

Continuity and Change in War Fighting : The Indian Experience

Lieutenant Colonel Khalid Zaki

"Victory smiles upon those who anticipate the changes in the character of war not upon those who wait to adapt themselves after they occur".

— General Giulio Douhet, *Command of the Air*, 1921

INTRODUCTION

The coming decades are likely to be as volatile as in the recent past, with our potential adversaries likely to confront us with conventional as well as unconventional means. The instability in our neighbourhood and extended area of interest will impinge, directly or indirectly, upon India's security. The pace of change, in the future, is likely to increase for a number of reasons. Technology is rapidly changing and if the armed forces do not absorb it at the same rate, they are likely to be left behind. Great changes are also taking place in our society. Being a part of the society, all societal changes will have a profound effect on the structures and functions of the armed forces.

In keeping with technological and societal changes, war fighting has been undergoing a rapid transformation in means as well as the ends. Traditional war fighting concepts of capturing territory and destruction of military forces or strategic resources are increasingly becoming less relevant in modern warfare. We are witnessing Non-State Actors (NSA) using unconventional means to confront state militaries and thus negate their conventional edge. This was clearly illustrated in Lebanon recently, where the *Hezbollah* fought the Israeli forces to a standstill. Nearer home, in Jammu and Kashmir, the Indian Army has been facing proxy war waged by militants sponsored by our adversaries. All this marks the advent of a new form of warfare.

AIM

This essay examines the transformation of modern warfare, prognosticates the emerging threat profile in the Indian context and

Lieutenant Colonel Khalid Zaki is from the 15 Mechanised Infantry Battalion.

This is an edited version of the first prize and award of gold medal in Group A of the USI Gold Medal Essay Competition 2005. *KG* 2006

Journal of the United Service Institution of India, Vol. CXXXVII, No. 567, January-March 2007.

recommends necessary doctrinal realignment and force restructuring to enable our armed forces to retain their combat edge in the coming decades.

THE TRAJECTORY OF WARFARE

The Generational Shift

According to William S Lind, modern warfare has seen four generations that have evolved over the last few hundred years. The first generation warfare (1GW) was dominated by massed manpower and culminated in the Napoleonic Wars. The second generation warfare (2GW) was dominated by firepower and ended in World War I. In relatively short order, during World War II the Germans introduced third generation warfare (3GW), characterised by manoeuvre. The fourth generation warfare (4GW), evolved since World War II, unlike previous generations does not attempt to win by defeating enemy's military forces. Instead, the unconventional 4GW adversary, making use of all available networks - political, economic, social, and military - directly attacks the minds of the enemy decision makers to destroy the enemy's political will to fight.¹

In 4GW, the state loses its monopoly on war.² All across the globe, state militaries find themselves confronting NSAs such as *Al Qaeda*, *Hezbollah*, *Taliban*, *Lashker-e-Taiba* and the likes. It is pertinent that only 4GW has defeated numerically superior conventional forces - the *Mujahideen* defeated the Soviets in Afghanistan, Vietnamese defeated the French and US forces, *Hezbollah* surprised Israel in Lebanon recently and the outcome of Operations *Iraqi Freedom* and *Enduring Freedom* being conducted by the coalition forces in Iraq and Afghanistan respectively, is still uncertain.

This view is also echoed by Martin Van Creveld, the author of *The Transformation of War*,³ in which he illustrates the relative successes of unconventional wars against conventional opponents and highlights the failures of regular militaries to deal with this evolving threat. He predicts - "If the last fifty years or so provide any guide, future wars will be overwhelmingly of the type known, however inaccurately, as 'low intensity.' Both organisationally and in terms of the equipment at their disposal, the armed forces of the world will have to adjust themselves to this situation by changing their doctrine, doing away with much of their heavy equipment.....".⁴

