

# **Dynamics of US Force Transformation**

RUDRA CHAUDHURI

INSTITUTE OF SECURITY STUDIES

OBSERVER RESEARCH FOUNDATION

## ORF OCCASIONAL PAPER



## **Dynamics of US Force Transformation**

RUDRA CHAUDHURI

INSTITUTE OF SECURITY STUDIES
OBSERVER RESEARCH FOUNDATION



### **List of Abbreviations**

C41SR Command, Control, Communications, Computers, Intelligence,

Surveillance, Reconnaissance

CENTCOM Central Command

ISAF International Security Assistance Force

JCS Joint Chief of Staff

JDAM Joint Direct Attack Munitions
MTR Mechanical Technical Revolution

NCW Network Centric Warfare NSS National Security Strategy

ORHA Office of Reconstruction and Humanitarian Assistance

OEF Operation Enduring Freedom
OIF Operation Iraqi Freedom
OAF Operation Allied Force
PGM Precision Guided Munitions
QDR Quadrennial Defence Review
RMA Revolution in Military Affairs
SOF Special Operations Forces
US DoD United States Department of Defence

UAV Unmanned Aerial Vehicle

#### INTRODUCTION

"There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in success, than to take the lead in the introduction in a new order of things."

— Machiavelli, The Prince

Military change is a risky affair.<sup>2</sup> It often involves responding to a particular alteration in the strategic environment or reacting to noticeable changes in a potential adversary's military doctrine. Sometimes, it evolves as a result of the forward-thinking capacity of visionary officers and civilian leaders.<sup>3</sup> It is a fairly complicated process potent with a number of intended and unintended outcomes. Till 1989, military change in the West, especially in the US, was largely designed to counter the threat of Soviet expansion. The doctrine of 'mutually assured destruction', Harold Brown's 'offset strategy', the policy of deterrence and containment were all conceptualised to prevent the Soviets from tilting the balance of power. In the post 1989 era, the term 'strategic uncertainty' came to provide a new calculus in the thinking behind military change. The collapse of the Soviet Union resulted in the absence of direction and focus in the thinking on military change. With no identifiable adversary that had the potential to threaten the US and Western Europe's ideological, political, economic, social and military structure, preparing for the next war became a whole lot more difficult.

Emily Goldman, one of the few military studies theorists who comprehensively wrote on strategic uncertainty, claimed that the West simply did not have the conceptual tools to embark on a process of military change, or modify its force structure in a period of uncertainty. Goldman concluded that in times of uncertainty, "civilian guidance is crucial, and it must be driven by the positive priority of shaping strategy in response to future challenges to world order." Today, the Bush administration seems to be attempting to follow the model outlined by Goldman, except that while Goldman provided sug-

gestions for change at a time of strategic uncertainty, she, like other theorists, failed to acknowledge the existence and growing threat posed by an adversary that no longer represented the nation-state. An adversary who could no longer be identified by the colour of its uniform or by the geographic space it occupied within specific political borders.

In September 2002, the Bush administration officially introduced its national security strategy report. In response to the devastating attacks on the epicentre of America's financial and defence establishment, President Bush outlined the fundamental tenets of a strategy that was authored to contend with changes caused due to the "profound transformation" in the current security environment. President Bush proclaimed that, in order to protect America's national security interests from elusive adversaries who were beyond the realm of the nation state, one of the essential tenets of the new strategy would be to transform America's military leviathan.

The task of transforming the military was given to the US Department of Defence (DoD), under the auspices of Secretary of Defence (SECDEF) Donald Rumsfeld. The primary objectives of the transformation, or what the US DoD refers to as 'force transformation', were two fold: to design a template for change that would allow the military to adopt new war-fighting paradigms and; to better prepare the services to set the conditions for political change in parts of the world in which uniformed or non-uniformed adversaries either harboured terrorists, or posed an imminent threat to America's vital security interests.<sup>6</sup>

With regard to fulfilling both these objectives, the current process of force transformation has sparked one of the most vigorous and significant debates in strategic and military studies since the deliberations over whether or not a 'Revolution in Military Affairs' (RMA) is underway. While transformation skeptics and critics have portrayed the ongoing process of military change as one that is confined to technological advancement, certain scholars of military affairs view force transformation as a process that has allowed the US military to spearhead a movement that complements the advantages provided in the information age with innovative and unorthodox thinking. This occasional paper will take forward the ongoing debate on force transformation, while providing a critical assessment of US military change. This may prove useful for policy makers in India - an undeniably important regional player - whose security interests remain threatened by China's modernising Peoples Liberation Army and by Pakistan's orthodox and unorthodox approach to warfare that has manifested itself as a fifty-year long proxy war waged against the Indian state.

The paper has been divided into four parts. Part I (Understanding Transformation) will explain what is meant by force transformation. It will attempt to provide a brief historical analysis to explain where the transformation journey began, while elucidating why it is essential to make a distinction between transformation and what is referred

to as a 'revolution in military affairs' (RMA). Part II (The Transformation Journey) will try to explain how the concept of military change in the US, manifested today under the rubric 'transformation', developed and matured through lessons learned and lessons ignored in the two theatres - Operation Desert Storm (1991) and Operation Iraqi Freedom (2003). Part III (A Short Sighted vision) shall exhibit that, while the process of transformation has had an undeniable effect in the theatre of warfare, a shortsighted and a naïve view of contemporary conflicts has disallowed the proponents of transformation to expand the effects based canvas of war to include post-conflict stabilisation operations - stages of war that requires tools and skills that are not provided for in a military arsenal, but constitute an integral part of a war's objectives. Lastly, part IV will provide policy relevant conclusions and recommendation; while highlighting what the Indian military could learn from the US.

#### PART I: UNDERSTANDING TRANSFORMATION

Although the US DoD established the office of force transformation under the charge of Vice Admiral (Retd.) Arthur K Cebrowski in October 2001, an official definition of force transformation was conceived by Donald Rumsfeld only in April 2003. According to Rumsfeld, force transformation is a:<sup>7</sup>

"process that shapes the changing nature of military competition and cooperation through new combinations of concepts, capabilities, people and organizations that exploit our nation's advantages and protect against our asymmetric vulnerabilities to sustain our strategic position which helps underpin peace and stability in the world".

Transformation is a process that is meant to initiate and sustain change at the organisational, operational and doctrinal level. It seeks to allow the US to "command a battlefield like a chess game in which all the enemies' pieces are visible and vulnerable..." while attempting to create an impetus for change in the way the US administration and armed forces think about war fighting paradigms. Hence, Donald Rumsfeld writes, "all the high-tech weapons in the world won't transform the US armed forces unless we also transform the way we think, train, exercise, and fight". Force transformation is not a selective process which replaces 'dumb bombs' with 'smart bombs' or which is solely designed to create new combat arms. It is meant to represent a 'sea change', which begins at the Oval office and continues down to the soldier operating in a contested zone. It is a 'top down' process, which has begun to encourage reform from the 'bottom up'.

Force transformation lies at the heart of the current US administration's defence strategy as well as the overall US security strategy. The process of transformation enjoys the unwavering support of President George W. Bush and the supposed 'transformation tsar' – Donald Rumsfeld. The 2001 Quadrennial Defence Review Report (QDR), the

2002 National Security Strategy (NSS) report, and the 2005 National Defence Strategy of the US illustrate this point convincingly. All the three documents outline the inarguable need to "transform America's national security institutions to meet the challenges and opportunities of the 21st century";<sup>11</sup> adopt a 'capabilities based model of projection';<sup>12</sup> and refocus "capabilities to meet future challenges".<sup>13</sup>

At the doctrinal level, the US military appears to be adopting a set of guidelines that are markedly distinct from the ones mentioned in the earlier Weinberger-Powell doctrine, authored in the 1980s. <sup>14</sup> Rather than overemphasising the use of "quick, decisive, and overwhelming force for clear military and political objectives", the current set of guidelines encourages the military to re-orient its force structure to create a light, agile force, capable of rapid deployment. <sup>15</sup>

At the organisational level, other than attempting to integrate different departments within the US DoD, force transformation seeks to promote 'Jointness' – one of the 'pillars' of the current process of military change. <sup>16</sup> Jointness is "the effective integration of the combat capabilities of the armed services". <sup>17</sup> Its primary objective is to create "joint, network centric, distributed forces capable of rapid decision superiority and massed effects across the battle space". <sup>18</sup>

At the operational level, transformation seeks to create 'mission tailorable units'. This involves shifting the emphasis of the military from a purely Clausewitzian model, which overemphasises decisive battle to a lighter, nimbler and great power force capable of operating in a non-linear, multidimensional battle space. This process is assisted by force enablers such as C4ISR (Command, Control, Communication, Computer, Intelligence, Surveillance, Reconnaissance) technology; which seeks to limit the 'fog and friction of war', while reducing the command-strike loop or the time involved in identifying and striking a target by unmanned aerial vehicles (UAV) such as the Global Hawk, used in Afghanistan in 2001, and the Hunter Tactical Shadow UAV, used first in Kosovo in 1999. The technology also involves the integration of service doctrines that seek to 'digitise the battlefield' and the reduction of the 'reaction time' by moving from 'platform centric' warfare to one that relies on network centric warfare.

In order to appreciate the caveats embedded in force transformation, it is imperative to view transformation as the "umbrella under which the military can change not only its weapons systems but its basing, recruiting, training, tactics, organisation, military education systems, doctrine and strategy".<sup>23</sup>

Hence, while studying, analysing, critiquing or contributing to the transformation debate - be it at the theoretical, policy, or empirical level - it is imperative to view transformation in the light of all the three pillars. By focusing on one aspect of transformation and negating others, certain scholars have presented a somewhat distorted analysis of transformation. For instance, Fredrick Kagan states that Rumsfeld has endorsed

a process of military change that is "completely unbalanced". <sup>24</sup> By focusing purely on technology, Rumsfeld is forwarding "...one of the most seductive and dangerous visions of modern times". Others claim that force transformation is "extravagant and perhaps dangerous" because it may lead to a "push button war". By ignoring the changes brought about by the current process of military change at the organisational level, such analyses provides a narrow and selective analysis of transformation, which often does a good job of misleading policy planners, decision makers and those in the services.

The current process of military transformation emerged as a result of one of the many ironies that were inherent in the 'arms race'. In the late 1970s, Dr. Andrew Marshall, the director of the 'office of net assessment' in the Pentagon, a position he continues to hold even today, observed noticeable changes in Soviet military lexicon. These changes represented attempts at military change under the rubric of what Soviet Marshall Nikolai Ogorkov called 'military technical revolution' (MTR).<sup>27</sup> Threatened by the possibility of a changing Soviet military strategy, Andrew Marshall authorised a study intended to better prepare the US armed forces to contend with the by-products of a potential MTR. It was later revealed that the Soviets were in fact investing in MTR as a result of 'projected' US interests in military innovation. At the end of the Cold War, 'MTR' was replaced by RMA (Revolution in Military Affairs), a term coined by Marshall.

Through the 1990s, RMA seems to have been viewed as an all-encompassing term used to define and outline the changes brought to the battlefield, specifically those associated with information technology. The use of precision-guided munitions during Operation Desert Storm was described as revolutionary. A streamlined command and control apparatus was viewed as a by-product of the information age, and hence, part of an RMA. However, while RMA came to be seen as an umbrella term that included significant changes in the military's force structure, organisation, or weapons programmes, sharp differences in the interpretation of the term RMA has made it exceedingly difficult to view all forms of military change under the RMA label. Similarly, given the multiple conceptualisations of an RMA, using the term interchangeably with 'transformation' could prove to be problematic. For, what is sometimes included in the interpretation of a particular RMA is not always represented by what the US has begun to call 'transformation'.

