CHAPTER II

UNDERSTANDING DOCTRINAL AND CONCEPTUAL
ASPECTS OF 4GW

"This is another type of war, new in its intensity, ancient in its origin -- war by guerrillas, subversives, insurgents, assassins, war by ambush instead of by combat; by infiltration, instead of aggression, seeking victory by eroding and exhausting the enemy instead of engaging him. It is a form of warfare uniquely adapted to what has been strangely called "wars of liberation," to undermine the efforts of new and poor countries to maintain the freedom that they have finally achieved. It preys on economic unrest and ethnic conflicts. It requires in those situations where we must counter it ... a whole new kind of strategy, a wholly different kind of force, and therefore a new and wholly different kind of military training."

- President John F. Kennedy, 1962

4th Generation warfare is not novel but a return, specifically a return to the way war worked before the rise of the state. Now, as then, many different entities, not just governments of states, will wage war. They will wage war for many different reasons, not just "the extension of politics by other means." And they will use many different tools to fight war, not restricting themselves to what we recognize as military forces.

William Lind in the early 90s

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As can be amply justified by the two quotes above separated by more than 30 years, the world has been plagued by a continually evolving landscape of small conflicts, driven by a host of issues ranging from the end of the cold war to globalization. People groups increasingly compete for resources and recognition, even while there is increasing pressure to avoid conflict. Additionally, even small conflicts can have a broad impact on an interconnected world. Earlier, a small war was very much localized in its effect, now a seemingly insignificant insurgency can disrupt economies and political systems on the opposite side of the planet.⁹ Thus, while major warfare seems to be becoming more and more rare, small wars, with limited objectives and scope, are becoming more significant, if not more numerous. It only makes sense that powered flight, one of the central enabling technologies of globalization, is also central to the effective prosecution of the small war. The unique capabilities of air power lend themselves readily to many of the requirements levied by small wars. However, a great capability misused is often more destructive than helpful, and the same holds true of air power. Air power employed foolishly in a small war is just as likely to contribute to the defeat of the nation that wields it. To evolve a doctrinal framework for employment of air power in small wars it would be important to wade through some definitions and theories of small wars, look at a model that describes the fundamental elements of a small war, and identify the characteristics of air power that fit into the model.

**DEFINITIONS, THEORY AND DOCTRINE**

The Indian Army Doctrine on Sub-Conventional Operations defines **Sub-Conventional Operations as armed conflicts that are above the level of peaceful co-existence amongst states and below the threshold of war.**

include militancy, insurgency, proxy war and terrorism either employed as part of an insurrectionist movement or independently.\textsuperscript{10}

**Small Wars** are operations undertaken either at home or abroad by national military forces at the direction of their government, in conjunction with political, social, and economic efforts, to defeat violent efforts by non-state actors to destabilize\textsuperscript{11} established civil authority within a given region, territory, or country.

This definition is an expanded version of the one first presented by the US Marine Corps in its Small Wars Manual\textsuperscript{11}, and encompasses other more commonly discussed concepts such as low intensity conflict, counter insurgency, counter terror, guerrilla warfare and civil war. As such, it lends itself well to the types of conflicts India is likely to face in the next few decades. Several other common terms closely related to small wars bear definition here.

**Terrorism:** Terrorism is defined a variety of ways, depending on the focus of the agency giving the definition. Here, the Indian MoD definition will be used: "The wanton killing of persons or involvement in violence or in the disruption of services or means of communications essential to the community or in damaging property with a view to putting the public or any section of the public in fear; or affecting adversely the harmony between different religious, racial language groups or overawing the sovereignty and integrity of a nation."\textsuperscript{12}

**Insurgency:** The Indian MoD expands the definition used by the US and NATO\textsuperscript{13} to the following: "Armed rebellion by a section of population against the legally constituted Government, with the support or sympathy of the local population, obtained voluntarily or by coercion. It covers the full spectrum of

\textsuperscript{10} Integrated HQ of Ministry of Defence (Army), Doctrine for Sub-Conventional Operations, Dec 2006,p.16

\textsuperscript{11} U S Marine Corps, The Small Wars Manual, . "...small wars are operations undertaken under executive authority, wherein military force is combined with diplomatic pressure in the internal or external affairs of another state whose government is unstable, inadequate, or unsatisfactory for the preservation of life and of such interests as are determined by the foreign policy of our Nation."p.1

\textsuperscript{12} Indian MoD, Joint Services Glossary of Military Terms, Delhi,2003 p. 119.