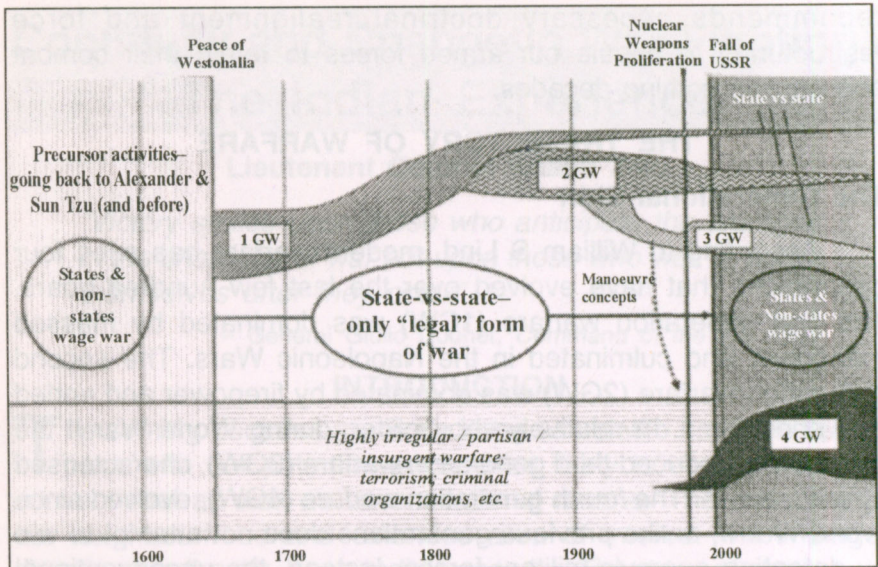


Fig. 1 : The “Generations of War” Model⁵

It is evident from the above figure that although vestiges of 1GW, 2GW and 3GW shall remain for some time, the trajectory of future warfare is inexorably moving towards 4GW. The challenge lies in retaining adequate potency against 'the continuity' of extant threats, while simultaneously adapting to 'the change' wrought by 4GW.

The Indian Experience

The momentous changes taking place at the global level in war fighting, as explained earlier, have not left the Indian Armed Forces untouched. Being a professional force, our Armed Forces have been imbibing these changes and applying them to the Indian context.

The Indo-Pak War of 1971 is a classic example of successful conduct of 3GW and is taught in foreign armies as such. The *Sunday Times of London* had reported, "It took only 12 days for the Indian Army to smash its way to Dacca, an achievement reminiscent of the German *Blitzkrieg* across France in 1940. The strategy was the same: speed, ferocity and flexibility". The Army, of course, was not alone. The IAF and the Indian Navy the *Mukti Bahini* helped to shape the victory.

On the other hand, our experience of 4GW has not been so encouraging. In Operation PAWAN, the Indian Peace Keeping Force (IPKF) in Sri Lanka applied the conventional 3GW tactics to what was essentially a 4GW adversary, with resultant losses. From 1990 onwards, we have been embroiled in Jammu and Kashmir in a similar confrontation with 4GW forces. In both instances, we have not fully grasped that a new form of warfare is upon us which is engaging a major portion of our forces and shall remain so in the coming decades. It calls for a realistic prognosis of the emerging threat profile.

THREAT PROGNOSIS

Conventional Conflict

Pakistan. Kargil '99 has demonstrated that there is space for calibrated conventional war within the nuclear threshold. Hence, the likelihood of a conventional war with Pakistan remains a possibility in the near term, triggered as a result of punitive strike by India in response to a terrorism or border incident. However, the likelihood of such a conflict in the mid to long term is likely to decrease due to international pressure to prevent conflict between the two nuclear states, emergence of a stable democratic government in Pakistan and resolution of the Kashmir Issue at some point of time in the future, as well as India's maturity and responsibility as an emerging global power.

China. A conflict is possible in the medium to long term, on account of clash of interests arising out of competing regional and global aspirations and, unresolved boundary disputes. Infrastructure development in the Tibet Autonomous Region (TAR), like the recent construction of the Golmud to Lhasa rail line, coupled with the ongoing modernisation of China's armed forces, are indicators. However, China is likely to turn its attention to India only after it has consolidated its position economically.

Hence, there is a requirement to maintain our conventional combat edge against Pakistan in the short to mid term and a conventional dissuasive posture against China, in the mid to long term.

Nuclear Conflict

Any conflict with Pakistan will be fought under a nuclear shadow with Pakistan threatening to use its nuclear weapons as

a desperate measure to stall our conventional offensive beyond a threshold threatening its very survival. The threat gets magnified in the event of Pakistan disintegrating into a failed state and its nuclear arsenal falling into the hands of *Jehadi* elements. The only effective counter to such eventualities is maintaining an assured second strike capability which would deter Pakistan from embarking upon a nuclear misadventure.

