

CHANGING NATURE OF WAR

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Beyond the immediate, we are facing a future where security challenges will be less predictable; situations will evolve and change swiftly; technological changes will make responses more difficult to keep pace with. Threats may be known but the enemy may be invisible.

Control of space becomes as critical as that of land, air and sea. Full scale wars may become rare, but force will remain an instrument of deterrence influencing behaviour and the duration of conflicts will be shorter.

*We should remember that what matters is the capability of the force.....
When we speak of digital India, we would also like to see digital armed forces.*

– Prime Minister Modi to the Combined Commanders

To my mind, this sums up the present and the future direction for the armed forces and other security and intelligence agencies. The concept of nationhood is not very old in India and, therefore, one has to learn from history: after all, the human race is essentially the same except that it is evolving all the time, refining its way of thinking all the time.

Let me attempt to provide a canvas of the historical perspective of warfare. One example is the Iraq War, not the present one. The USA swept away the Iraqi Army in a few days, and thought victory had come; unfortunately,

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the assumption about the nature of this war was a faulty one. The planning was done based on the experience of previous wars. Lessons from past wars have limited utility in the future. Were the Americans intellectually impaired, institutionally misdirected or, perhaps, constitutionally impaired to act decisively?

If you have read Clausewitz, you will be familiar with what he has often said, "War is politics by other means." I would say war and politics are expressions of sociology, they grow out of the social conditions of their time and place though the reasons may never be identical. Let me explain why I say this: the theme of the modern world has been shaped by the English Civil War, which marked the end of wars of religion and the beginning of secular ones. Science helped fuel the intellectual and industrial revolutions, and, as a consequence, emerging doctrines of individual conscience and governments based on social content rather than divine right; the establishment of the idea of the sovereign state within a system of states, birth of nationalism, of an idea of countries based on common, shared identity rather than as personal holdings of dynastic families. Changing sociology produced a new style of warfare which was demonstrated by the American Revolution.

Rapid technological change also radically altered the nature of how wars were to be fought. Added to that, the industrial revolution and innovations put vast powers into the hands of states, particularly in the areas of mobilisation, communication, transportation and logistics support, enabling the creation and sustainment of mass-based armies, equipped with a bristling array of weaponry whose inherent efficacy forced further innovation in tactics, techniques and procedures in a self-reinforcing process that has marched down the intervening years.

THE TRIUMPH OF MODERN WARFARE

The apogee of this process was World War II. It was the highest expression of the art of modern war. Many technological changes have taken place but very little has changed since World War II as far as sociological

underpinnings are concerned. It is the paradigm of modern war and experience of it that shapes a country's strategic military thinking and planning, particularly the Western model. If you examine it closely, you may conclude that despite all the talk of transformation, this is old wine in a new bottle.

Sociology is changing and so is the nature of warfare. We generally plan to refight the previous war. This is what we understand as to what to do and how to do it.

Let me now take you to another example, the Vietnam War. My view is that the strategist Clausewitz remained in obscurity outside Germany for many years after his death and came to prominence in the US only after the Vietnam War. I get the impression that he was more quoted than read, and if read, then less understood. The Vietnam War was a profound shock, not only for the US as a whole but most especially for the military. The perceived defeat in Vietnam deeply affected the military's self-image. This led to introspection by the US and analysis by the world powers.

Col Summers, a well known US thinker, has summed it up by saying that America lacked a war-winning strategy in Vietnam largely as a result of the military having surrendered strategy-making to civilians who produced concepts of limited war, which meant that the military instrument of strategy was not understood and, consequently, misapplied to goals it was not designed for, a fault Clausewitz had warned against. Military failure was a strategic failure and the blame for that lay with the civilians who had come to dominate strategic thinking without having an appreciation of the military instrument.

MODERN WARFARE

The military had also failed to appreciate the nature of insurgent warfare and tried to turn Vietnam into replay of World War II in the jungles!! Reform of how the military should conduct small wars was needed. The military carried out a major study on manoeuvre warfare and the operational art of

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war—building on Clausewitz and the German Army's experience in World War II. The study influenced doctrine development and military reform which reflected the deepest institutional prejudices within the military and its aversion to non-traditional forms of war-fighting.