\textsuperscript{13} http://en.wikpedia.org/wiki/Insurgency, accessed on 25 Nov 2009
conflict from subversion to full-scale guerrilla war, including the emergence of guerrilla bands into regular units.”

**Low Intensity Conflict (LIC):** The Indian MoD describes LIC as follows: “LIC encompasses a variety of violent and low-level conflict situations. In most cases, such conflicts fall under the category of ‘politico-military confrontation’ between contending states or groups. Such conflicts are at a much lower scale than conventional war but are above the routine and peaceful competitions among states. One of the parties to the conflict may not be a state, as in an insurgency situation. It frequently involves protracted struggle of competing principles and ideologies. LIC ranges from high grade internal struggle situations to extensive employment of the Armed Forces in counter insurgency operations. It is waged by a combination of means, employing political, economic, informational and military instruments. It includes terrorism but excludes purely criminal acts.”

**SMALL WARS THEORY**

Although the working definition presented above for small wars effectively bounds the research, it is inadequate to fully describe the dynamic of the small war. Small wars are, at their very root, a contest for authority over a civil population. Figure 2.1 describes this contest, whose three primary participants are the established government, the civil population in question, and the non-state actor who seeks to take the government’s place. Authority can be exercised over a population by force, by permission, or by some combination of the two. But in no case can authority be executed without a certain amount of legitimacy. The legitimacy of a government is the degree to which its population recognizes the government’s right to rule or exercise control. Thus the contest for authority

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14 Indian MoD, Op Cit, p. 70.
15 Ibid, p. 80.
is a contest for the greatest relative legitimacy with a given population. This can be achieved by increasing one's own legitimacy, reducing the legitimacy of the established government or, most often, by doing both. Authority may be exercised for a variety of motives. Most often it is to promote the welfare of the population, enrich those in top positions, or promote the ideals of those in authority.

However, it can also be exercised for more sinister reasons, such as extermination or ethnic cleansing. Examples of this latter case can be seen in Bosnia-Herzegovina, Rwanda and Uganda, Sudan and in the Israeli-Hizballah conflict.

![THE SMALL WAR Diagram]

**Figure 2.1**

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16 The model presented in Fig. 1 was developed by Maj Merz (USAF) at DSSC, Wellington. Although it does not come directly from any particular source, many of the concepts reflected by the model come from Dr. Gordon McCormick (Naval Postgraduate School, Monterey, CA, 2000) and from Dr. John Arquilla (Naval Postgraduate School, Monterey, CA and RAND, 2000).
Legitimacy in Small Wars

Legitimacy with a population is primarily built on four elements. The first is the perceived ability of the government to control the population. The second is a government’s ability to provide security to the population from perceived threats. The third element of legitimacy is the government’s perceived ability to maintain an environment where the population can provide for itself physically and financially. The fourth element is identification, or the degree to which the population feels the government has the same ideals, history, culture, religion, ethnicity, language and so on. Since the primary participants in a small war do not include two recognized governments, a small war does not legally fall under the Geneva Convention for war. At the same time the impact of human rights and security on legitimacy results in human rights and terrorism emerging as a huge pivot point for small wars. Therefore, most governments seek to respect the principles of the Geneva Convention, even though they don’t legally apply, while the non-state actor has no such compulsion and is free to adopt the most ruthless, unscrupulous and horrendous techniques of warfare. Additionally, in most cases, non-state actors are not initially able to engage the forces of established government head-to-head and destroy them, demonstrating their superiority in the first two elements of legitimacy (control and security).\(^{17}\) Nor are they in a position to convince the population that they can provide the best economic environment. Thus, they generally start at the economic, ideological and cultural seams of a population, and at the seams of government control, incrementally undermining government legitimacy while building up their own. Hence we commonly see increased criminal activity to undermine popular sense of government control, terrorist acts to undermine popular sense of security, attacks on economic infrastructure to reduce prosperity and attack popular sense

\(^{17}\) Leites & Wolfe, Rebellion and Authority: An Analysis Essay on Insurgent Conflict, Santa Monica, C.A, Rand Corp, 1970, pp. 12-18
of economic security. Finally, we see attempts to polarize the population along ideological and religious lines to fracture the population into segments within which the non-state actors can compete more effectively for legitimacy. In addition, for reasons discussed above, the contest for greatest relative legitimacy is a complex equation of continuously changing factors which contestants must balance over time to succeed.\textsuperscript{18}

Very rarely are small wars decided in a few months. Most often these conflicts take years, or even decades, as we have seen in Malaya, Vietnam, Peru, Northern Ireland, Sri Lanka ... and the list goes on. Third party involvement in a small war (also called a proxy war ) can have a significant impact on the outcome of the conflict, as they provide additional resources, international recognition and an additional way to pressure opponents and decrease their effectiveness. Third parties may be governments, non-government organizations (NGOs) or individuals with personal influence. Their motives for involvement are nearly infinitely varied and can prolong a contest for legitimacy, change the outcome or even become contestants themselves. Therefore, contestants in small wars and Insurgencies\textsuperscript{19} frequently also compete to shape third party involvement, since it may well determine their success in gaining legitimacy with the population in question.