While several scholars and policy makers from different parts of the world have written and debated about an RMA, the bulk of the work seems to originate from the US. Most agree that RMA involves a "radical rupture or discontinuity in the history of warfare". But why such 'discontinuities' occur has been a matter of much debate. Over the years, the RMA contest seems to have given rise to three conceptualisations. The first provides for an open interpretation of an RMA, <sup>29</sup> the second overemphasises the role

of technology<sup>30</sup> and the third emphasises the shift in historical epoch and the effect the doctrine and logistics have on a process of change.<sup>31</sup>

Given these inter-related yet divergent interpretations of an RMA, using the term interchangeably with 'transformation' proves to be hugely problematic. Such discrepancies are not merely a result of theoretical debates, but also, possibly more importantly, significant for policy oriented decision-making. Transformation is an advanced and a larger term representing military change. Although it originates from within the RMA debate, it must not be confused with one or all of the interpretations of an RMA.

#### PART II: THE TRANSFORMATION JOURNEY

In the post-Cold War era, the US experienced peacetime strategic uncertainty. The disintegration of the Soviet Union blurred the conceptual clarity that had existed for over four decades. Significant individual actors within America's defence community realised that the force structure once designed to deter Soviet expansion, was no longer a necessity in a world where the threat of block-on-block war had been demystified. It is in this geo-strategic environment that the conceptual underpinnings of transformation, as it is understood today, emerged.

There are two inter-related strands inherent in the transformation story. One lies at the doctrinal level, in which military change is envisioned and concepts are translated on white papers. The second lies in lessons learned and lessons ignored in the theatre of war. The following part of this paper will attempt to amalgamate both strands while providing a holistic analysis of military change between 1990 and 2006.

## (a) Quagmires, Strategic Uncertainty & Military Unpreparedness

In 1962, in reference to the war in Vietnam, President John F Kennedy said:<sup>32</sup>

"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 combat; by infiltration instead of aggression...these are the kind of challenges that will be before us in the coming decades if freedom is to be saved; a whole new kind of strategy, a new and wholly different kind of military training"

Ivan Arrguin Toft claims in his theory of asymmetric warfare, that a "weak actor's strategy can make a strong actor's power irrelevant", since "power" does not always imply "victory in war". The US defeat in Vietnam seems to have been primarily caused by its inability to fight in an unorthodox environment in which it underestimated the Vietcong's resolve for survival. Colin Powell, a Major during the Vietnam War, however, claimed that the practice of "military proportionality" led to the defeat of a conventional

army against an adversary who used less direct means for achieving their victory.<sup>34</sup>

Instead of rethinking new paradigms in war, successive American administrations in the post Vietnam War period followed the Powell-Weinberger doctrine. "There would be no more self-restraining – self defeating proportionality". War was considered the last possible resort, but once committed to battle, America would use "overwhelming force" to defeat its enemies. Military intervention would substitute diplomacy rather than complement it. <sup>36</sup>

In the 1991 Persian Gulf War, or the 'first war of information,'<sup>37</sup> the Weinberger-Powell doctrine (which came to be known as the Powell doctrine) impactfully proved the effectiveness of using 'overwhelming force' against an identifiable uniformed enemy. The US armed forces achieved 'battle space dominance' and came close to reaching the "zero circular error probable goal" in an arena the Powell doctrine was best prepared to engage in.<sup>38</sup> Although Stephen Biddle, in his historic article, 'victory misunderstood' argued that "major skill imbalance and new technology caused the radical outcome of 1991", the fact that 795,000 coalition troops overwhelmed Saddam Hussein's forces in less than six weeks with a fatality rate of one per every three thousand soldiers, was evidence enough of America's superior war machinery.<sup>39</sup> Greater air-land integration, the awesome affect of precision munitions, and RMA related technology provided the US led coalition with an asymmetric advantage. However, it is worth noting that although the US demonstrated its ability to overwhelm an adversary in a force-on-force clash, the American administration was still not prepared to deploy ground troops in 'low intensity' theatres. In the post Gulf War period, when the Kurds in the north of Iraq asked for security assistance on the ground, primarily to protect Kurdish refugee camps from Saddam Hussein's wrath, the US refused. The Vietnam experience and the threat of increasing US military fatalities seemed to have influenced the then Bush administration not to deploy troops, in a mission that would have constituted an 'operation other than war' (OOTW).

The error of reluctance to deploy ground troops in OOTW's was fully realised in Somalia in October 1993, during the Clinton rule. Eighteen American marines were killed in an urban warfare theatre during 'Operation Restore Hope 'in Mogadishu. <sup>40</sup> US helicopters were shot down by Somali warlord Aideed's gunmen who used Soviet pattern RPG–7 anti tank rockets and AK-47s which could have been bought for as little as \$200. <sup>41</sup> The Somalis used what Sun Tzu called methods of 'deception' to get the better of the US in urban warfare.

This was not the first time the US encountered non-symmetric attacks in the post or pre Vietnam War period. In the early 1900s US servicemen in the Philippines faced what Mao Zedong called "classical indirect strategy" and what President Roosevelt referred to as the "insurrection".<sup>42</sup> US experience in Haiti, and the strategy which General Wesley

Clark calls "dispersion" and "camouflage" used by the Jugoslavenska Narodna Armiya or Yugoslav Army (JNA) in erstwhile Yugoslavia to 'DoDge' the enemy, suggests that the US military was not incapable, but certainly suffered from vulnerabilities - vulnerabilities which US military doctrine failed to comprehensively address. <sup>43</sup>

Admittedly, the Powell doctrine served American interests at a time when the US believed that its foremost adversaries were solely represented by nation-states, that would rely on "...great industrial capability to endanger America..." .<sup>44</sup> But perhaps, the flaw in the doctrine lay in the fact that it undermined unconventional strategies, the result of which Major Colin Powell himself witnessed first hand in Vietnam. Rather than insisting on the use of 'overwhelming force', military change in the early 1990s could have accommodated for the fact that 'American primacy' in the post cold war period would push its enemies to the asymmetric wall. Instead of persisting to improve what General William Westmoreland called the "conventional big unit approach", <sup>45</sup> the Powell doctrine might have paid greater attention to the 'small wars manual', written by a group of Marine Corps officers in the 1960s. <sup>46</sup>

The Somalia debacle had a deep-seated affect on the Clinton administration. President Clinton's unwillingness to deploy the much needed peace keeping forces in Rwanda and his refusal to authorise the deployment of ground troops during 'Operation Allied Force' (OAF) in Kosovo signified America's increasing unease in directly doing battle with an adversary in largely unorthodox theatres.

During OAF in 1999, a decade after the US began to comprehensively re-structure its force posture, the myth of an all-encompassing RMA was exposed. Concepts that had been in the process of development since 1991 were tested and failed to prove effective on ground during a real time military exercise. US Military change in the 1990s failed to fully appreciate the ground realities of the new kind of conflicts, which was nothing like the Desert Storm. The Allied Force demonstrated the fact that OOTW's and future conflicts were more likely to be 'the step child of Chechnya' than the 'son of Desert Storm'.

## (b) Operation Allied Force (1999): A Wake-Up Call for the US Military

The US led campaign intended to expel former Serbian President Slobodan Milosevic's forces from Kosovo and halt the brutal and forced exodus of Kosovar Albanians to Albania was hailed as an "overwhelming success". In November 1999, Javier Solana, the former NATO Secretary-General, claimed that the seventy-seven day "air campaign achieved everyone of its goals". By mid-June 1999, eleven days after the air war commenced, Serb forces were replaced by peacekeeping forces under NATO command. On June 10, 1999 the UN passed UNSC resolution 1244 which authorised the "immediate deployment of international security and civilian presence into Kosovo for an indefinite period".

10 \_\_\_\_\_\_ www.orfonline.org

Air power began to be viewed as a "silver bullet - an infallible, invulnerable instrument with universal application". As far as the transformation story was concerned, Kosovo demonstrated the fact that war's objectives could be partially achieved by fighting a war from above 15,000 feet, without having to deploy forces on the ground, thus avoiding potential quagmires. However, a post-mortem of OAF - a US designed and led operation - demonstrates that, at the strategic and operational level, the campaign was largely flawed.

Rather than using devastating firepower from the beginning, the air campaign began by targeting 51 'lite' targets. NATO leaders assumed that Milosovic would capitulate after the initial bombings began. They were mistaken. Milosovic, quite unimpressed, gave no credence to the allies' determination to force his troops to withdraw from Kosovo and escalated his 'bloody purge'. NATO's 'hope to win' strategy failed to appreciate the undeniable fact that "compellence has to be definitive". An excruciatingly incremental bombing campaign, coupled with President Clinton's opposition to deploy troops on the ground, added to Milosovic's belief that the alliance would soon withdraw.

In the duration between the start of OAF and the NATO summit in late April 1999, one million ethnic Albanians were displaced, between 5000-11,000 were killed, half a million fled to Macedonia, Albania and Montenegro and the number of Serb forces within Kosovo swelled to over 40,000.<sup>54</sup> The absence of ground troops allowed the Kosovo Liberation Army (KLA) to "reverse" the "ethnic cleansing" in areas where the bombing had destroyed Serb artillery and disrupted their supply lines. The Serbs were forced to flee to Serb dominated province of Metravica and the regions surrounding the Trepca mines.<sup>55</sup>

Although US SECDEF William Cohen attempted to defend the position taken by the US and its allies by claiming that 'NATO cohesion' would have 'suffered' if ground forces were deployed, <sup>56</sup> a comprehensive explanation seems to lie in what Lawrence Friedman calls the US's 'body bag effect'. Friedman claims that the 'Vietnam syndrome' and the 'Somalia debacle' influenced President Clinton to authorise a 'risk free' war, keeping in mind a political environment where overseas interventions and returning 'body bags' could well jeopardise the political life of any US administration. <sup>57</sup>

The most significant lesson for America's defence forces - and for that matter, transformation- seemed to lie in the fact that the very context of warfare had changed. Desert Storm was no longer representative of the sort of conflicts that the US or its allies were likely to fight in the future. Also, in addition to not understanding how to operate in OOTW's, there were certain prominent vulnerabilities at the operational level. While military change in the 1990's were designed to: reduce the logistics foot-print; increase rapid deployability and; improve battle-space awareness so that precision munitions may prove effective, OAF demonstrated that the US military had not done enough to

translate forward thinking concepts into reality.

While launching 'Task Force Hawk', a force of 24 Apache helicopters deployed in Albania and intended to provide close air support during OAF, the US DoD took as long as 19 days to provide the logistics required to transport the force from Germany to Albania. It took 500 C-17 flight sorties to move 22,000 tones of luggage to provide adequate support for the Task Force.<sup>58</sup> The then Chief of Army staff (US) General Dennis Reimer claimed that Task Force Hawk needed a "far more adaptive force packaging methodology".<sup>59</sup> The pilots had no experience in flying during the night, a necessity in a theatre in which night raids were common. In a comprehensive critical analysis after OAF, Benjamin Lambeth wrote:<sup>60</sup>

"The Task Force Hawk experience underscored how little the US army, by its own leadership's candid admission, had done since Desert Storm to increase its capacity to get an emergent theatre of operations rapidly with sufficient forces to offer a credible combat presence".