Against China, the equation is completely reversed, in that the Chinese armed forces have a decisive conventional edge over us which if we try to match, will be a severe drain on our economy. The nuclear option will be the only effective means to deter the Chinese dragon, of sufficient reach and size.

Hence, while both, conventional and nuclear conflicts remain on the threat horizon, the latter is only a consequence of the former as an escalation. This defines their inter se priority.

Low Intensity Conflict (LIC)

Given the low probability of being able to achieve their aims by open hostilities, whether nuclear or conventional, there is an increasing tendency of both, state and NSA, to take recourse to 4GW. China has in the past aided insurgency in the North East while Pakistan applied it first in Punjab, where it failed and then in Jammu and Kashmir. A major portion of our Army continues to remain tied down in Counter Insurgency (CI) operations with growing cost in manpower and material.

There are other threats to security in the hinterland. There is a growing menace of Naxalism in parts of Andhra Pradesh, Chattisgarh, Orissa, Jharkhand and Bihar in collusion with the Maoists in Nepal who dream of a Compact Revolutionary Zone. These forces are growing bolder by the day and have directly challenged the authority of the state. The gravity is evident from the fact that Naxalites have killed 460 people in the first six months of 2006,⁶ nearly equalling our total combat casualties in Kargil War. The social and cultural fault lines of our heterogeneous society are also breeding grounds for 4GW forces in form of terrorism, fundamentalism and extremism, as evident from the Mumbai train blasts on 11 July 2006.

As the central paramilitary forces are still not able to combat this threat and the employment of the Armed Forces has adverse

implications, it has been proposed that a separate force, manned, led, equipped and controlled by the Army, called the Internal Security Force be raised to meet this requirement.⁷ The Rashtriya Rifles and the Assam Rifles could provide the nucleus for such a force. It would be the 'lead force' in tackling the high end threats to internal security.

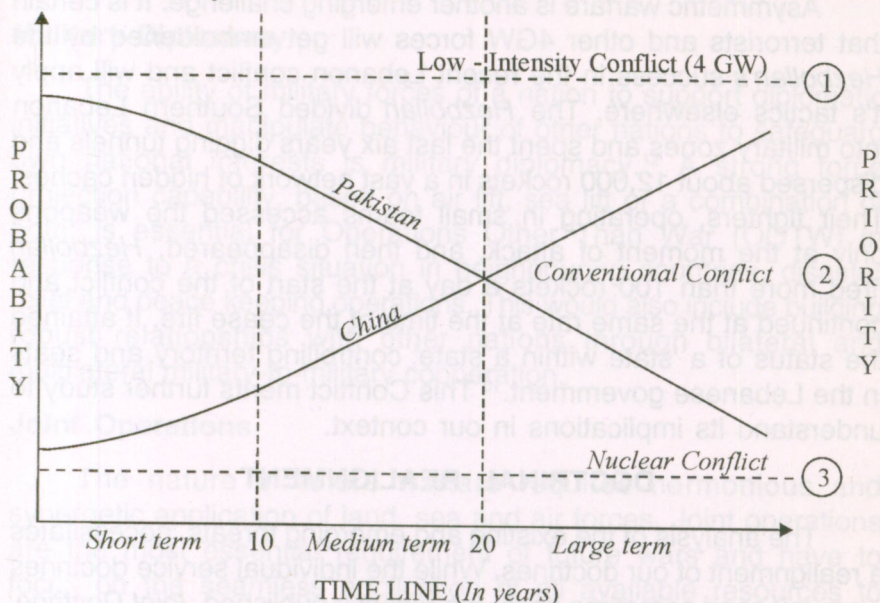


Fig. 2 : The Prognostic Indian Threat Model

The above prognosis reveals that while conventional and nuclear conflicts remain in the realm of possibility, the LIC is the reality we are facing today and shall continue so in the future. There is, therefore, a need for re-appraisal and re-prioritization of the emerging threats. While retaining our conventional combat power, together with the nuclear deterrent, the emphasis has to shift towards LIC (4GW) as the primary threat in the coming decades.