Two strategists have brought out this aspect, one being Clausewitz. He often said, "War is, thus, an act of force to compel our enemy to do our will."

The second is William J Olsen of the National Defence University (NDU) of the US who has written: "While the nature of warfare is changing... but policy, strategies and instructions that develop and implement them have not understood or adjusted to the changing nature of war. We have moved from the era of Modern War into the era of Post Modern War, into an age of war without a Centre of Gravity."

The views of some more researchers on this subject are worth examining. Mary Kaldor has argued that war in the past decade has changed into something completely new. Globalisation of the economy in combination with the pursuit of exclusionary identity politics has removed the difference between war and peace, crime and war, and between war and systematic abuse of human rights in a growing number of conflicts. Some others have argued that the new features of modern war – precision guided munitions and network-centric warfare are signs of a Revolution of Military Affairs (RMA). Some others have come to the conclusion that the use of smart bombs and air power has made war virtually a post-modern spectator sport for the Western countries.

Quantitative studies indicate that during the Nineties, over 90 per cent of armed conflicts took place within states rather than between states. There is a high degree of correlation between so-called modern war and low intensity conflict or "non-state war". I would summarise to say that there are at least three debates on the changing nature of war.

First: It deals with non-state warfare. Now the question is: is there something new in this?

Second: RMA contends that the way future wars (and some current ones) will be fought is new.

Third: Called post-modern war. It states that war has become virtual.

As far as Clausewitz's writings go, it suggests that war consists of a trinity made up of the people, the government and the armed forces. War comprises, and balances between, creative forces (symbolised by the armed forces action), rational forces (symbolised by the government) and emotional forces (symbolised by the people). Essentially, it means that the armed forces are separable from the people (who do not take part in fighting) and from the government, which leads the war. Obviously, Clausewitz's analysis was influenced by the military and political context in which he lived.

Some of the internal wars have demonstrated differences from insurgent wars as far as clear military objectives are concerned. The fighting forces are irregulars which display absence of even an appearance of military order and discipline; resulting in a level of ferocity and even atrocity that is routinely committed in these conflicts.

When it comes to terrorism, Jerrold Post suggests that terrorism as an intentional act selected from a range of perceived alternatives is understood as rational. It is a psychological set-up that predisposes some to be drawn towards extreme groups and extreme rhetoric. However, this argument is not compatible with rationalist accounts of terrorism or modern warfare.

What then are the characteristics of modern war? One school of thought is that modern war is inclined to target the civilian population. Global trade links are used to support the armed movements fighting in this war, and the enemy often becomes invisible. This is what makes differentiation between war and peace blurred. Some suggest that war may be continuation of economics by other means. This does not mean that wars are caused by economic shortcomings – rather that the conduct and continuation of wars are determined by economic incentives. These are akin to the wars during the Middle Ages.

While justifying the RMA, it is often said that the ability to collect, communicate, process and protect information is the most important factor defining military power. In the past, armour, firepower, and mobility defined military power, but now it often matters less how fast you can move or how much destructive force you can apply. Stealth trumps armour, precision trumps explosive force and being able to react faster

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than your opponent trumps speed. My own take is that the Western powers are reluctant to become militarily involved unless they enjoy overwhelming superiority in military, especially technological, power. Further, the increasing dependence on air power and precision-guided munitions of the West is an attempt to take death out of wars not only by reducing own losses through the predominant use of air power in the conduct of war but also by minimising collateral damage. This has led to development of non-lethal weapons which may be a futile attempt at the end. Surely removal of death from wars may also make the post modern war occur more frequent as society becomes disconnected with the decisions, conduct and suffering in war.

Some strategists like Smith, Duyvesteyn and Stathis Kalyvas have analysed, and concluded about, three different types of civil warfare roughly corresponding to, though not perfectly correlated:

- Conventional warfare that exists in secessionist conflicts.
- Irregular warfare that is intimately linked with rural insurgencies.
- Symmetric conventional warfare that is in some way connected to state collapse.