As far as battle space awareness was concerned, over-reliance on air power frustated the US led NATO forces' efforts to comprehensively disrupt the Serbian force posture. According to Earl Tilford, "with no significant ground opposition and a NATO land force intervention ruled out, they (the Serbs) parked their tanks and heavy vehicles, using concealment and decoys to excellent affect. They simply continued their operations on a different level than the revolution in military affairs air war going on some 15,000 feet overhead".61 Little damage was actually incurred by Serbia's defensive forces. The NATO estimate of destroyed armoured tanks and mobile units were shown up later as highly exaggerated.<sup>62</sup> Timothy Thomas claims that six months after OAF ended, NATO forces were unable to calculate the damage expended on Serbia's ground forces. 63 Despite the use of the most technologically advanced air armada in the world, precision munitions destroyed schools, trains and convoys, hospital, parts of Bulgaria, and a portion of the Chinese embassy in Belgrade. Hence, despite attempts at transforming the forces, vulnerabilities in the US force structure and the US estimation of the nature of conflict were self-evident. Such vulnerabilities came to be addressed during the presidency of the current US President, George. W. Bush.

Following the electoral victory of Bush in January 2001, the US DoD, under the leadership of SECDEF Donald Rumsfeld, was injected with a renewed impetus to further transform the structure of the US forces. Dealing with uncertainty became the foremost point of concern for an administration that was determined to move away from a "threat based model" of projection to a "capabilities based model". Rather than attempting to understand who threatens the US, the 'capabilities based model' analyses how the US is threatened, and what capabilities are required to deter such a threat.

US experience in Kosovo demonstrated that in a future conflict, rather than steer-

ing around potential uncertainties, the US would have to develop a strategy to embrace uncertainty. The 'Chechnya' scenario appeared far more relevant than the Desert Storm experience. In the post September 11, 2001 period, the US DoD was provided with a viable excuse to demonstrate the apparent effectiveness of implementing transformative concepts in theatre. Operation Enduring Freedom in Afghanistan (2001) and Operation Iraqi Freedom (2003) in Iraq was proof of the fact that the US DoD had begun to appreciate the caveats embedded in indirect approaches to a conflict during the destructive stage of war, something Colin Powell and the Powell doctrine had clearly ignored.

## (c) Operation Enduring Freedom (2001): Testing Alternative Conceptual Underpinnings

Embarking on 'Operation Enduring Freedom' (OEF) in Afghanistan was part of a grand strategy to "attack the enemy where he hides" in order to secure "America's homeland". The objective was to destroy Al Qaeda training camps, capture its key leaders and destroy any infrastructure that could provide 'terrorists' with a safe haven.

Afghanistan represented a theatre that was not wholly unorthodox, but at the same time did not provide for complete attrition warfare. The Taliban wore plain clothes, drove in armoured Toyotas camouflaged with mud, used 'spider holes' protected by anti tank mines and planted car bombs to deter enemy maneuverability.<sup>67</sup> They would disperse and resort to using guerrilla tactics and again regroup to fight open battles.

Instead of deploying conventional troops, the US led 'coalition of the willing' initially used special operation forces (SOFs) on the ground, who exposed visible and entrenched targets using "laser targeted identification systems" and long-range aircrafts to find and destroy visible targets and air defences, in particular, the 'kill boxes'. On the first day (October 7, 2001) of air strikes more damage was done to visible targets than during the entire OAF or Desert Storm operations. Devastating precision' delivered by precision guided munitions (PGM) on an average destroyed two targets per aircraft compared to ten aircrafts per target during Desert Storm.

Bernard Rostker claims that OEF demonstrated an "extraordinary degree of cooperation between the air forces and the special forces". The use of the USS Kitty Hawk, which provided a mobile operations platform capable of supporting a small contingent of SOFs, overcame the A2/AD or 'anti access' weakness. Allying with local 'Afghan proxies' provided the SOFs with a local partner in a theatre where the adversary had 'home court advantage'. Hence, while overwhelming ground forces would serve as easy targets for the Taliban coalition, SOFs used guerrilla tactics to track the enemy without being seen or heard.

Donald Rumsfeld claimed that during the attack on Mazar-i-Sheriff on November 8, 2001, the "...19th century met the 21st century..." US special operations forces (SOF)

along with their Afghan allies rode horses while carrying GPS locators and wearing Kevlar bullet proof vests and helmets. 'Network centric warfare' (NCW) used digital information to combine better sensors, communications and precision weapons'. Military Jointness allowed the four segments of the military to combine their efforts, created transparent lines of communication between the air and the ground which, with the help of precision guided missiles, virtually neutralised the Taliban within two months from the day OEF was launched.

By December 6, 2001, most of Afghanistan except the Eastern Tora Bora Mountains and the Shahi-Kot-Valley, close to the Pakistani border, had been occupied by the Northern Alliance. General Abdul Rashid Dostum, Atta Mohammed and Hamid Karzai, who entered into an agreement to launch a 'combined offensive action' on October 15, 2001, now controlled 80 per cent of Afghanistan, compared to the mere 15 per cent they controlled before OEE.<sup>75</sup>

However, OEF and transformation did not completely overwhelm the perceived adversary. OEF may have demonstrated that joint operations was indeed at its very best, but contrary to what one US senator claims, it cannot be used as the "...foundation upon which the services need to continue building." Four times more civilians died in Afghanistan than during the Balkans war of 1999. Carl Conetta claims that B1s and B52's used 'near precision' and not 'precision' bombs because they were cheaper, could be deployed at night, in any weather and from great distances.

Thus, the dilemma of transformation. While the B1s dropped 40 percent of the ord-nance while flying only 5 per cent of strike sorties, it used massed precisions which increased the civilian death toll. This, coupled with unreliable information from proxies who could be bought by the Taliban and the Al Qaeda, resulted in a failure to gain dominant battle space knowledge.

Former Chairman of the US Joint Chiefs of Staff General Richard Meyers claimed that the Afghan coalition, which included the Taliban, Al Qaeda and other foreign fighters didn't waste any time in adapting to the US form of warfare. This was evident from the report that the Al Qaeda wrote notes exposing American vulnerabilities for their comrades in Iraq. Stephen Biddle claims that PGMs were not effective against well-entrenched positions. In the first month of the battle, the hysteria of initial success undermined the adaptive nature of essentially guerrilla fighters. But once the Al Qaeda understood the precision technology, it was quick to adapt to the situation and in Bai Beche, Tash Kanda and on 'highway 4', PGMs were unsuccessful in routing out the Taliban and foreign fighters. The Al Qaeda even began to use non-broadcast methods to communicate, which undermined the utility of sophisticated sensors.

During Operation Anaconda (March 2, 2002) in the Shahi-Kot-Valley, US forces and

transformation met its greatest challenge. Despite using 907 kg JDAM and new 'thermo boric' bombs, <sup>82</sup> Afghan defences continued to hold. Overestimating the omniscience of technology, the forces failed to "connect the dots" to map out a "transparent battlefield". <sup>83</sup> At Shahi-Kot, SOFs were joined by the 101st airborne and the 10th Mountain division, which were trained not in mountainous terrain but at its base in upstate New York.

Despite their technological inferiority, General Tommy Franks claimed that the 'enemy' was able to ambush helicopter landing zones, which resulted in the explosion of one Chinook transport helicopter. When the US forces seemed vulnerable, the Al Qaeda was reported to have called up 500 additional fighters from the Southern Afghanistan Khost area and Waziristan. Afghan commanders allied to the SOFs even claimed that the US had underestimated the number of enemy troops. The Financial Times reported that Opreation Anaconda had suffered an 'intelligence failure.'

On March 17, 2002, while the operation was dubbed an "unqualified and absolute success", 85 a large number of Taliban and Al Qaeda fighters escaped into Pakistan despite the efforts made by President Musharaff to "tighten the borders". 86 The process of achieving success demonstrated weaknesses in military planning and over reliance by intelligence on local proxies. Major Donald Vandergriff argued that a greater number of troops should have been deployed at Shahi-Kot to limit retreating Afghan fighters 87 and that the PGMs were unable to reach well entrenched 'spider holes'. He also pointed out that 'raw' information allowed the adversary to take advantage of landing sights. 88

While these weaknesses certainly highlight the limitations of transformation, it must be remembered that transformation does not claim to provide the military with error proof processes. Admittedly, there was an 'information failure' which disallowed the 'fog and friction of war' to be eliminated. The PGMs were unable to reach the heart of 3000 year old caves modified to withstand heavy bombing and, at a tactical level, not sealing the exit routes allowed the Taliban coalition to disperse. Osama bin Laden was not captured, either at Tora Bora or at Shahi Kot and, reportedly, not using British Royal Marines trained for such operations was an error the Americans have yet to explain. <sup>89</sup>

However, Afghanistan witnessed a partial 'intellectual transformation' within the military. The usage of SOFs did not expose conventional forces to the theatre, which combined attrition warfare and a Maoist interpretation of guerrilla fighting. <sup>90</sup> The military attempted to assimilate: the use of technology (PGMs and NCW); trained human capital (SOFs) capable of integrating with not only the landscape but also its people and; co-opted local proxies (Afghan allies) who provided the cavalry strength and the much needed political support necessary to deal the final blow to a common enemy. Strategically, the combination of the army's light armoured vehicles, the air force's long range bombers, the navy's fighters providing reconnaissance and forward forces in theatre and AC-130 gun ships providing real time over watch of operations under the umbrella of

C4ISR technology demonstrated the ability of the US military to sustain an unprecedented level of 'Jointness' in an unorthodox theatre of operations.<sup>91</sup>

While force transformation suffers from vulnerabilities, it must be appreciated that transformation is just beginning and therefore difficult to be understood by servicemen who received traditional training in 'parochial' branches of the military. Limitations to transformation in Afghanistan are clearly visible, but so are its merits. The perseverance of a 'transformational secretary of defence' and the need to protect American interests in protracted non-traditional theatres of war seems to force its transformation shy armed services to accept that' perhaps, unconventional theatres of warfare under the current grand strategy are becoming more the norm and convention than traditional warfare.<sup>92</sup>

While the application, in the main, of a largely unconventional strategy may not seem transformational for a military averse to change, the implementation of an operational plan wrought with difficulties was impressive. As far as the transformation journey was concerned, OEF certainly represents a significant milestone in US military history. It may not be easily emulated in other theatres, but can provide evidence of the fact that the military is capable of thinking beyond the Desert Storm model of power projection.

## (d) Operation Iraqi Freedom (2003): Reorienting Tested Strategies

While planning for OIF, General Tommy Franks claimed that although the campaign would mainly be a conventional one, transformative strategies would help lower the casualty figures and raise the chances of a decisive victory. Rather than using operational plans that were "based on Desert Storm era thinking," Rumsfeld and General Franks created new operational realities by providing suitable alternatives to the Army's National Training Centre's (NTC) age old focus on open desert battle. In a period of four weeks, between March 10, 2003 and April 9, 2003, the first objective of the mission had been achieved. With fewer than two hundred US casualties, the Iraqi army was defeated and the Baathist regime had been toppled.