\textbf{Understanding 4G Warfare}

\textit{You have given us weapons, you have given us hope and we thank Allah for you. We don't want to take much of your time, but this is the arrangement of the brothers. People now are supporting us more, even those ones who did not support us in the past, support us more now. I did not want to take that much of your time. We praise Allah, we praise Allah. We came from Kabul. We were very pleased to visit. May Allah bless you both at home and the camp. We asked the driver to take us, it was a night with a full

\textsuperscript{18} Ibid,pp.112-118
moon, thanks be to Allah. Believe me it is not in the country side. The elderly...everybody praises what you did, the great action you did, which was first and foremost by the grace of Allah. This is the guidance of Allah and the blessed fruit of jihad.

Al Qaeda leadership to Osama Bin Laden after the 9/11 attacks

After having understood the plethora of terminologies that have evolved over the last five decades or so, it would be appropriate to shift to the present when established militaries are grappling with the rapidly changing nature of warfare and trying to match assets and orchestrate training regimens with roles and missions. It is also important not to get saturated with terminologies that try to fingerprint the various genres of warfare. Is it sub-conventional warfare, or is it Irregular Warfare (IW)? What happens when sub-conventional warfare escalates to levels wherein non-state actors use tactics and equipment that lend themselves easily to conventional warfare? Amidst the din of all this debate what happens to guerilla warfare, wars of liberation, terrorism and proxy wars. It is in this context that 4th Generation or 4G warfare best describes the broad genre of warfare waged by non-state actors of the 21st century against the state and Irregular warfare fingerprints the micro warfighting techniques adopted by them to prosecute 4G warfare. In order to understand 4G warfare it is imperative to track when it replaced third generation warfare.

The two Gulf Wars of recent times epitomized what third gen warfare is all about viz, speed, surprise, physical dislocation and non-linear operations that seek to bypass and collapse the enemy. Third generation warfare had no inbuilt mechanisms for issues like reconstruction or ‘Winning the Hearts and

20 Transcript and annotations independently prepared by George Michael, translational, Diplomatic Language Services; and Dr. Kassem M. Wahba, Arabic language program coordinator, School of Advanced International Studies, Johns Hopkins University. They collaborated on their translation and compared it with translations done by the U.S. government for consistency. There were no inconsistencies in the translations.)

21 OpCit, USAF Doctrine on Irregular Warfare, n.5, p.3
Minds of the defeated enemy’. All of a sudden, the 21st century saw a distinct shift to warfare in which the state lost its monopoly on warfare with its proven ability to win wars with mass, mobility, speed or firepower. Instead, it found itself staring down the barrel of a powder keg that comprised of culturally distinct, militarily well trained and sometimes fanatic non-state actors who had perfected a ‘Pot Pourri’ of guerilla tactics with conventional firepower, terrorist ideology and religious Islamic fervor like the Hezbollah and Taliban. Suddenly the state found itself woefully untrained to cope with such an enemy who practiced what is also been termed as hybrid warfare. Overnight, 21st century warfare was suddenly transformed into 4G warfare with military theorists groping and arguing to give it a name. With large nation states willing to grant more autonomy to ethnic groups and engage in meaningful economic upliftment, as a means of reducing conflict, the major challenge for nation states and democracies like India, U.S and even Russia when it comes to 4G warfare is the increasing threat of non state actors who are driven by religious fundamentalism primarily emerging from the spread of Islamic fundamentalism as seen in Iran, Iraq, Pakistan and Afghanistan.