These theories are subject to further research. In some wars, there was some ground to the argument of war being a tradition of civil military coordination, anti-guerilla, interdiction through intelligence operations and, most importantly, a willingness to negotiate limited political compromises with the adversary possibly from a position of strength or a stalemate situation. (e.g. Malaya, Kenya, Cyprus and Northern Ireland). This probably emerged from the British colonial burden of policing.

Let me put it this way: when political actors seek intangible, rather than purely physical, outcomes through military action, strategic analysis becomes far more intricate because it requires an acute appreciation of the ambiguities and complexities of the socio-political environment in

which these conflicts occur. The key problem is that democracies handle such conflicts very poorly, says Eliot Cohen.

Broadly speaking, conventional warfare in military terms is best understood by defining it:

- There are well defined centres of gravity at different levels of strategic, tactical and operational respectively.
- There is a clear distinction between combatants and non-combatants.
- Operations are carried out by a large number fighters who fight in the sectors or specified areas.

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GLOBALISATION AND CONFLICTS

There have been many researchers who have linked globalisation to increased conflicts. From the time the Cold War ended, it has been a process of a reverse of real globalisation in the form of the spread of American power, ideas and institutions on a global scale. This Anglo-Saxon economic and ideological hegemony is unlikely to continue without growing international political and ideological resistance, and, indeed, one major form that this has begun to take is that of international terrorism led by the Al Qaeda network.

One can visualise the current phase of US unipolar domination of the international system as a transitional one, and ultimately, a new balance of power will reassert itself – China is a strong possibility. However, the overwhelming military superiority of the United States over its international rivals makes this an unlikely prospect in the near future. Authentic globalisation has yet to develop out of its US and Anglo-Saxon dominated form, certainly on lines that can lead to the entrenchment of democracy at the world level.

The future may be rather more fluid, with continued centrality of inter-state warfare. The breakdown of weak states has not ensured the domination of a completely new form of war, since the warlord factions are both supported in many cases by states and themselves seek the control of states as an ultimate political goal. Therefore, we are possibly going through

a transitional period, in which a number of weak states that were supported by large scale patrons during the Cold War, now have to struggle to survive in a rather insecure international political order. Some may ultimately fail, leading to an increased number of sovereign states in the international political system. In this process, inter-state warfare may become a major defining characteristic in the 21st century.

Let me try and elaborate on the thesis of a type of new war before I bring you to our context – the Indian context. All these have an impact on how we are going to move on with our force structures which could become a subsequent matter of debate.

Osama Bin Laden put across to Al Qaeda in 1999: “We seek to instigate the [Islamic] nations to get up and liberate their land”. The attack on the World Trade Centre was successful, probably beyond the expectations of the perpetrators, in publicising the global Islamic idea. Al Jazeera also announced that regardless of Osama being killed or surviving, the awakening had begun. The second type of war which has been put forward by researchers and mentioned by me, is virtual war or spectator-sport war. The US has utilised it the most, using superior technology, primarily airborne technology and advanced information and communications technology. This is achieved by virtual simulation, media manipulation, global surveillance and networked warfare to deter and, if need be, destroy, the potential enemies. It draws on the just war and holy war doctrines (the first, when possible, and the second, when necessary). Also, for own population to be spectators, they do not participate in any meaningful way by risking their own lives or paying any additional taxes. This differs from what Clausewitz was writing in the 19th century – for him, the reason implied the legitimate interests of state, i.e. on behalf of the whole nation. The thought that private groups (non-state actors) would be acting in their own selfish interests, did not count because it was quite contrary to the thinking of enlightened people of those days.

Therefore, a comparison of wars of the past decades, mostly on the basis of the ways in which they were fought, their tactics or *modus operandi*, with the wars of today, wherein the actors involved have been heaped together

under the rubric of 'irregular', can, and has, often led to an obsessive concern for developing counter-measures, sometimes detrimental to comprehending the long-term drivers of a conflict, especially a low intensity one.

Globalisation, along with technological advances and international communications, has added a new dimension to the paradigm of today's warfare. Two good examples are Al Qaeda's worldwide operations and the Mumbai terror attack, which place emphasis on the visibility of the deeds rather than the practical consequences.