General Tommy Franks claimed that OIF was a "campaign unlike any other". The "dramatic and radical" process of transformation had proven to be lethal yet effective. 6 Contrary to the claims made by certain critics, according to whom transformation is the "most expensive white elephant in the history of mankind" and that in the post presidential election period in 2001, 7 "transformation died a quiet death", 8 the practical benefits that transformation can bring to the battlefield were made all too evident. In unconventional and largely conventional theatres, OEF and OIF demonstrated that new strategies and methods had been adopted by a military that had, for the last three decades, relied on 'overwhelming force' to defeat the uniformed adversary. However, in

the post conflict phase of OEF and OIF, what also became evident were the limitations of the ongoing process of transformation. While the US strives to modify its force structure to adapt to a myriad of theatres, the following part of this paper will reveal that the US DoD's naïve, almost arrogant and inarguably short sighted vision for transformation has hardly given any clout or meaning for preparing the military to win battles, not wars, supposedly fought for "...the future of peace and hope"<sup>99</sup>?

#### PART III: A SHORT SIGHTED VISION

According to Donald Rumsfeld, one of the objectives of OIF was to "help the Iraqi people create the conditions for a rapid transition to a representative self-government" that is "committed to ensuring the territorial integrity of that country". The current US SECDEF placed post-major conflict stability operations within the ambit of war objectives. By doing so, he very clearly linked stabilising states and communities destroyed by RMA related munitions and technology within the ambit of the larger debate concerning transformation. The primary objective of transformation is to "meet the challenges and opportunities of the 21st century". These challenges not only include defeating an adversary if deterrence fails, or discouraging military competition, but also - as has been mentioned in the 2001 QDR report - setting the "conditions for regime change" 102 and, as noted in the 2005 National Defence strategy report, preparing the military to improve its "ability to transition from military to civilian led stability operations" and maintaining peace. 103 Today, security conditions in Iraq and Afghanistan are a vivid and constant reminder of the fact that the US and for that matter, Donald Rumsfeld and the current US DoD has failed to appreciate the need to prepare the military for post-conflict roles. The US DoD has, in a most blasé and devastating manner, ignored the need for the military to maintain peace in otherwise war-torn theatres.

## (a) No Post-Conflict Plan: Iraq & the Need for Doctrinal Revision

On June 9, 2003, Donald Rumsfeld claimed that, because of "speed, jointness, intelligence, and precision...most Iraqis are better off today than they were four months ago". As of July 4, 2006, 2,534 US soldiers have died in combat; 18,356 US soldiers have been wounded while, at the most conservative estimate, 50,000 civilians have died in Iraq since March 2003. According to a UNICEF report, Iraq's mortality rate for children under the age of 5 rose from 5 per cent in 1990 to 12.5 per cent in 2004. The Special Inspector General for Iraqi reconstruction claims that out of the 142 medical clinics slated for reconstruction, only 6 have been constructed. Eight million Iraqis (approximately 25 per cent of the population) have access to potable water, compared to 13

million before the 2003 war. 108

1. These appalling statistics, begs the question:why? The media, or atleast the Western media's presentation of the war as the common man views it on the television, provides obvious and easily salable explanations, or loosely used buzzwords that have come to define Iraq's deteriorating security paradigm. Insurgency, Saddam loyalists, 'terrorists', foreign fighters, Al Qaeda, criminal gangs, Jihadis are the much aired words that are offered to encapsulate what is considered to be the essential reasons behind Iraq's nightmarish situation. Question: why did the so-called 'coalition of the willing' allow the security situation to worsen so abysmally? Why were insurgents and foreign fighters allowed to create a formidable infrastructure to support a now omnipresent guerilla war? While these questions have come to dominate discussions on news channels and symposia, this part of the paper will attempt to demonstrate that a short-sighted vision of warfare coupled with a total disregard for socio-political constructs have disallowed the US, a 'norm entrepreneur,' and its military leviathan to conceptualise, let alone architect, a post-conflict plan for peace and stability.

The responsibility of coordinating the reconstruction of Iraq in the period immediately following the collapse of Saddam Hussein's regime was handed over to the US DoD - a department that, ironically, had sought to close its own peacekeeping institutes in its war colleges due to apparent budget constraints. The military decided to go it alone, rather than consult the then Secretary of State Colin Powell, a General with the added advantage of heading the US's diplomatic bureaucracy and had, with the assistance of 75 Arab experts, prepared a paper on the 'future of Iraq project'. 110

Immediately after the Baathist regime had been toppled, rather than filling the streets of Iraq's cities and towns with peacekeeping forces trained to exercise minimal force while maintaining law and order, the coalition forces were given strict orders not to adopt policing roles. Analysts at the Human Rights Watch state that this policy of observing but not protecting Iraq's civilian population from looters and vandalism resulted in a security vacuum. Reacting to the US DoD's meaningless policy, Kenneth Roth, executive director of human right's watch, stated: The responsibility of U.S. and coalition forces doesn't end when they defeat opposing troops.... occupying forces are responsible for protecting civilians, not just during combat but in the aftermath of fighting."

This "wait, see and do nothing" policy had two devastating and long lasting effects. Firstly, it undermined the coalition's legitimacy on the 'Arab street' and raised the local inhabitant's suspicions with regard to the USs real interests in Iraq as they saw their shops, homes, and livelihood being destroyed in front of their eyes. Secondly, the security vacuum provided potential insurgents with a brief but sufficient time frame to gather their forces and construct an anti-US strategy. 113

In April 2003, Secretary Rumsfeld dismissed the dismal state of affairs as initial difficulties in Iraq. Brushing aside the fact that there were simply not enough troops to provide a viable security parameter, Rumsfeld remarked:, "Freedom is untidy. And free people are free to make mistakes and commit crimes". The Bush administration seemed to have actually believed that the coalition forces or the 'liberators' would be welcomed with garlands into Iraqi cities partially destroyed by transformation oriented weaponry. In fact, Paul Wolfowitz, Deputy Secretary of Defence at the time, stated that nation building within Iraq would take place through a process of natural progression. He opined that, "like the people of France in the 1940s", they (Iraqi's) would "view us (Americans) as their hoped-for-liberators". Rather than preparing to gradually institute the four fundamental pillars of reconstruction - security assistance; social and economic well-being; justice and reconciliation; governance and participation <sup>116</sup> - US CENTOCM relied on hard power tactics to deal with complex political and human problems. In June 2003, when CENTCOM woke up to the fact that insurgency and violence had marred the Iraq campaign, the US launched counter-insurgency operations in areas constituting the 'Sunni triangle'. 117 Fifty-six simultaneous large-scale operations ravaged Iraq's cities, killing countless civilians and undermining whatever little faith the common man might have had in the prospect of freedom.

The US had negated the essential tenets of peace keeping and enforcement. Rather than attempting to appreciate the source of discontentment and working with regional experts, Rumsfeld opined: "I think that the basic approach that the military is using is a sound approach." The US - led coalition refused to understand that nation building and reconstruction must be a bottom-up process, ultimately conceptualised and led by those who are from the region, and whose authority are not confused with hyper power politics or supposed imperial constructs. Even within the US administration there was very little consensus on how to re-institute basic civil services. While the then National Security Advisor Condoleeza Rice said the "concept was that we (America) would defeat the army, but the institutions would hold, everything from ministries to police forces", Rumsfeld encouraged the US military to carry out a 'de-baathification' campaign which involved dissolving a forty thousand strong Iraqi army<sup>119</sup> - an institution that could have assisted in stability operations - and a 30,000 strong bureaucracy that had in fact tired of the constraints placed on them by Saddam Hussein's dictatorship. <sup>120</sup>

Today, three years since the OEF began, the security situation within Iraq has not improved in any noticeable manner. The Sunni, Shia, and Kurdish divide within Iraq has prompted certain Western analysts to claim that the only viable solution lies with the division of Iraq into three autonomous regions while the domestic pressure on the administration to reduce US troops strength in Iraq is mounting. <sup>121</sup> In order to avoid potential quagmires in the future, the doctrine for transformation must include softer

concepts that have so far been divorced from the US military's myopic conceptualisation of warfare. The need for greater legitimacy, consensus among allied nations and the inclusion of socio-political factors cannot be ignored, especially in conflicts in which winning 'hearts and minds' is more important than crushing a perceived adversary's military might.

## (b) Acquiring 'Soft Power': An Imperative, Not an Option

In his book 'Paradise and Power', Robert Kagan argues that the USs approach to international relations is defined by a Hobbesian understanding of international politics. <sup>122</sup> Power is measured largely by a nation-state's military prowess, rather than its ability to influence norms emanating from supra-state bodies such as the UN. Kagan's perception of the US seems dangerously reminiscent of the way the US actually executes or atleast, till recently, did execute its foreign policy initiatives. With little respect for international norms and institutions, which the US itself helped create in the period following the end of the Second World War, the current US President's belief that the US does not need a 'permission slip' to protect its national security interests has landed the US in quagmires potent with violence. This is despite the fact that such quagmires could be avoided by accepting and acting on a mobile concept of legitimacy and learning to appreciate the intricacies embedded in what Joseph Nye Jr. calls 'soft power', which would empower the US with assets it can no longer afford to ignore or reject.

Legitimacy and soft power are inextricably related terms. Soft power "is the ability to get what you want through attraction rather than coercion". The way to enhance one's soft power is to follow policies that are considered legitimate, atleast in the eyes of the international society of states. Under the auspice of soft power or 'attractive power', a nation-state or a coalition will find it easier to win peace rather than war. Legitimacy can be acquired through international consensus in the UNSC, as was provided to the coalition during Operation Enduring Freedom, or which was available when Saddam Hussein breached international law in 1990 by threatening Kuwaiti sovereignty. By acquiring soft power, the US can take advantage of hard power assets that have proven inexpendable in theatres where understanding the people and customs is as important as defeating its armed forces. Ignoring legitimacy means the US in all probability will not be deterred from following a largely unilateralist path, with the proclaimed intention to protect what it perceives to be its national security interests. But the cost of doing so may be increased exponentially, as is vividly apparent today in Iraq.

During OIF, without the support of a UNSC endorsed resolution, and without the support of its traditional European allies – France and Germany - the US was forced to deal with difficulties that allied support would have assisted in minimising. Nye writes that the "initial resistance to provide the UN a significant role in reconstruction cost

20 \_\_\_\_\_ www.orfonline.org

the US more than \$100 billion or about \$1000 per American household. Although the coalition or the 'hub and spokes arrangement with the US at its core' consisted of states such as Poland, Ukraine, Nicaragua, El Salvador, Honduras, Australia, Britain, and others, the US had to spend \$250 million to "underwrite their participation". States like India, with an innate faith in the normative values that shape international order, refused to send troops to Iraq without UNSC approval.

Among those who did send their troops, the seemingly unending spiral of violence have forced many of them to withdraw. The countries that had initially supported the coalition but have since withdrawn include: Nicaragua (February 2004); Spain (late-April 2004); Dominican Republic (early-May 2004); Honduras (late-May 2004); Philippines (Jul 19, 2004); Thailand (late-August 2004); New Zealand (late September 2004); Tonga (mid-December 2004) Hungary (end December 2004); Portugal (mid-February 2005); Moldova (February 2005). Countries that plan to leave Iraq in the near future include Poland, Bulgaria, and Ukraine. Countries which have reduced or are planning to reduce their troop commitment include: Ukraine (-200 during Fall 2004); Moldova (reduced contingent to 12 in mid-2004); Norway (reduced from 150 to 10 in late-June 2004, early July 2004); Bulgaria (-50, December 2004); Poland (-700, February 2005); Italy (-300 in September 05(decrease apparently began in mid-August 2005); Netherlands (reduced in March 2005).  $^{125}$  The UN has the ability and experience to comprehensively deal with problems of: refugee protection; the construction of homes and hospitals and; providing security assistance without making security a core issue for its presence. Without its support, the vulnerabilities of what is left of the US led coalition in Iraq has increased manifold.