Emerging Challenges

Apart from the threats outlined above, many more challenges may emerge in the future, as India gains eminence in the global stage commensurate with its economic growth. Free flow of energy and overseas trade will become central to this development. Prime Minister Mr Manmohan Singh, in his address to the Combined

Commanders Conference in October 2005, stated - "We must ensure workable alliances with like minded countries for security of our sea lanes, for our commercial and energy security."⁸ This entails a critical shift from essentially a 'continental approach' of our military strategy to a 'continental-cum-maritime' strategy.⁹

Asymmetric warfare is another emerging challenge. It is certain that terrorists and other 4GW forces will get emboldened by the *Hezbollah's* success in the recent Lebanon conflict and will apply it's tactics elsewhere. The *Hezbollah* divided Southern Lebanon into military zones and spent the last six years digging tunnels and dispersed about 12,000 rockets in a vast network of hidden caches. Their fighters, operating in small teams accessed the weapons only at the moment of attack, and then disappeared. *Hezbollah* fired more than 100 rockets a day at the start of the conflict and continued at the same rate at the time of the cease fire. It attained the status of a 'state within a state' controlling territory and seats in the Lebanese government.¹⁰ This Conflict merits further study to understand its implications in our context.

DOCTRINAL REALIGNMENT

The analysis of the existing and emerging threats, necessitates a realignment of our doctrines. While the individual service doctrines were released sometime back, the recently published *Joint Doctrine: Indian Armed Forces* attempts to give a shape to the Indian strategic thought process. It lays down that - "To defend the national territory, we need to maintain a full spectrum of dissuasive and deterrent capability on land, air and sea. This capability should be such that it is effective against all types of armed conflicts, from LIC to conventional, under a nuclear shadow."¹¹ Consequently, the essential doctrinal issues that merit consideration in a further study of desired force structures are outlined in the succeeding paragraphs.

Strategic Vision - Enabled by Politico-Military Interaction

It has already been highlighted that the 4GW will take place across the spectrum of political, social and military fields. This would necessitate a close politico-military interaction enabled through revamping of the higher defence organisation. The establishment of the Headquarters Integrated Defence Staff (HQ IDS) under command of the Chief of Integrated Staff to Chairman COSC (CISC)

was the first step in this direction. The CISC needs to be upgraded to the post of Chief of Defence Staff (CDS), to provide single point military advice to the Raksha Mantri. The direct access of military leadership to the political leaders would enable development of strategic vision for the country through the mechanism of the National Security Council.

Military Diplomacy

The ability of military forces of a nation to support diplomatic initiatives and manipulate behaviour of other nations to safeguard own national interests is military diplomacy.¹² A strong force projection capability, based on air lift, sea lift or a combination of both, is essential for Operations Other Than War (OOTW) in response to a crisis situation in neighbouring countries, disaster relief and peace keeping operations. This would also include building robust relationships with other nations through bilateral and multilateral military-to-military cooperation.

Joint Operations

The nature of future warfare requires harmonious and synergetic application of land, sea and air forces. Joint operations are the most essential requirement of future wars and have to focus on the seamless application of all available resources to shock, dislocate and overwhelm the enemy.¹³ There is a need to 'think purple' and transcend from single service operations to joint operations to optimise and integrate the full combat potential of each service. This demands an integrated command structure at all levels - strategic, operational and tactical in the context of land-air-maritime battle. This should be complemented by joint training, planning and conduct of war.

Revolution In Military Affairs (RMA) : Transformation Through Technology

Future wars will be fought under high-tech conditions characterised by greater transparency and increased precision of munitions. This calls for imbibing RMA through adoption of high technology in our doctrine and organisation, at all levels, thus bringing about a change in our war fighting methodology. Network Centric Warfare (NCW) forms an essential component of the RMA, where in the challenge lies in reducing the 'sensor to shooter' gap in the information and cognitive domain.

Human Resource Development (HRD)

In the surfeit of hi-tech gadgetry, one is apt to overlook the 'man behind the machine'. In the background of the changing socio-economic conditions in the country, the human resources have to be harnessed to its full potential. Adopting systems approach to training, directive style of command, manoeuvre approach to war fighting, improving the technical threshold and imbibing secular moral values are some of the essentials.

