and jointmanship, the road blocks and the way out.

However, the problem of one branch of service taking direct orders from a person in another will persist through future conflicts. Indian Armed Forces have a skewed ratio between its services unlike other countries in the west where the ratio is approximately the same. In our country the army is million strong whereas the strength of the navy is about 70,000. Major General (Retd) Robert H. Scales while speaking on "Change During War: Contemplating the Future While Fighting in the Present" at a seminar on "An Army at War Change in the Midst of Conflict" held at Combat Studies Institute Frontier Conference Center Fort Leavenworth, Kansas on 2-4 August 2005 made some very interesting observations :-

This problem is made particularly difficult today because of our obsession with jointness. Jointness is, by its very nature, a source of friction in forward thinking, because everybody has to have a piece of the action. Why do we put a "J" in front of

all of our headquarters? Well, because we have to be joint. Actually, we don't. There's very little "joint" about IRAQI FREEDOM, it's 95 percent Army and Marine Corps.

Nuclear Issue

I do not know with what weapons World War III will be fought, but World War IV will be fought with sticks and stones.

Albert Einstein

After May 1998 when both India and Pakistan carried out nuclear tests and declared themselves as nuclear weapon states it became clear that conventional war, if undertaken, would be fought with a "nuclear backdrop". The impact of nuclear weapons was clearly discernible in the self imposed restriction by India in Kargil conflict and the caution displayed by the government during OP PARAKRAM in 2002. Pakistan has declared that it will go for nuclear strikes against India when a significant portion of its territory has been captured or likely to be captured. Or, when a significant destruction of the Pakistani military machine has taken place or when Pakistani strategic assets (read nuclear deterrent) are endangered. India's "Cold Start" war doctrine does not seem to be allowing Pakistan to reach at the above conclusions by indulging in deep long range penetrative strikes. The Indian doctrine seems to be aimed at inflicting significant military reverses on the Pakistan Army in a limited war scenario short of a nuclear war.

Restructuring Army. In this changed scenario realistic planning should take into account the factor of short but limited war ranging from 10 days to eight weeks. The efficacy of couple of large sized strike corps going deep into heartland of Pakistan is questionable. The utility of currently structured holding and strike corps is minimal. The location of our strike formations deep in the hinterland will not allow any cold start. Even our holding formations are not in a position to cold start. Large sized strike formations may have to be reorganized into smaller, more agile and responsive and rapidly deployable formations which can be reinforced by follow up formations. The question, whether the existing organisation of the field army into corps, division and brigades should be retained, or a more flexible organisation of 'task forces' directly controlled by a divisional or corps headquarters should be introduced, needs to be considered by the Army. The organisation so created should not only be tactically sound, it should also result in substantial savings in manpower for the Army. If the cold start doctrine is to be implemented then a serious introspection of locations of formations would be needed.

Similar restructuring will be required for Navy and Air Force. Dichotomy of Indian Air Force having control of Strategic Command whereas Army has the strategic missiles. need to be resolved.

Conclusion

God grant me the serenity to accept the things I cannot change,
The courage to change the things I can, and the wisdom to know
The difference.

Reinhold Niebuhr (1892-1971)

The Indian Armed Forces since their inception have fought conventional as well as CI Ops starting from First and Second World Wars and Afghan campaigns to all wars and CI Ops after independence. No armed forces in the world have such varied experience in all types of warfare in such different terrain. We have some notable success and our share of failures. While 71 operations at Bangladesh was our crowning glory, Indo China War in 1962 was the nadir. We had some notable success in CI Ops. Still we are at it in J and K and North East.