General John Abizaid claims that without the moral currency of legitimacy, the USs primary task of enhancing Iraq's security apparatus has been made all that more difficult. Many on the 'Arab street' view America's military personnel as agents of an imperialist hyper power because of its largely uncompromising form of unilateralism and refuse to assimilate themselves in a state that they view as being under occupation. Although this paper does not make the claim that the deployment of a multinational force under the UN banner would have witnessed the depletion of violence; it does subscribe to the view that UN support may have helped reduce the number of insurgent attacks while tackling the problem through a mixture of economic, political, social and military tools.

The undeniable advantages of acquiring legitimacy and thus projecting power through a process of acceptable consensus has been made evident in Afghanistan. On September 12, 2001, a day after the attacks in New York and Washington, NATO invoked Article 5. <sup>127</sup> In the aftermath of the major combat phase, German troops under NATO command took on the responsibility of training the national police force and placed

five provisional reconstruction teams outside Kabul, in areas where American forces refused to patrol. France initiated the process for legal reform and in 2002, NATO's 'response force' provided additional security during the general elections. <sup>128</sup> By the end of 2006, NATO's international security assistance force (ISAF) will attempt to take on the responsibility of assisting President Karzai in his endevour to stabilise Afghanistan. In the next couple of months the US led coalition will begin to take orders from the NATO command and control center in Kabul.

While it could be argued that harnessing stronger relations with America's allies is not necessarily the responsibility of the US DoD, in the current security environment - where armed transnational actors threaten regional stability - it is essential to include the role played by the allies as one of the core components of a doctrine that has been designed to deal with 'irregular' challenges and 'uncertainty' – a far better option than sticking to the stand that the "mission...defines the coalition". As part of the intellectual transformation the US military is undergoing, the US DoD needs to incorporate the fact that it is the coalition that should define the mission.

#### PART IV: CONCLUSIONS AND RECOMMENDATIONS

Force transformation, as has been defined and described in this paper, is a relatively new phenomenon. It is a process that is bound to evolve in the years to come. Already, in the strategic and military study circles some have begun to use the term 'security transformation' instead of force transformation - expanding the horizons of a process to include peacekeeping operations and those connected to humanitarian assistance. This paper has attempted to provide an analysis of the ongoing process of force transformation, based on available data and the experience of soldiers, as narrated by certain scholars in Afghanistan and Iraq.

In order to prove truly transformational, the current process of US military change must seek to follow a multilateral path of action. Doing so might involve forcing a major shift in the Bush administration's posture vis-à-vis its unilateralist track and its stand that it does not have to get a "permission slip" to protect America's national security interests. It may even involve forcing the American administration to re-evaluate its position with regards to anticipatory attacks, thereby limiting its strategic options. The US stands to gain two fold if it works with its traditional allies and the larger body of international society. First, certain hard assets such as reconstruction teams and greater number of troops trained to maintain the peace will become available to America (hence limiting the possibility of potential quagmires in theatres such as Iraq). Second, it may also, to quite an extent, restore America's waning right to legitimacy, the acquisition of which, as discussed earlier, has the propensity to play an imperative role in maintaining peace.

If the Bush administration is to continue to engage in theatres where post major conflict stabilisation operations are to be included as one of the war objectives, then it is of paramount importance to correct Rumsfeld's short sighted vision with regard to transformation and the aftermath of war. The US must expand its so far tapered conceptualisation of the consequences of conflict, and foster the link between diplomatic initiative, allied support and military capabilities. As discussed above, while this may perhaps involve compromising the Bush administration's unilateralist approach to international politics, it may also allow the US to better appreciate the difficulties embedded in rebuilding societies and communities shattered and displaced by war and the politics of war.

### (a) Emulation-Counter-Emulation: Transformation, India & the US

Force transformation, like any significant process of military change, is a perilous affair: its implications and consequences are not easily measurable. In the current security environment, one defined by uncertainty and the rapid growth of transnational non-state actors, many nation-states around the world have begun to re-think the fundamental premises that once characterised their state's military doctrine. In several cases, US force transformation has served as a framework for emulation or partial emulation. In Eastern Europe, the Romanians have acquired the expertise to develop a rapid reaction force that can be easily deployed with a minimal logistics footprint. The 'Berlin Plus' programme has allowed NATO's member states' partial access to transformation-oriented technology, specifically those related to command, control and network centric warfare. Canada, UK, Israel have all begun to use the transformation construct to better prepare the armed forces to address their respective security needs.

In South Asia, the Chinese seem to have taken the lead in constructing scenarios that are capable of contending against and countering transformation related capabilities. The speed at which China is accelerating its process of military modernisation is indeed impressive, but at the same time worrisome. According to a detailed study recently completed by the US 'office of force transformation' and the RAND cooperation, the PLA are in the process of modernising their armed services in four primary ways. They are: to successfully conduct anti-access operations; take advantage of information operations; develop missile centric strategies in order to threaten US military bases in the Asia Pacific region and; develop a Chinese version of NCW with a streamlined C4ISR infrastructure.<sup>131</sup>

The alacrity with which the Chinese are allegedly modernising their force posture and thereby strengthening their military capabilities suggests that the Indian military also needs to quicken its modernisation efforts in order to remain relevant in a rapidly changing world. While the focus of this paper has not been to construct a roadmap that

could be used to develop a transformation oriented strategy for India, this concluding section will highlight some aspects of US force transformation which the Indian Ministry of Defence (MoD) can consider emulating, keeping India's strategic and security interests in mind. <sup>132</sup>

Emulating, or borrowing certain transformation oriented concepts and procedures relevant to India's security needs must be viewed within the larger ambit of Indo-US strategic relations. Military change based on a process of partial emulation and technological assistance from outside the nation-state cannot be divorced from potential and foreseeable consequences which, in real politics, go hand in hand with self-interest and self-motivation.

Unlike the US and Pakistan, whose robust defence cooperation initiatives can be traced back to the 1950s, India and the US have had a history of limited defence cooperation. Between 1947 and 1999, the US has provided India with approximately only \$161 million worth of military assistance. Interestingly, 90 percent of US military assistance was provided to India between 1962-1966, that is, at the time when Chinese aggression led to an embarrassing defeat for India's armed forces and the political establishment. <sup>133</sup> This suggests that the US supported India with military assistance only because China's expansionist aggression was a threat to America's vital interests in the region.

In June 2005, Indian Defence Minister Pranab Mukherjee and US SECDEF Donald Rumsfeld signed the 'new framework for the US-India defence relationship for the next ten years.'134 According to this agreement, the US and India entered into a multilateral pact of planned collaboration in agreed areas of cooperation, decided to expand two way defence initiatives and to extend collaboration to missile defence.<sup>135</sup> Prior to this agreement, in the post 2001 period, the number of Indo-US joint defence initiatives and exercises had rapidly increased. Air exercises have allowed US Air Force pilots to familiarise themselves with the Soviet made SU-30 MKI's. In 2004 and 2005, Indian Air Force (IAF) pilots flying Russian built fighters did well to hold off American pilots flying F-15Cs and F-16s. Special operation forces from the US and India have held joint exercises in the jungles in the Indo-Chinese border areas. The Malabar joint naval exercise has become a regular feature off the Indian coast. In 2002, the Pentagon negotiated the sale of 12 'fire-finder' radars worth \$190 million, along with \$29 million worth of counter-terrorism equipment. In March 2005, Washington said that it is "ready to discuss the sale of transformative systems in areas such as command and control, early warning system and missile defence". 136

On July 18, 2006, Prime Minister Manmohan Singh and President George W. Bush issued a joint statement in the White House that recognised India as a nuclear power state. Newspapers, media channels, and interested actors in India, the US, and in different parts of the world have celebrated, guardedly deliberated, or opposed the poten-

tial nuclear deal between the world's two largest democracies. This particular strategic environment and time provides India with a viable opportunity to attempt to cautiously access certain aspects of transformation oriented technology and strategies that are relevant to India's security needs. However, as has been pointed out by General (Retd.) V. P. Malik, India's MoD needs to be especially cautious while viewing US military change in the last decade as a model for change. Given the fact that India's research and development centres are not half as advanced as that of the US or the UK, it would be wise to study the US model and borrow concepts that would suite India's ongoing pursuit to modernize, rather than transform its military. As has been mentioned in the first part of this paper, transformation is an advanced and complicated process that the US has been able to take forward only with huge investments in R & D, a defence budget that exceeds the Indian budget by over three hundred and fifty billion dollars (in 2004), and the availability in the US of private partners equipped with state of the art technology and know-how. It should be remembered that India's 29 ordinance factories are not equipped to develop the technology that the process of transformation relies upon. In the future, as has been mentioned by General (Retd.) Malik, if private enterprises and non-governmental defence firms, who have already begun to take great strides in the Indian market, are given a longer leash to develop cutting edge technologies and much needed defence related equipment, only then, perhaps, India could begin to work towards moving from the modernization stage of military change to the transformation stage. In doing so, MoD might consider certain recommendations, made in the following part of this paper, to further nurture the conceptual thinking behind an advanced stage of military change. 137

First, India's Ministry of Defence and the Defence Forces could attempt to emulate one of the primary organisational tenets of the transformative process of 'Jointness'. Since 1986, when the Gold-Water Nicholas Act was passed in the US, the armed forces have strived to erode the particularly parochial lines that distinguish the operational functions of one service from another. The Act instituted the position of the Chairman of the Joint Chiefs of Staff (CJCS), a general whose rank is deemed higher than the service chiefs and whose primary responsibility is to serve as the US President's chief military advisor. During the time of war or peace, the CJCS has done well to disallow the chiefs of each service to forward their perspectives without taking into consideration the views of the other services. As has been mentioned earlier, this was particularly evident during OEF and OIF. While the debate with regard to the need for a 'Chief of Defence Staff' has ruffled the traditional feathers of the Indian armed services, studying the nuances embedded in US joint doctrine may perhaps assist India in its endeavour to create an atmosphere in which the three services work in full cooperation – that is, jointly – with each other. One of the main obstacles to creating a CDS in India seems to

lie with the bureaucracy's reticence in the matter of rank, file, and status.<sup>139</sup> Although it has a very different political set up, these difficulties continue to be faced by the US too. An understanding of the tussle between the CJCS and the SECDEF, the political head of the armed services, can provide India with valuable lessons on how to institute a CDS while balancing the Indian bureaucracy's inhibitions that appear self evident, even though they are not openly aired.