FORCE RE-STRUCTURING

The analysis so far indicates that force re-structuring is an operational necessity to give our forces the wherewithal and capability to tackle the existing and emerging challenges. There can be no single prescription for this venture, since the existing threat profile is diverse in nature and will evolve over time. The force profile should be so configured that it is capable of operating across the spectrum of conflict identified earlier i.e. ranging from LIC to conventional conflict under the nuclear shadow.

Conventional Forces

A future conventional conflict with our primary adversary will be fought under a nuclear overhang that will limit the scope of offensive action to multiple shallow objectives. Towards this end, battle groups have been constituted, based on division or division plus force levels, organised for this purpose. The battle group's constituent formations are not necessarily their organic elements, but could be from any other formation, primarily based on the mobilisation matrix and the mission orientation.

If such a mission oriented organisation is the imperative of our pro-active strategy, then there is a need to carry this forward and institutionalise it. This entails building 'modular force' structures for our conventional forces. The basic 'module' or the primary building block of such a force structure could be a brigade size force that is self contained for fire power and logistic support and composed of combined arms combat groups. This brigade-centric organisation could be scalable from heavy (armour heavy), medium (mechanised infantry heavy) to light (infantry heavy) roles. These brigade size battle groups would have all the capabilities presently found at divisional level i.e. it will have its integral combat service

and logistics support. A corresponding exercise can be undertaken in the Navy and the Air Force, to create a modular force structure.

The command echelons above the brigade, i.e. division and corps headquarters (and their equivalent in the other services) would be made independent of their subordinate formations i.e. it will have no organic formations under command. Rather, tailor made mix of such brigade modules can 'plug and play' under any division headquarters to accomplish the mission assigned. Similarly, the corps headquarters can have its own mission specific organisation.

Eventually, these command echelons above the brigade will evolve into a truly joint and battle focused command structures capable of controlling a mix of modules from any service contingent on their threat based mission. In essence, we would achieve a right balance of 'capability' and 'threat' based force structure; the brigade size modules being the former and the command echelons above it being the latter.

While a comprehensive study would be necessary to arrive at the exact organisation and command and control structure, which could be implemented in an incremental manner, the following advantages of such a scheme are evident:-

(a) It will enable a flexible and joint force packaging, which will generate more options for the commanders at all levels enabling them to reach for a broader set of tactical and operational objectives, in a tri-service context.

(b) It will migrate our vertical hierarchical organisation to a horizontal networked organisation, with its inherent advantages.

Having realised these advantages, the US Army is also transforming into a modular force and has already deployed six such Brigade Combat Teams in Iraq.¹⁵

Strategic Forces

The Indian Nuclear Doctrine is well articulated and is based on maintaining a credible minimum nuclear deterrent, with built in survivability and necessary safeguards, to cater for all contingencies. Within this policy frame work, the role of the armed

forces will be to guarantee the second strike capability based on a triad of land, sea and air based missiles, with secure command and control networks. The current status and the desired capabilities are shown in figure below:-

STRATEGIC FORCES			
CAPABILITY	LAND	SEA	AIR
PRESENT	<ul style="list-style-type: none"> ● Based on Prithvi and Agni Class of missiles. Range limited to tactical and operational depth. ● Road and rail based launcher. Easy detection and hence low survivability. 	<ul style="list-style-type: none"> ● To be based on Dhanush and Sagarika missiles. ● Ship and submarine launched. ● Greater reach and highest survivability. Hence, most potent deterrent. 	<ul style="list-style-type: none"> ● Based on Mirage 2000, Jaguar and Su 30 MKI. ● Range limited by operating radius of the aircraft. ● Highest payload capacity and accuracy.
DESIRED	<ul style="list-style-type: none"> ● Enhance range of Agni missile beyond 5000 km (ICBM class). ● Construct underground bomb proof silos at likely launch sites to ensure survivability. 	<ul style="list-style-type: none"> ● Early completion of the Advance Technology Vehicle (ATV), the indigenous nuclear submarine projects. ● Concurrent finalisation of Sagarika SLBM. 	<ul style="list-style-type: none"> ● Consider space based options.

Fig. 3 : Capability of Strategic Forces

The potency of the nuclear deterrent will not be a function of number of warheads, but an assured second strike capability based on adequacy and flexibility of the delivery systems and survivability of the command and control structures. This has to be demonstrated to potential adversaries, so that it knows that, however, strong a first strike it may launch, India is capable of launching a crippling retaliatory strike.