The belt stretching from Palestine to Pakistan and running through what is known today as the Middle East has always been a powder keg from the days of the Crusades, the collapse of the Ottoman Empire and subsequently, the birth of Israel and the Palestinian problem. With almost the entire mid-east carved up between the US & Russia during the cold war, some amount of artificial stability was maintained. The void created by the absence of any ideological reasons to perpetrate conflict in an established state was quickly filled by religious and ethnic struggles. The nineties saw the civilized world slip into periods of uncontrolled IW with genocides and brutality proliferating across continents. Whether it was the Serb led genocide against minorities and the

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23 Op Cit ‘Irregular Warfare and Air Power’, n.1, p.4
subsequent backlash from the Croats and Bosnians in the Balkans, or the Chechen rebellion, or even the resurgence of Islamic terrorism in the Middle East and the LTTE struggle in Sri Lanka, the world saw the emergence of a new genre of IW. Features of these conflicts include relatively uncontrolled conflict control mechanisms with the UN emerging as the only institution that has attempted conflict resolution albeit with very low success rates. It is in the wake of this chaos that one has seen the US leading loose coalitions against those who waged war against what the US terms as the civilized world, but is actually more against US interests and global dominance.

The two defining moments that changed the nature and intensity of 4G warfare in the world and gave it a fundamentalist flavour were the Iranian revolution led by Ayatollah Khomeini and the rise of the Taliban in Afghanistan. The Iranian revolution galvanized Shiaite aspirations across Asia with Iran providing spiritual, moral, financial and military support to Shia groups in diverse locations as the clerics perceived the US brand of capitalism as a threat to the Islamic faith. Not wanting to be left behind radical Sunni groups with overt/covert from wealthy Saudi fundamentalists like Osama Bin Laden started asserting themselves in semi-developed areas like Afghanistan and Pakistan, thus creating a new, more assertive, and at times fanatic non-state actor who would wage the most ruthless kind of war against established nation states like India, the US, Russia, and even in the Sinkiang province of China.

**Summary**

In simplistic terms, 4GW is truly a broad genre of modern warfare with diverse tools, props and feeders. Terrorism, Insurgencies, Guerrilla movements and wars of liberation are but various tools that are used to fight 4GW. As far as the props and feeders are concerned, the main ones that exist today are religious fundamentalism and desire for religious domination, ethnic diversity, proxy
ambitions, internal economic disparity and developmental bankruptcy, and the
desire for the revival of historical legacies and geographical boundaries. If one
looks at every 4G conflict that is raging today, they would have one or more of
the above mentioned feeders.

DOCTRINE & EMPLOYMENT OF AIR POWER

Even though small wars, to tackle insurgent, LIC or terrorist situations, have
become increasingly common in the last 50 years, only the United States Air
Force has come out with a doctrine for what it now terms as Irregular
Warfare, parts of which would be discussed later in this chapter. At best, in
other doctrines, there is only a brief mention of possible roles for air power in
such situations. This includes the doctrines of the British Royal Air Force, and
Indian Air Power Doctrine 2000. As a result, air forces are seldom optimally
organized or equipped to tackle such situations. To evolve a comprehensive
document for 4GW, it is important that one understand the 4GW itself. For the
established power, or the state, to tackle this problem of legitimate control over
the population, undertaking combat operations against the non-state actor is
only one of the aspects. To tackle the issue in its entirety, besides combat
operations, other parallel lines of operation (LOOs) are required such as
providing good governance, essential services and economic opportunities.
These LOOs, whatever they are, must be mutually supporting and not
contradictory in order to successfully achieve legitimacy. This is the concept of
'Full Spectrum Operations' which must be followed in any small war
scenario. Aerospace power usually, but not always, falls into the domain of
combat operations, as an LOO.

24 Peter Chiarelli & Patrick Michaelis, Winning the Peace: The Requirement for Full Spectrum Operations,
To evolve an aerospace doctrine for small wars, which ensures combat operations are mutually supporting to other LOOs, it is essential to understand three basic aspects. Firstly, the basic characteristics of aerospace power itself, i.e. Flexibility, Mobility, Responsiveness, Shock Effect, Concentration and Offensive Action, with which every air warrior is familiar. Secondly, irrespective of the nature of warfare, the core roles of air power would remain the same and thirdly, it is important to understand the basic feeders or inputs that enable a non-state actor to sustain operations. These basic feeders are people, material supplies and information. Therefore, to be used effectively in a small war, aerospace power must focus its inherent characteristics specifically to meet the requirements of legitimate control while interdicting the basic feeders themselves. To give an example, the characteristic of offensive action can be directly translated to carrying out punitive strikes on non-state actors like insurgents. However, to ensure that this action does not adversely affect government legitimacy, the punitive strikes need to be surgically precise ones, with least collateral damage. On the flip side it is only now that aerial weapons are being developed with such precision so as to target a single person without harming anyone else in the immediate vicinity. Therefore, it may be wiser to seek alternative methods to strike in case absolute precision is doubtful. One alternative could be to insert air-mobile Special Forces to engage the target speedily, utilizing the strengths of aerospace power, but in a different way. Likewise, we must analyze and adapt each of the characteristics of aerospace power along with the traditional roles of airpower in small wars. When one talks about flexibility, it includes both the ability to adapt quickly to changed circumstances, and the ability to use combat power in ways suited to the situation. It also means that the same weapon platform can be used for a variety of missions. The dynamic requirements of fighting small wars make this