Second, while the prospect of instituting a CDS will be undoubtedly beneficial for India, the essence of jointness must be brought to the military through a top-down process that gradually allows proliferation of new concepts through an organised bottomup procedure. In the US, while greater jointness and joint thinking has come to be selectively accepted at the senior officer level, junior officers seem to remain largely 'ambivalent' on the advantages brought to the battlefield by acting jointly. 140 During OAF, this ambivalence along with a false sense of service parochialism seemed to have influenced the Task Force Hawk commander to refuse cooperating with the US military's Combined Air Operation Centre (CAOC) in Vicenza, Italy. 141 In 2001, before embarking on OEF, General Tommy Franks and SECDEF Rumsfeld made a concerted effort to make sure that jointness received the sort of support that was needed. While planning for OEF at the CENTCOM base in Florida, General Frank warned: "We should not allow narrow minded four-star generals to advance their share of the budget at the expense of the mission". <sup>142</sup> In the theatre, the performance of the military was reflective of General Frank's insistence on working as a singular force, rather than separate services engaged in a particular operation. As one commentator noted, during OEF the armed services "saw, for the first time, integration of forces rather than de-confliction of forces". <sup>143</sup> In order to institute a joint environment that is acceptable to junior and senior officers in all branches of the Indian services, perhaps the MoD could consult junior level officers in the US on how they began to view and appreciate the advantages embedded in jointness. For India, a state in which future conventional combat will possibly be fought on land, greater jointness may prove to play a key role in deciding the fate of future battles or wars. 144 This process has already been enhanced and implemented in army-air force exercises, such as the recently conducted Exercise Sanghe Shakti (May 2006) and during others like Poorna Vijay (2001), Vijay Chakra, Divya Astra, Vajra Shakti (May 2005) and Desert Strike (November 2005). 145 A study of the US model may further assist in realising the institutionalisation of jointness in military doctrine, as well as in the intellectual outlook of India's military personnel.

Third, in the area of border security, MoD could consider embracing what Admiral William Owens calls a 'system of systems' approach, in order to provide the services with greater situational awareness as well as joint situational awareness. This is of paramount importance, as India suffers from visible vulnerabilities on both the India-Pak

border and the Indo-Chinese border areas. India and China have not yet been able to agree on a clearly demarcated line of control. Although the dialogue with Pakistan at the political level has begun to somewhat clear the clouds of distrust that have dogged Indo-Pak relations for more than fifty years, a Kargil type of incursion and the ongoing Pakistan backed proxy war against India provide reasons for ruling out the potential for conflict. Transformative technologies and systems can assist in protecting India's borders. Advantages embedded in an advanced C4ISR construct and those associated with NCW have the ability to provide India's security forces with greater situational awareness. This, coupled with greater investment in unmanned aerial vehicles with missile launching capabilities, and other manned and unmanned aerial mediums, can assist in avoiding blind-spots, as also confirm intelligence reports on incursions in to India. Basic aerial vehicles that may help in this process have been listed below:

Model	Function & Flight Altitude	
Lacrosse	Radar Imaging Satellite	
Crystal KH – 11		
Global Positioning Satellite U-2R	One Crew member. 4 cameras connected via	
	satellite link to a command & control centre.	
	Flies at 70,000 feet	
Global Hawk	Unmanned surveillance aircraft. Flies at 65,000	
	feet	
Joint Surveillance Target Radar	Converted 707 Boeing fitted with 5 super com-	
system - JSTAR	puters and 18 control consoles. Flies at 20,000	
	feet	
Predator Unmanned Aerial Vehicle	Provides immediate feedback to ground troops.	
	Flies at 4000 Feet	

Table 1.0<sup>146</sup>

It should be noted that while such technology can assist in enhancing India's security apparatus, the American experience in Kosovo and the intelligence failure experienced during operation Anaconda in Afghanistan, is a stark reminder of the fact that technology is not panacea. Human intelligence (HUMINT) and 'eyes on the ground' [activities] can never be replaced nor its importance reduced in order to accommodate technological advancements.

Fourth, India's armed forces could modify and take forward certain processes that are now inherent in transformation. In order to enhance rapid deployment capability and minimise the logistics footprint during battle or in border skirmishes which have the potential to escalate, the army could reduce the number of troops in the Strike Corps. The

US Striker brigade (previously known as the 'Interim Brigade Combat Team' (IBCT), that has been deployed in Iraq provides instances where heavy, precise and lethal fire power has been made compatible with rapid deployment functions. Presently, India's three Strike Corps, as has been pointed out by Brigadier (retd.) Gurmeet Kanwal, find it "difficult to concentrate, side-step, deploy and maneuver and this virtually rules out surprise and deception". <sup>147</sup> Certain actors in the Indian military are already considering breaking down the Strike Corps into smaller force structures, so as to take advantage of "cold starts" or "the ability to launch quick strikes across the International Boundary (IB) without prior warning by moving rapidly to battle positions from the cantonments". 148 In this process, former Chief of US Army Staff General Eric Shinseki's vision for a future force could prove invaluable. General Shinseki realised that changing the army's age old posture would be met by resistance and would be difficult to implement. Hence, he mapped out a plan intended to gradually modify the army's force posture. Developing on concepts originated by General Gordon Sullivan, Shinseki divided the army's future vision into three stages with three force structures. First, the army would invest in a 'future force' programme that would incorporate state of the art systems and technologies. Simultaneously, it would maintain a 'legacy force', making use of equipment and concepts that have been in place since the Reagan years. At the same time, the Army would deploy an 'objective force,' with readily available equipment, forming the bridge between the legacy and future force. In the conceptualisation phase of a modified Strike Corps, Shinseki's vision and policy guidelines with regard to military change may prove useful to India's army leadership as well as the DRDO and the MoD.

Finally, although modernisation and transformation of a nation-state's military structure and force posture is desirable, keeping India's security interests in mind, the MoD and the Government should avoid focusing entirely on the modalities of US military change. Though, as has been discussed in the previous sections, it has served well in preparing the US military to contend against an adversary during the destructive stages of war, it has done little in the area of softer security. The devastating, meaningless, and cowardly attack by the Pakistan supported organisation Lashkar-e-Toiba (LeT) and banned Indian group, the Student Islamic Movement of India (SIMI), on the nation's financial capital, Mumbai, (July 11, 2006) is a case in point. It is a stark reminded that no number of precision munitions, sleeker C4ISR and an 'out of the box' combat strategy is capable of stopping non-uniformed clandestine actors from attempting to disrupt the daily life of ordinary Indians. While a potential solution lies perhaps at the diplomatic level, lessons from Europe and NATO's attempt at 'security transformation' may assist in reducing the number of attacks on the Indian mainland. During the NATO Prague summit of December 2001, NATO and Europe's attempts at reducing the threat of terror through softer security paradigms such as intelligence reform were highlighted. While

the US seems to concentrate on hard power tactics to defeat 'terror', Europe's softer, calculated and effective approach to protecting its borders are important lessons for India.

The process of institutionalising intelligence and data sharing constructs created between Europol and the German based intelligence organisation, the 'Club of Bernes', may provide India's various and robust intelligence services with alternative paradigms needed to tackle the threat of terror, especially in the area of sharing information in a timely manner. For instance, while NCW and C4ISR has been designed to increase situational awareness in the theatre, reduce the time-gap between attaining information and processing it, a modified structure along similar lines may help in placing India's intelligence arms under one network centric system. This system, although at a rudimentary and non-technical level, has been adopted by Europol's 'terrorism threat integration center', which acts as a "central point" for collecting information for European states as well as the Pentagon. <sup>149</sup> Also, the government of India may consider consulting states such as Poland which, according to Richard Aldrich, provides "excellent capabilities across the whole spectrum of intelligence related activity", specifically in the area of human intelligence and electronic warfare. <sup>150</sup>

While this occasional paper has lightly touched upon what the Indian MoD could consider emulating from the US, the Indian political establishment will have to craft a cautious yet skillful roadmap for emulation and procurement. It is not in India's interest to modernise her force structure in the way the US is attempting to transform hers. As has been mentioned above, India must carefully choose which aspects of the current process of US military change it could emulate and modify. This is important, as the US administration's objectives behind aspiring to transform its armed services are vastly distinct from those of India. India does not seek to intervene in other countries either to further the promotion of democracy or institute an India friendly leadership at the helm of another state's political and military affairs. 151 India's vital security interests lie in its immediate neighborhood and perhaps, to a slightly lesser extent, in the Persian Gulf, South East Asia, the five Central Asian Republics and in the Indian Ocean Region. For instance, while political conditions and state of affairs in the Subcontinent are of primary and imminent interest to India, Iran's nuclear aspirations and North Korea's seemingly aggressive force posture remain very much within India's strategic calculus. As far as India's threat perceptions are concerned, China and Pakistan pose the most powerful and identifiable challenges to India's political sovereignty and military capabilities.

Greater military to military contact, and the construction of an emulation framework, if conceptualised in the future, should not be confused with the view that India is more than a 'strategic partner'. India has maintained a largely independent foreign policy decision-making process. Although partially marred by suspicion, after India voted against Iran in the IAEA in 2005, it should be remembered that it is in India's interests

not to allow Iran to acquire or develop nuclear weapons. More pertinently, it should be remembered that India chose not to join the 'coalition of the willing' or participate in any way in the occupation of Iraq. The then Indian Prime Minister, Atal Bihari Vajpayee, made it abundantly clear that India would send troops to Iraq only if mandated to do so by a UNSC resolution.

In the July/August 2006 issue of the journal, 'Foreign Affairs', a periodical that often does well to reflect the opinions and views of senior policy makers and academics, Ashton Carter makes three disturbing propositions. While defending the need to make India an exception to the rule vis a vis the US's non-proliferation laws, Carter states that Americans need to be aware of the larger game plan as far as India is concerned. Carter writes:<sup>152</sup>

"Washington gave something away on the nuclear front in order to gain much more on other fronts; it hoped to win the support and cooperation of India, a strategically located democratic country of growing economic importance – to help the United States confront the challenges that a threatening Iran, a turbulent Pakistan, and an unpredictable China may pose in the future"

Labeling India asan "informalally" of the US, Cartersays without hesitation: "Ultimately, India could even provide US forces with "over the horizon" bases for contingencies in the Middle East." <sup>153</sup> The ongoing debate within the US, with regard to providing India with nuclear technology and recognising India as a nuclear power, seems to have already blurred the distinction in the terms 'partner' and 'ally', atleast in the minds of certain Americans. While advancing the need to adopt transformative technology and emulating certain concepts, India should keep its own immediate security interests in mind, and not those apparent backbench aspirations of a supplier state. While it is important to modernise India's force structure, the MoD and Government of India needs to do so without providing US legislators and media any reason to believe that greater defence cooperation will lead India to support US unilateralism and hence, betray its longstanding commitment to the international society of states.

.....

#### **ABOUT THE AUTHOR**

Rudra Chaudhuri was a Research Intern at the Institute of Security Studies, Observer Research Foundation, New Delhi. He is a Research Assistant on a UK ESRC project titled 'Shifting Securities' and a PhD student at the Dept. of War Studies, King's College London, UK.