Nuclear weapons are very like conventional military armaments in that the credibility of their use is only in terms of their utility in war.¹⁶ This is possible only when these forces are kept operationally ready by having nuclear war plans in place and exercising them periodically.

To ensure the continuity of our nuclear deterrence, we have to ensure that our military nuclear programme is kept out of the ambit of the ongoing US-India Civilian Nuclear deal and the IAEA safeguards.

Special Forces

It has been established that the trajectory of modern warfare is steadily moving towards the 4GW. Such asymmetric threats, bring into focus the need of tackling an unconventional enemy, with Special Forces (SF) who are superbly trained, well equipped and highly motivated to tackle the demands of such a warfare. Indeed, the US military relies heavily on SF detachments in Afghanistan and Iraq in its ongoing campaign. The Indian SF are based on the SF battalions of the Army, the Marine Commandos (Marcos) of the Navy and the Garuda of the Air Force.

The key element of SF operations is jointness in training, planning, preparation, conduct and integration of all SF resources under a single command. Having identified this critical need, a Joint Special Operations Command (JSOC), should be raised, taking under its command all service SF units, including those units under the Home Ministry manned by army personnel. This JSOC should come under command of the HQ IDS, providing the SF capability at operational and tactical levels to the three Services. The second element of the jointness is a common operating philosophy through a joint SF doctrine, which is being prepared by HQ IDS.

While the specifics of the nature and scope of SF operations will be spelt out by the joint SF doctrine, guided by their strategic reach and force capabilities, the broad domain of their operation would be:-

(a) **Offensive Action.** This will include all small scale actions performed in direct support of an operational level commander during the conduct of conventional operations; such as raids, ambushes, search and destroy missions, targeting vital communications and logistics infrastructure and enemy commanders. It will also include conduct of the reconnaissance and surveillance, at strategic and operational levels, sometimes even before the commencement of actual operations due to their 'small footprint'.

(b) **Counter Insurgency (CI).** India's CI campaign in Jammu and Kashmir has reached a state of strategic stalemate. Although Rashtriya Rifles, Assam Rifles and the regular army units will continue to be the mainstay of our CI operations, we

need to break out of the current impasse by shifting focus from 'saturation tactics' being presently employed, to 'surgical strikes', by SF units on both sides of the Line of Control (LC), directed against key militant leaders, training infrastructure, launch pads and logistics installations. Such operations, carried out clandestinely, do not risk escalation, while causing grievous hurt to the Pakistani establishment that supports proxy war.

(c) **Counter Terrorism.** This includes our response to terrorism in all its manifestations; hostage rescue, evacuation operations, bomb disposal, infiltration of militant/terrorist organisation and emerging challenges of countering Weapons of Mass Destructions (WMD), cyber terrorism and terrorism effecting energy security. Of these, the counter WMD requires urgent attention and could entail setting up organisations on the lines of US Chemical biological Incident Response Teams (CBIRT) and Nuclear Emergency Search Teams (NEST).

(d) **Expeditionary Contingency.** The aim of the SF's expeditionary capability would be to maintain law and order on the high seas as part of Low Intensity Maritime Operations (LIMO) and in the proximal land areas, render help to friendly governments in the region facing threats from rebels and terrorists like the Maldives operation, disaster management like carried out post Tsunami and to cater for contingencies like Kandahar hijacking. This capability would be based on a mix of air borne and amphibious means with adequate reach in our area of interest. These operations could also be undertaken as part of a coalition along with friendly foreign forces or under the UN auspices. A good model to follow in this regard is the Marines Air Ground Task Force (MAGTF) constituted from the US Marine Expeditionary Force.