The changing nature of warfare calls for more attention to the study of strategy. In spite of globalisation and technological advances, the terminology to describe modern wars covers a wide range of concepts and, sometimes, is overlapping. There is wide divergence of opinion.

In the light of the perspective which researchers have brought out, where does it leave India? There are three more factors worth examination.

FROM BATTLEFIELD TO BATTLESPACE

Civilians are usually absent from the battlefield either because the battle occurred in a relatively unpopulated area or they fled prior to its onset. This linearity has diminished severely. Now the civilians and civilian objectives are intermingled with military objectives. The valid targets which could not feasibly be struck in the past, now become vulnerable. The universe of strikeable targets multiplies and, therefore, also the potential of collateral damage and incidental injury while still achieving military objectives.

The operational concept of precision engagement will underline military tactics and strategy which highlights the centrality of air power. It will consist of several systems of systems that enable military forces to locate the objectives or targets, provide responsive command and control, generate the desired effect, assess the level of success, and retain flexibility to reengage with the precision required.

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Two capabilities are key to achieving precision engagements: (a) information dominance, particularly surveillance and reconnaissance; (b) ability to apply just the right amount and kind of force to accomplish the objective. Information dominance implies transparency of an opponent's action and intentions, and concealment of own (integrated intelligence at all levels of warfare).

Mountains of information will be available to the decision-maker, to the extent of becoming unacceptable in the unprocessed form. New data processing systems using artificial intelligence are being developed to rapidly fuse, sort, evaluate and disseminate information in a user friendly form. Future wars will not only be smart but "brilliant". Inertial navigation technologies and guidance systems will permit weapons to regularly strike targets within centimetres of the desired point of impact. Therefore, in many military operations other than war, deadly force may become counter-productive.

PERCEPTION MANAGEMENT

Only if there is responsible media and press, can perception management improve the connectivity of the political intention with the citizens, which is necessary for governments to justify wars and maintain vote banks for the next election.

As far as non-traditional warfare is concerned, in the Indian context, it will certainly be from a weaker adversary who intends to cause damage by exploiting the vulnerabilities of a stronger enemy, in this case, India. When Pakistani extremists infiltrated Mumbai and crippled one of the largest cities in the world with less than 10 individuals, it was proof of how warfare and national security stand redefined. This incident of November 2008 proved the evolution and transformation which has taken place faster than we thought, occurring within less than a decade of Al Qaeda's attack on the World Trade Centre in New York. These infiltrators used small rubber craft equipped with light tools,

where smaller is better, even smarter and independent. Carrying supplies in simple backpacks, they exploited over the counter technologies to overwhelm their targets. Simple navigation using Google maps, communicating and also updating planners and other team members by cell phones they successfully conducted guerilla information operations, carrying out ad hoc psychological methods of confusing their adversaries by manipulating the local media. So much so, that despite available scattered intelligence, the chief of one service did not react despite the fact that his forces were deployed in the area the extremists transited through, stating it was “unactionable” intelligence, and got away with a reward. The terrorists followed all the principles of special operations, sending false reports on Twitter of their positions and the numbers wounded or killed, causing the public panic that even overwhelmed their opponents i.e. the police and the military. It was marked by simplicity, security, repetition, speed, purpose and surprise. Every guerilla force uses these principles around the world. Our Anglo-Saxon model does not go the whole hog into siege warfare or counter-insurgency and professes large scale warfare. Nations can no longer afford large scale war over land now given the current state of the economy, the debts and the crying need to spend money on projects for the well-being of citizens. In general, nations cannot hide their large military operations – it will be too expensive to train, equip, field, support and provide security to large forces. It is time for smart and precision weapons. With cyber warfare, infrastructures can be crippled within minutes not to mention nuclear, space-based, biological and chemical weapons.