#### References

- 1. Quoted in Dana Priest, The Mission, (New York-London, W.W. Norton and Company, 2003) P 389
- 2. Military change has been defined as "change in goals, actual strategies, and/or structure of a military organisation", Theo Farrell & Terry Terriff (Ed), The Sources of Military Change, (London, Lynne Reinner Publishers, 2002) P 45. For alternative interpretations of military change see (1) Stephen Peter Rosen, Winning the Next War: Innovation and the Modern Military, (Cornell University Press, 1991) P 7. (2) Harold R Winton and David R Mets (Ed), The Challenge of Change: Military Institutions and New Realities 1918-1941, (University of Nebraska Press, 2000). P XII (3) Kimberly Marten Zisk, Engaging the Enemy: Organisation Theory and Soviet Military Innovation 1955 1991, (Princeton University Press, 1993). P 4
- 3. These propositions have shaped what has come to be known as the existing rationales for the theory on military change. For further reading see (1) Emily Goldman, "Thinking About the Strategy Absent the Enemy", Security Studies, 4:1, (Autumn 1994); (2) Barry Posen, The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars, (Cornell University Press, 1984); (3) Kimberly Marten Zisk, Engaging the Enemy: Organisation Theory and Soviet Military Innovation 1955-1991, (Princeton University Press, 1993); (4) Stephen Peter Rosen, Winning the Next War, (Cornell University Press, 1991)
- Emily Goldman, "Thinking About the Strategy Absent the Enemy", Security Studies, 4:1, (Autumn 1994), P 78
- National Security Strategy of the USA, (30 September 2002), Available at: http://www.whitehouse. gov/nsc/nss.pdf P 13
- Quadrennial Defence Review Report of the USA, (September 30 2001), Available at: www.defenselink. mil/pubs/qdr2001.pdf P III & 21
- Quoted in the Transformation Planning Guidance (TPG), See Elements of Defence Transformation, authored by the US DoD. Available at: http://www.oft.osd.mil/library/library\_files/document\_383\_ ElementsOfTransformation\_LR.pdf
- Quoted by Admiral William A Owens, 'An Introduction to the Revolution in Military Affairs' by Gary Chapman, (LBJ School of Public Affairs Publication, University of Texas. XV Amaldi Conference on Problems in Global Security. Helsinki, Finland. September 2003) www.lincei.it/rapporti/amaldi/ papers/xv.chapman.pdf
- Donald H Rumsfeld, "Transforming the Military", Foreign Affairs, (May/June 2002), Volume 81:3. P
- 10. This point has been made by the US DoD See "Elements of Transformation", US DoD, Available at: http://www.oft.osd.mil/library/library\_files/document\_383\_ElementsOfTransformation\_LR.pdf P 2
- 11. The National Security Strategy of the Unites States of America, (September 2002) Available at: www. state.gov/documents/organisation/15538.pdf P 2
- 12. Which unlike the earlier 'threat based model' attempts to conceive of innovative ways to respond to current threats rather than merely identifying who threatens the US. Detailed analyses of these models are presented in: Quadrennial Defence Review Report, (September 30th 2001). Available at: www.defenselink.mil/pubs/qdr2001.pdf P IV
- National Defence Strategy of the United States of America, (March 2005), Available at: www. defenselink.mil/news/mar2005/d200503/8nds2.pdf P 10
- 14. In the 1980's Casper Weinberger, and later Colin Powell, under Ronald Reagan's presidency, created a set of guidelines for the use of military force. For a detailed understanding of this doctrine See Jeffery Record, "Weinberger-Powell Doctrine Doesn't Cut it", US Naval Institute Proceedings, (October 2000)
- 15. Quoted by Colin Powell in David Jablonsky, "Army Transformation: A Tale of Two Doctrines", Parameters, (Autumn 2001).
- According to the Quadrennial Defence Review Report of 2001, 'transformation pillars' include 'Jointness', experimenting with new approaches to warfare, and innovation with science and technology. See - Quadrennial Defence Review Report, (30 September 2001), Available at: www. defenselink.mil/pubs/qdr2001.pdf P 32

- Don Snider, "Jointedness, Defense Transformation and the Need for a New Joint Warfare Profession", Parameters, (Autumn 2003), P 17
- 18. Network Centric Warfare (NCW) is the military's response to the information age amoung certain other functions, it has been designed to permit the services to combine strategies, emerging tactics, and procedures, in order to allow the military to act as a single network force. For details see 'The Implementation of Network Centric Warfare', (Published by US DoD), Available at: http://www.oft.osd.mil/library/files/document\_387\_NCW\_Book\_LowRes.pdf
- 19. C41SR refers to 'Command, Control, Communications, Technology, Surveillance and Reconnaissance'. It allows the military to work in an integrated fashion in battle. For a detailed and non-technical explanation See Elinor C Sloan, "The Revolution in Military Affairs", (London, McGill-Queens University Press, 2002), P 7-8
- 20. Ibid P 5-7
- 21. This is one of the prime objectives of the US Army's 'Land Doctrine' under the umbrella of force transformation. Digitising the battlefield involves creating units such as the US 4th infantry division, which are dependent upon C41SR technology for improved performance in battle. See Lynn E Davis and Jeremy Shapiro (Ed), "The US Army and the New National Security Strategy", (RAND Corporation Publication, 2003), P 293-306
- 22. This has been included as one of the fundamental goals of the US Navy's strategic doctrine 'Forward From the Sea' See Elinor C Sloan, "The Revolution in Military Affair'"s, (London, McGill-Queens University Press, 2002) P 9-11
- John Hillen, "Rumsfled's Baby and the Bath Water", National Review Online, (23 December 2004), Available at: www.nationalreview.com/comment/hillen200412230823.asp
- 24. Fredrick Kagan claims that 'Rumesfeld's vision' for transformation is centered on technological change rather than complete change. See Tom Hone, Transformation Trends, (16 January 2005)
- 25. Ibid
- For an examination of the analysis provided by critics of transformation See Gary Chapman, "An Introduction to the Revolution in Military Affairs", XV Amaldi Conference on Problems in Global Security, Helsinki, Finland, (September 2002), Available at: www.lincei.it/rapporti/amaldi/papers/XV-chapman.pdf P 17-18
- 27. Nikolai Orgakov was the Chief of the Soviet General Staff in the mid 1980's. For further reading see Admiral William A Owens, "Creating a US Military Revolution" in Theo Farrell & Terry Terriff (Ed), Chapter 10, The Sources of Military Change, (London, Lynne Reinner Publishers, 2002)
- 28. Andrew Latham, "Warfare Transformed: A Braudelian Perspective on the Revolution in Military Affairs", European Journal of International Relations, Volume 8:2, 2002, P 231-233
- 29. These include the works of Andrew Latham, Clifford Rogers, & Tim Benbow. See (1) Andrew Latham, "Warfare Transformed: A Braudelian Perspective on the Revolution in Military Affairs", European Journal of International Relations, 8:2, 2002, P 231-233; (2) Elinor C Sloan, "The Revolution in Military Affairs", (London, McGill-Queens University Press, 2002) P 23-24; (3) Tim Benbow, "The Magic Bullet: Understanding the Revolution in Military Affairs", (London, Brassey's, 2004) P 22
- 30. These include the works of Richard O Hundley, according to whom RMA occurs when "one or more core competencies of a dominant player" is rendered obsolete, or when a 'dominant player' "creates one or more core competencies". See (1) Richard O Hundley, "Past Revolutions Future Transformations", (Acquisition and Technology Policy Centre of the RAND National Defence Research Institute (NDRI). RAND Corporation Publication 1999) P 9; (2) Andrew Krepinevich, who claims that technology combine with "innovative operational concepts and organisational adaptation", the underlying impetus for change in his view seems to stem from changes in technology. For a detailed analysis of his work see Steven Metz, "Strategy and the Revolution in Military Affairs From Theory to Practice", (US Army War College, Strategic Studies Institute, June 1995). Available at: www.atic. mil/doctrine/jel/research\_pubs/rmastrat.pdf P 3
- 31. These include the works of Alvin and Heidi Toffler and Steven Metz The Tofflers argue that an RMA occurs when "an entire society transforms itself, forcing its armed services to change at every level simultaneously from technology and culture to organisation, strategy, tactics, training, doctrine and logistics". Steven Metz builds on the theoretical edifice constructed by the Tofflers. According to

Metz, RMA's can be divided into 'minor' RMA's and 'major' RMA's. While 'minor' RMA's are driven by technological change, the impact of which is visible on the battlefield; 'major' RMA's are a product of social, economic, and political change that has a forceful impact on strategy rather than battlefield operations. See Steven Metz, "Strategy and the Revolution in Military Affairs – From Theory to Practice," (US Army War College, Strategic Studies Institute, June 1995). Available at: www.atic.mil/doctrine/jel/research\_pubs/rmastrat.pdf P 3

- 32. Quoted in "Military Transformation for the Changing Cause, Character and Conduct of Conflict in the 21st Century", (US National Defence University College Paper), P 2
- 33. Ivan Arrguin Toft, "How the weak Win Wars: A Theory of Assymetric Conflict", International Security, Volume 26:1, (Summer 2001), P 94-96
- 34. Charles Krauthammer, "What Happened to the Powell Doctrine", Washington Post, April 20, 2001, Available at: www. palestinemonitor.org/media/what\_happened\_to\_the\_power\_doct.htm
- 35. Ibid
- 36. Under this doctrine, military intervention was warranted only if it affected America's "vital interests". The political will needed to engage American troops in battle was supposed to have guaranteed its sustained commitment while exhausting all other diplomatic options. For a detailed understanding of the Weinberger-Powell doctrine, see, Jeffery Record, "Weinberger-Powell Doctrine Doesn't cut it", US Naval Institute Proceedings, October 2000, www.mtholyoke.edu/acad/bush/record.htm
- 37. The 1991 Iraq war was called the First War of Information because it employed what has come to be known as 'Network Centric Warfare' the ability to process information from the soldier on the ground to an aircraft in the air to the Joint forces command centre in Tampa, Florida in a matter of seconds. Thus, NCW refers to a process, which aims to create complete transparency in providing and receiving information.
- 38. Battale space dominance is achieved by using products of the information age such as 'ISR' programmes which deal with improving intelligence collection, surveillance and reconnaissance; C4I Communications command, control, communications, computer systems and intelligence processing. For a detailed analysis look at, Admiral William Owens, "Creating a US Military Revolution" in Theo Farrell & Terry Terriff (Ed), "The Sources of Military Change", (London, Lynne Reinner Publishers, 2002) P 206
- 39. Stephen Biddle, "Victory Misunderstood: What the Gulf War Tells us About the Future of Conflict", International Security, Volume 21:2, Fall 1996, P 1
- 40. 'Operation Provide Hope' was the name given to the US led United Task Force under the aegis of the United Nations (UNITAF).
- 41. Barry Posen, "Command of the Commons: the Military Foundation of US Hegemony", International Security, 28:1, Summer 2003, P 33
- 42. Quoted in "A Diary of American Intervention", Available at: http://www.msc.edu.ph/centennial/philam-diary.html
- 43. Quoted in Albert A Stahel, "Dissymmetric Warfare Asymmetric Warfare", International Transactions in Operational Research. Volume 11, 2004, P 435
- 44. The National Security Strategy of the USA, (September 2002) www.whitehouse.gov/nsc/nss.pdf
- 45. Quoted in Max Boot, "A Century of Small Wars Shows they can be Won", New York Times, July 6 2003, Available at: http://www.smallwars.quantico.usmc.mil/search/BootMax.pdf
- 46. The Small Wars Manual was re written in the 1980's it claimed "in small wars no defined battlefront exists and the theatre of operations maybe the whole length and breadth of the land" Ibid.
- 47. Benjamin Lambeth, "NATO's Air War for Kosovo: A Strategic and Operational Assessment", (RAND Corporation Publication, 2001), P 222
- 48. Javier Solana, "NATO's Success in Kosovo", Foreign Affairs, Volume 78:6, November/December 1999, P 118
- 49. According to Ivo Daalder & Michael. E O'Hanlon. For details on resolution 1244 see Ivo Daalder and Michael. E O'Hanlon, "Winning Ugly", (Brookings Institution Press Washington D.C, 2000) P 234
- 50. Scott Cooper quotes Senior US officials who support the increasing use of air power. See, Scott A Cooper, "Air Power and the Coercive Use of Force", Washington Quarterly, Volume 24:4, Autumn 2001, P 81