26 Op Cit, Leites & Wolfe, n.17, p. 5.
characteristic of airpower particularly pertinent, if employed effectively. To adapt this characteristic for use in small wars, one must identify where flexibility is needed most. In addition, it may be necessary to consider what organizational structures, command and control mechanisms and doctrine are necessary take full advantage of aerospace flexibility. The unique ability of aircraft to manoeuvre freely and swiftly in three dimensions, gives aerospace power the speed and range to apply military power and other forms of support wherever needed over a very large area. Aircraft have very important applications in the rapid movement, support and resupply of forces, with the emphasis being on ‘rapid’. To adapt this characteristic for use in small wars, the obvious question is, where would mobility be most beneficial in a small war scenario and how could it provide a measure of terrain-immunity to combat forces? The previous three characteristics of aerospace power naturally combine to make it also one of the most responsive elements of military power. This responsiveness means it can be used to apply combat power quickly to where it is needed most. But it also means it can provide other assistance quickly when and where required. Thus, it expands the ‘presence’ of the established government in a small war.\textsuperscript{28}

As with the other characteristics of aerospace power, one must consider what aspects of responsiveness are needed in the small war scenario, and how air power can be applied to meet them. An important characteristic of aerospace power, when used offensively, is shock effect. It is an effect that goes beyond surprise and can cause confusion and psychological disorientation. It is brought about by the aircraft’s ability to deliver with little or no warning and with telling effect. While this characteristic is great for conventional conflicts, one must carefully consider whether shock effect is always desirable in the case of a small war. If the answer to this question is “No!” then one needs to further consider how to control the shock effect. While tailoring the characteristics of aerospace

\textsuperscript{28} Ibid, pp.26-31
power to contribute effectively in small wars, key operational requirements must not be neglected. Without factoring these in, smooth conduct of combat operations may not be possible. These requirements are reliable intelligence through various ISR assets, secure and compatible communication systems between all the fielded forces and parallel LOOs, and joint planning and cohesiveness between the fielded forces and other agencies. Another important aspect is the threat-scenario for aerial assets in a small war. In the case of non-state actors, the main threat is likely to be from Man Portable Air Defence Systems (MANPADS) and small arms. Aircraft must have sufficient defensive systems or must minimize the threat through appropriate tactics, techniques and procedures. Another area that offers great potential at the lower end of the spectrum of warfare is the employment of Special Forces as a credible response to threats of unconventional warfare or state sponsored terrorism. This potential of Special Forces can best be exploited when synergised with the airlift capability. This would then combine the shock effect of Special Forces with the speed and reach of air power to create a truly strategic effect. In a way the use of unconventional means to defeat an unconventional enemy is the right way to go about furthering the stated objective of ‘terrorising the terrorist’.

Without pre-judging the impact of aerospace power on 4GW, it is important to study two models that relate to military decision making and intelligence gathering, the two inescapable requirements of prosecuting effective war against the non-state actor. The first one on the following page is also called the OODA loop (Fig. 2.2) and the second diagram gives a birds eye view of the intelligence decision making cycle (Fig. 2.3).
Fig 2.2

OODA LOOP OF MIL DECISION MAKING

Fig 2.3

INTELLIGENCE CYCLE

Close scrutiny of the Fig 2.2 (OODA Loop) clearly indicates that air power has a significant role to play in observing the enemy (hidden non-state actor) using
aerial and space based recce and surveillance systems. It is also the prime facilitator in orientating the leadership in time and space so as to be able to decide the best course of action. Thereafter, aerospace power also provides various options to act, be it offensive attack or 'soft power' options like airlift and logistic support for ground forces, thus completing the cycle. The same holds good for the intelligence cycle (Fig 2.3) where every function depends on aerospace power. Thus, it stands to reason that all roles of air power that were considered relevant in conventional conflict remain relevant in 4GW, albeit with some significant changes. If one has to focus more closely on which specific roles of airpower would have the maximum payoffs in 4GW, Surveillance and Reconnaissance would possibly be the most important irrespective of the situation. Thereafter, state posture would determine whether the non-kinetic or supporting roles like Casualty Evacuation or Air Logistics would be employed, or would the state be inclined to also use kinetic or offensive roles like precision strikes and insertion of Special Forces.