CYBER WARFARE

No discussion is complete without the mention of cyber and nuclear warfare. Cyber war has encouraged every country to spy on other nations to disable weapon systems, power grids, communication networks, transportation chains and logistics which heavily depend on open domain networks. Many military sources of infrastructure are outsourced to civil backbones and there lies the catch. The US and Israel created a virus called STUXNET to slow down Iran’s development of nuclear technology – the result is that now Iran is talking to the world under the pressure of sanctions. Another example is the creation of

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the virus Flame Virus, which attacked and infected networks around the Middle East and has been used for espionage—it was successfully used on Iran for over two years. In 2009, Russia and China infiltrated the US power grid and left malicious software that could that could potentially harm the entire electricity distribution system. No one has issued any denial. It only shows how cyber has changed the nature of warfare. The source of attack cannot be determined. It is a cheaper method of disabling the economy and can paralyse the infrastructure of the fighting forces. The MI 6 hacked Al Qaeda's website and changed the recipe for explosives for a recipe for cupcakes! Though this type of potential has not peaked, it has changed the nature of warfare as it is accepted as the 5th dimension in which wars are being fought.

NUCLEAR WARFARE

This warfare emerged in the 20th century World War II. The use of nuclear weapons can, and will, annihilate a complete country if used. Hiroshima and Nagasaki killed 200,000 people; it has the potential of extinction of all life on earth. This weapon prevented any big conventional war later. But it gave birth to guerilla warfare and later non-state warfare or state-sponsored non-state warfare. The threat of its being used has not disappeared altogether despite mutually agreed destruction, and the Strategic Arms Limitation Treaty. There have been many proliferations, mostly with the tacit support of the existing nuclear powers. So much so, that some of the countries that obtained nuclear weapon technology through such proliferating, have passed it on to the non-state actors, which poses a serious threat to humanity, particularly in our region.

SPACE WAR

The focus of technologically advanced countries has shifted to space which so far remains an untested medium for war. In the recent past, the race for supremacy in space has intensified. The US is supreme when it comes

to space communication, monitoring and possibly weaponisation. There is some debate that possibly the US has developed capabilities of virtually monitoring and selectively destroying terrestrial targets with precision accuracy and least or nil collateral or incidental damage. This could be one reason why the US is losing interest in land warfare and letting other regional powers assume leadership of regions. The closest challenge to US supremacy is from China, which is many years behind the US in space assets. The other powers that have the capability of challenging the US in due course are Russia, France and, later, India.

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SPECIAL FORCES

In addition to technological changes , there have been changes in tactics as well. Due to the nuclear backdrop, wars are less likely between conventional armies; rather, they are fought through special forces. This calls for the need for small, elite units that can be deployed everywhere, or special forces. Operation Entebbe, carried out by the Israeli Special Forces in 1976 was one such case. In 1976, terrorists hijacked an Air France flight and flew it to Uganda, where they released the hostages, except the Israeli ones, and threatened to kill them if Israel did not comply. The Israeli Special Forces planned and executed a rescue operation. They took all seven terrorist out, one Israeli commander was killed, and four hostages lost their lives but 104 people were rescued. Eleven Ugandan MiG-17s were destroyed on the ground and 45 of their soldiers killed. Conventional armies don't fare well in handling such situations. More and more confrontations have needed special forces' action rather than conventional armies' confrontation over land.

Special forces operations have been failures as well. Operation Eagle Claw failed, resulting in the deaths of 8 US personnel. It resulted from inadequate training. They did not adapt to the changed nature of warfare. It was inspired by the Entebbe Operation, but Eagle was too complex to be properly executed. In this case, a conventional war would have been all that was needed.

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INDIAN SCENARIO

Closer home, our scenario is more complex. Unlike the US, India is not a global power yet. Every external or non-state war is likely to result in internal damage to life and property, apart from loss of territory. These have to be protected. Our strategy for a two-front war does articulate dissuasive deterrence on one front and supremacy of capability on another. What needs to be factored in now is capability to protect maritime trade, supremacy to prevent any aggressor using sea routes (and sub-surface / air space above these seas) to harm our economic and terrestrial interest. Also, India being a big economy and principled democracy, it must ensure that the passage of commons is not impeded which will impact the world economy and, therefore, the well-being of citizens.