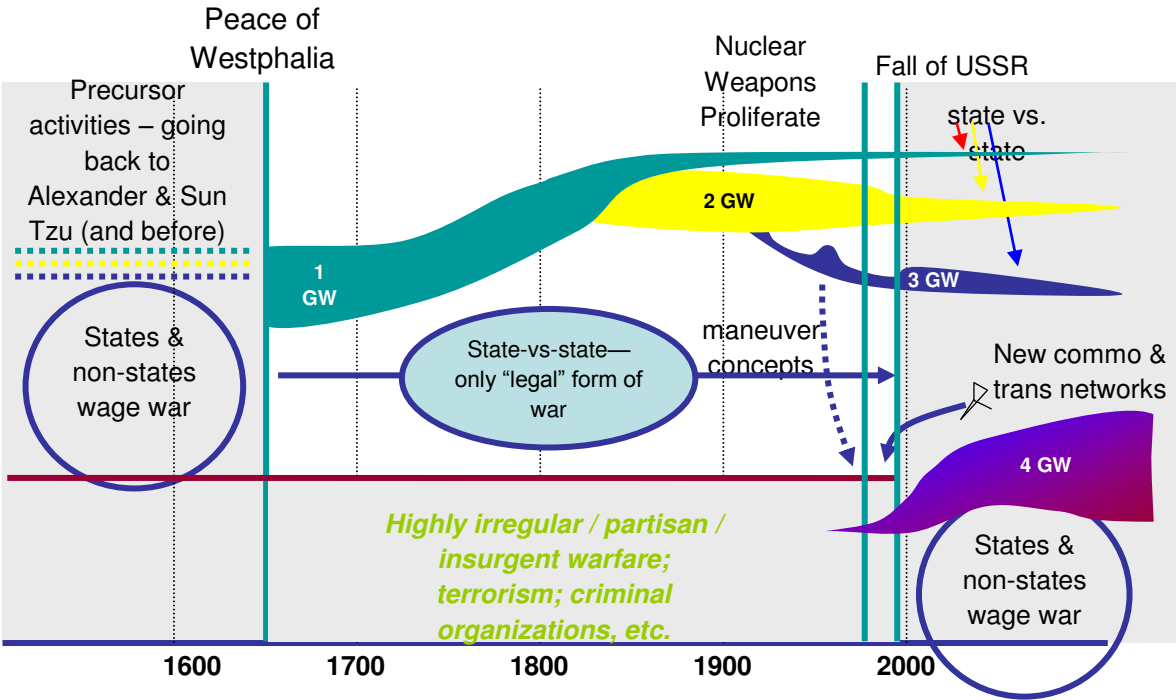
As we look to the future of war we must face one absolute certainty: any prediction will prove faulty. Moreover, the conventional and the unconventional, the symmetric and the asymmetric, may occur almost simultaneously, overlapping in time and space. The challenge of a modern military is to fight throughout the entire spectrum of conflict. Technology is helpful when combating insurgents, but is never the solution to human conflict. While sharing information is a good idea, centralization usually results in micromanagement by uninformed and inexperienced senior officers at distant headquarters. Complex computerized command systems require tremendous logistical support, may breakdown and suffer damage from enemy attacks or jamming, and may be exploited by the enemy. Advanced warfare will be largely joint-service in character. The revolution in information technology, especially as applied to command and control,

long-range precision strike, and stealth, has so compressed time and space in military operations as to create an unprecedented nonlinear battle space characterized by breadth, depth, and height. Advanced forces are also likely to be networked from "sensor to shooter"—that is, surveillance capabilities will be electronically connected to strike forces, and all of them to each other.

In any CI Ops the Center of Gravity is The People. The first step must be focused on security for the people and the establishment of public safety. The rapid spread of Left Wing extremism is posing a serious challenge to various states of the Indian Union. The ability of left wing groups to run a parallel government in their strongholds is undermining the authority of the Government and impeding the development of these areas. The cycle of violence is wastefully consuming already scarce resources. With the situation in Nepal the formation of a red corridor from Nepal through Bengal, Bihar, Jharkhand, Chattisgarh, Madhya Pradesh, Andhra Pradesh, Orissa and Maharashtra is a real possibility. We may have to fight communist Maoist and Islamic extremists simultaneously at the two extreme end of CI Ops spectra.

Obviously, the services have to prepare the physical condition and training of soldiers, marines, sailors, and airmen. But equally important, they must prepare the minds of the next generation of military leaders to handle the challenges of the battlefield. And that mental preparation will be more important than all the technological wizardry that can be brought to bear in combat. Most important in that intellectual preparation must be a recognition of what will not change: the fundamental nature of war, the fact that fog, friction, ambiguity, and uncertainty will dominate the battlefields of the future just as they have those of the past.

The "Generations of War" Model From the Viewpoint of Core States and Nuclear Powers



END NOTES

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