CONCLUSION

Hierarchical organisations like the armed forces inherently resist change, forgetting that changes in the emerging security environment and future battle field milieu, as well as societal changes demand change. Considering the momentous changes taking place in the global, regional and domestic environments and their impact on our security, the armed forces need to realign doctrinally and restructure organisationally to remain a potent force. Some of the

'ways' and 'means' to achieve the desired 'ends' have been explored in this essay, summarised below -

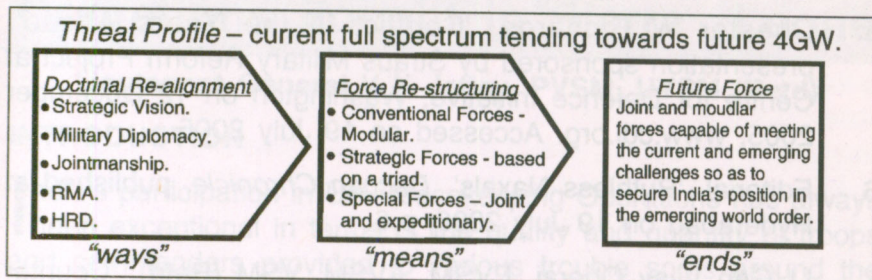


Fig. 4 : Ways, Means and Ends

There is need to exercise an element of caution while embracing these changes. Any undue emphasis or insistence on a tailor-made orientation focussing primarily on any particular level of warfare would be dangerously misplaced.¹⁷ The words of Sir Winston Churchill while addressing the House of Commons in 1923, sum it up-

“The armed forces are not like a limited liability company, to be reconstructed from time to time as the money fluctuates. They are not inanimate things, like a house to be pulled down or enlarged or structurally altered at the caprices of the tenant or owner. They are living things, if they are bullied, they sulk, if they are happy, they pine, if they are harried, sufficiently they get feverish, if they are sufficiently disturbed, they will wither and dwindle and almost die, and when it comes to this last serious condition, it is only revived with lots of time and lots of money.”

End Notes

1. Thomas X Hammes, *The Sling and the Stone: On War in the 21st Century*, (New Delhi: Manas Publications, 2006), p.208.
2. William S Lind, 'Understanding Fourth Generation Warfare'. *USI Digest*, Vol. VII, No. 13, September 2004 - February 2005. p.4.
3. Martin Van Creveld, *Transformation of War*, (New York: Free Press, 1991).
4. Ibid, 'Through a Glass, Darkly: Some Reflections on the Future

- of War', *Naval War College Review*, Autumn 2000, Vol. LIII, No.4.
5. Chester W Richards, 'Conflict in the Years Ahead', presentation sponsored by Straus Military Reform Project at Centre for Defence Initiative, Washington on 12 December 2005. www.cdi.org. Accessed on 19 July 2006.
 6. Editorial, 'Ruthless Naxals', *Deccan Chronicle*, published at Hyderabad on 19 July 2006, p.6.
 7. Lt Gen Vijay Oberai, PVSM, AVSM, VSM (Retd), 'Counter Terrorism Strategies: Restructuring the Armed Forces'. *Pinnacle - The ARTRAC Journal*, Vol.4, No.1, April 2005, p. 16.
 8. 'Big Leap', *Force*, June 2006, Vol 13, No10, p.15.
 9. Brig (Dr) Arun Sahgal (Retd), 'National Military Aspirations and Military Capabilities: An Approach', *Army 2020 - Shape, Size, Structure and General Doctrine for Emerging Challenges*, (Centre for Land Warfare Studies, New Delhi, 2005), p.112.
 10. Thom Shanker, 'A New Enemy Gains on the US', *The New York Times*, 30 July 2006. www.thenewyorktimes.com. Accessed on 10 August 2006.
 11. *Joint Doctrine: Indian Armed Forces*, promulgated by HQ IDS, New Delhi in May 2006, p.4.
 12. *Ibid.* p.4.
 13. *Indian Army Doctrine*, promulgated by HQ ATRAC, Shimla in October 2004, Chapter 4, Section 13, Para 4.13.
 15. 2005 Army Modernisation Plan. www.army.mil. Accessed on 01 Jul 2006.
 16. Bharat Karnad, 'Firming up the Critical Capability Triad: Strategic Muscle, Sub-Conventional Punch and IT-Enabled Network-Centricity and Electromagnetic Warfare Clout', *Army 2020- Shape, Size, Structure and General Doctrine for Emerging Challenges*, (Centre for Land Warfare Studies, New Delhi, 2005), p.243.
 17. Gen S Roychowdhury, PVSM, ADC, 'Army 2020', *Indian Defence Review*, October - December 2004, Vol 19(4), p.41.