We are a nation of 1.2 billion and adding. Our security establishments are pockets of excellence but not truly synergised. Any threat to people, property and territory needs to be tackled **as the nation's war and not as an armed forces war or internal security war**. The line between war and peace or transition from external to internal war is extremely blurred, which has been discussed in the "Changing Nature of Warfare." Therefore, the moment a threat in any domain i.e. land, sea, air, space, cyber, nuclear, etc is perceived, all the powers of the state must have a mechanism to repel it. Or else, the threat can quickly convert into a conflict which will impact the well-being of our citizens. The Mumbai terror attack, the Parliament attack and other skirmishes are examples. Frequent incursions on the Chinese border, the growing influence of China in the Indian Ocean and littorals, and the withdrawal of the US and International Security Assistance Force (ISAF) from Afghanistan in the unfolding rainbow scenario of Al Qaeda and Islamic State (IS) which has the potential of manifestation into all its seven forms (that is why rainbow), are the challenges which India has to meet with comprehensive national power. As we visualise in our paradigm, the many mediums of war which utilise the new models of warfare need to be deterred with appropriate capability building and if it spills into a threat we must have the capability to punish,

using our comprehensive national power. This is the kind of structure of synergy we have to create to convert or transit from deterrence capability to its operational conclusion. As the National Security Adviser (NSA) in his earlier articulations has said: “National debate on these issues is a necessary prerequisite for a united national response..... is either conspicuously absent or mired with political acrimony is unfortunate ...”. Ajit Doval has added ... “The country needs a strategic mindset and a consensual long-term vision if it has to emerge as a major global player”.

Prime Minister Modi , who has an absolute majority in the Lower House of Parliament, has pointed out the changing nature of war. Very clearly, he has articulated that future wars will be short, with known threats but invisible enemies. This sums up the future direction for strategists and planners in the government to put the desired format in place. The statement gives credence to non-state wars, cyber, Unmanned Aerial Vehicles (UAVs), nuclear and space mediums which are part of the nature of this war. Attempts are being, and will be, made to cripple the civilian infrastructure which also supports the security mechanism such as power grids, communication and telecom networks, economic activity life lines, including stock exchanges and the transportation and logistics frameworks of the country.

China and India, as countries with increasing populations, requiring more and more energy and life sustaining resources, are in fierce competition to change the transitional world of unipolarity and have brought sea routes for trade and energy movement and protection thereof to centre stage. This pressing need has also enabled the smaller littoral states to take advantage of their geo-political positioning which gives them the opportunity to exploit vulnerabilities arising out of long logistics chains. There are technologically advanced countries and strong economies e.g. Japan, Brazil, South Africa, Indonesia, etc that have an equally strong presence at sea whose participation makes the solutions even more complex, which India has to cope with. Our political will has to translate into mechanisms which need **transformation** of the entire security infrastructure, decision-making structures, Research and Development (R&D) organisations, industrial and manufacturing policies, diplomacy and awareness of people.

Our capability building and transformation of security structures must result in a mechanism of deterrence. Our organisational tribalism must convert to nationalism.

There are new alignments and misalignments of nations in our vicinity which will be adversarial to our vision. Our negotiational skills will need modification and compromises will have to be made in the coming times to prevent the risks of visible conventional military confrontation. India is surrounded in a dense nuclear environment which also restricts freedom and escalation of war. Therefore, our actions will need to be swift, decisive and precise to avoid collateral damage. This will call for 24x7 surveillance, fusion of all intelligence data in all domains of warfare and monitoring of developments in our region of interest. Any changes from status quo will need to be addressed at the appropriate level, using just the right tools such as cyber, space, electronics, special forces and precision of air power available with the appropriate arm of the nation.

Our capability building and transformation of security structures must result in a mechanism of deterrence. Our organisational tribalism must convert to nationalism. Only this will force the adversary to be influenced and modify his behaviour to one which meets our national interests. It will force him to factor the cost of escalating non-nuclear conventional conflict to full scale. Skirmishes will continue, possibly using the civilian population as a shield, thereby compounding the necessity of precision targeting to achieve just the objective which would be necessary to overcome the decision dilemma. As a country we have to put our heads together for synergised and synchronised response capabilities and mechanisms, using modern and indigenous technology where possible. This must be aimed at penetrating the vulnerability of the adversary and punishing the weaker adversary hard if he takes the non-state route to create conflict and loss. The time to match gun for gun, ship to ship, aircraft to aircraft with a stronger adversary and fighting individual armed forces war is probably over.