- 51. Tim Judah claimed that the bombing allowed a "homogenisation of the Serbs", who remained in the belief that the bombings could not affect their future, or their aspirations vis-à-vis Kosovo. See Tim Judah, "Kosovo: War and Revenge", (Yale University Press, 2000) P 238-239
- 52. According to Thomas Schelling. See, Scott A Cooper, "Air Power and the Coercive Use of Force", Washington Quarterly, Volume 24:4, Autumn 2001, P 85
- 53. Benjamin Lambeth, "NATO's Air War for Kosovo: A Strategic and Operational Assessment" (RAND Corporation Publication, 2001) P 231
- 54. According to Daalder and O'Hanlon, Ibid P 113
- 55. Jim Whitman, "Kosovo Refugee Crisis: NATO's Humanitarianism Versus Human Rights", International Journal of Human Rights, Volume 4 Issue 3/4, Autumn/Winter 2000, P 176
- 56. William Cohen, US Secretary of Defence during the Kosovo crisis claimed, "NATO had one consensus, that was for the application of air power. There was no consensus for the application of ground forces in a non-permissive environment". Ivo Daalder & Michael.E O'Hanlon, 'Winning Ugly, (Brookings Institution Press Washington D.C, 2000), P 145
- Lawrence Friedman, "Victims and Victors: Reflections on the Kosovar War", SIAS Review of International Studies Volume 26, 2000, P 335-358
- 58. Benjamin S Lambeth, "Task Force Hawk", Air Force Magazine, Volume 85:2, February 2002,
- 59. Ibid
- 60. Ibid
- Earl H Tilford Jr. "Operation Allied Force and the Role of Air Power", Parameters, Winter 1999-2000, P
- Timothy L Thomas, "Kosovo and the Myth of Information Superiority", Parameters, Spring 2000, 14-20
- 63. Ibid
- 64. The QDR was written prior to the attacks on the World Trade Centre but had been adapted after attacks on 9/11. Quadrennial Defence Review Report, (September 30 2001), Available at: www.oft. osd/mil/library\_files/document\_125\_qdr\_2001.pdf
- 65. George W Bush Quoted in Bruce R Nardulli, "The US Army and the Offensive War on Terrorism", in Lynn E Davis & Jeremy Shapiro (Ed), "The US Army and the New National Security Strategy", (RAND Corporation Publication, 2003), P 27
- 66. These objectives were listed by President George W Bush in his September 20th Joint Session to Congress. Text available at: http://www.globalsecurity.org/military/library/news/2001/09/mil-010920-usia01.htm
- 67. Sean M. Maloney, "Afghanistan from here to Eternity", Parameters, Spring 2004
- Gary Chapman, "An Introduction to the Revolution in Military Affairs", (LBJ School of Public Affairs, University of Texas. XV Amaldi Conference on Problems in Global Security. Helsinki, Finland. September 2003) P 7
- 69. Afghanistan was divided into 36 'kill boxes' or areas, which were watched by the air force and naval fighters belonging to each 'kill box'. See, Lynn E Davis and Jeremy Shapiro (Ed), "The US Army and its New National Security Strategy", (RAND Corporation, 2003 Publication) P 144
- For a detailed analysis of all targets destroyed or affected refer to Global Security.Org, "Operation Enduring Freedom", Available at: www.globalsecurity.org/military/ops/enduring -freedom.htm and Guardian Unlimited, "Attack on Afghanistan", www.guardian.co.uk/flash/0,5860,567567,00.html
- 71. Operation Enduring Freedom Global security .org http://www.globalsecurity.org/military/ops/enduring-freedom.htm
- Bernard Rostker, "Transformation and the Unfinished Business of Jointedness" in Lynn E Davis & Jeremy Shapiro (Ed), "The US Army and the New National Security Strategy", (RAND Corporation Publication, 2003), P 144
- 73. Anti Access Environments are those, which prohibited the US from intervening in regions where it cannot establish a temporary base or regions in which access is denied or has been cut off.
- 74. Donald H Rumsfeld, "Transforming the Military", Foreign Affairs, Volume 81:3, May/June 2002, P 20
- For a detailed analysis of key events see Stephen Biddle, "Afghanistan and the Future of Warfare: Implications for Army and Defence Policy", (Strategic Studies Institute, US Army War College,

34 \_\_\_\_\_\_ www.orfonline.org

- November 2002)
- Senator Carl Levin, Chairman of the Senate Armed Services Committee quoted in Bernard Rostker, "Transformation and the Unfinished Business of Jointedness" in Lynn E Davis and Jeremy Shapiro (Ed), "The US Army and the New National Security Strategy", (RAND Corporation Publication, 2003) P 144
- 77. According to Human Rights watch and Reuters, 1000-1300 civilians died. Carl Conetta, "Operation Enduring Freedom: Why a High Rate of Civilian Bombing Casualties", Project for Defence Alternatives, January 24, 2002, Available at: www.comw.org/pda/02010ef.html#1
- 78. Tech Sgt. Tim Dougherty, "B-1 is Tailor Made for Operation Enduring Freedom", US Air Force Print News, Washington, March 29, 2002. www.b1b.wpaft.af.mil/pages/pdf/b1\_tailor\_made.pdf
- 79. The bombings in Paktia province on December 20, 2001 and on Pul-E-Kumeri on December 14, 2001, which killed only civilians was a result of corrupted information and 'near precision' bombings. Ibid
- Stephen J Blank, "Rethinking Asymmetric Threats", Strategic Studies Institute, US Army War College, September 2003
- 81. Ibid
- 82. The thermo boric bomb sucks oxygen out of deep entrenchments and cave like structures, in the hope of luring the enemy out. Ibid
- 83. Ibid
- 84. Quoted in Adam Geibel, "Operation Anaconda- Shahi KotValley, Afghanistan", US Army Publication, March 2-10, 2002, www.leavenworth.army.mil/milrev/download/english/mayJun02/bob.pdf
- 85. General Tommy Franks quoted in Jason Vest, "Why the British Can't Match the British at High Altitudes", The American Prospect, March 21, 2002,
- 86. Jason Vest, "Mountain Warfare is not the only thing Slowing Down the US Army", The American Prospect, April 8 2002,
- 87. Ibid
- 88. For a detailed analysis of key events see, Stephen Biddle, "Afghanistan and the Future of Warfare: Implications for Army and Defence Policy", Strategic Studies Institute, US Army War College, November 2002, P 43
- 89. Jason Vest, "Why the British Can't Match the British at High Altitudes", The American Prospect, March 21, 2002
- 90. For a detailed understanding of Mao's tactics see, Ivan Arrguin Toft, "How the Weak Win Wars: A Theory of Asymmetric Conflict", International Security, Volume 26:1, Summer 2001. P 93-128
- 'Command, Control, Communications, Computers, Intelligence, surveillance and reconnaissance'.
   For a detailed report on US successes see, General Montgomery C Meigs, Former Commander of US Army in Europe and 7th army, "Unorthodox Thoughts about Asymmetric Warfare", Parameters, Summer 2003.
- 92. According to a survey by Thomas G Mahnken and James R Fitzgerald the lack of publicity within the army with regard to transformation has resulted in a military, which does not clearly understand the need to endorse change. Thomas G Mahnken, "Revolutionary Ambivalence: Understanding officer Attitudes Towards Transformation", International Security, Volume 28:2, P 112-148
- 93. General Tommy Franks, American Soldier, (New York, Regan Books, 2004) P 329
- 94. Details can be found in Ibid P 38
- 95. General Tommy Franks, American Soldier, (New York, Regan Books, 2004) P 433
- 96. John Gordon & Jerry Sollinger, "The Army's Dilemma", Parameters, (Summer 2004), P 36-37
- 97. According to Lt. Col. Ralph Peters, quoted in, Thomas G Mahnken & James R Fitz Simonds, "Revolutionary Ambivalence: Understanding Officer Attitudes Towards Transformation", International Security, 28, No. 2, (Fall 2003), P 122
- 98. David Isenberg and Ivan Eland, "Empty Promises: Why the Bush Administration's Half Hearted Attempts at Defence Reform Have Failed", Policy Analysis: 442, (June 11 2002), Available at: www.cato.org/pubs/pas/pa442.pdf P 2
- 99. In a radio address in which President George W Bush announced the commencement of OIF, he claimed that the above-mentioned quote was one of the reasons why his administration decided to attack Iraq. See, "President's Radio Address: Discuss the Beginning of Operation Iraqi Freedom", (22

- March 2003) Available at: http://www.whitehouse.gov/news/releases/2003/03/20030322.html
- 100. Thomas Donnelly, Operation Iraqi Freedom: A Strategic Assessment, (Washington DC, Published by the American Enterprise Institute, 2003) P 74
- 101. For details see, The National Security Strategy of the United States of America, (September 2002), Available at: www.state.gov/documents/organistion/15538.pdf P 1-5
- 102. Quadrennial Defence Review Report, (30 September 2001), Available at: www.defenselinkmil/pubs/ gdr2001.pdf P 21
- 103. National Defense Strategy of the USA, (March 2005), Available at: www.defenselink.mil/news/mar2005/d200503/8nds2.pdf P 16
- 104. Donald Rumsfeld, Prepared Testimony to the Senate Armed Services Committee, (July 9, 2003), Available at: www.au.af.mil/au/awc/awcgate/congress/rumsfeld\_09July03.pdf
- 105. http://icasualties.org/oif/
- 106. Louise Roug & Richard Morin, "Nation is Divided on Draw-Down of Troops", Washington Post, June 27, 2006
- 107. http://www.militaryphotos.net/forums/showthread.php?t=20487
- 108. Lionel Beehner, "Iraq's Faltering Infrastructure", Council on Foreign Relations, (June 22, 2006), Available at: http://www.cfr.org/publication/10971/iraqs\_faltering\_infrastructure.html
- 109. Martha Finnemore and Kathryn Sikkink claim that 'norm entrepreneurs' are those who create their own norms and influence certain states to follow those norms. Nicholas Wheeler, 'Reflections on the Legality and Legitimacy of NATO's Intervention in Kosovo', International Journal of Human Rights, Volume 4 Issue 3/4 (Autumn/Winter 2000) P 146
- 110. Details can be found at Dale R Herspring, "The Pentagon and the Presidency: Civil-Military Relations From FDR to George W Bush", (University Press Kansas, 2005) P 401-404
- 111. For details See Tobby DoDge, "Iraq's Future: The Aftermath of Regime Change", Adelphi Paper 372, (March 2005) P 9
- 112. http://hrw.org/english/docs/2003/04/09/iraq5529.htm
- 113. For details on both positions See Tobby DoDge, "Iraq's Future: The Aftermath of Regime Change", Adelphi Paper 372, (March 2005) P 28-30
- 114. Thomas Donnelly, "Operation Iraqi Freedom: A Strategic Assessment", (Published by the American Enterprise Institute, Washington DC, 2003)
- 115. Quoted in Jeffery Record & Andrew Terrill, "Iraq and Vietnam: Differences, Similarities, and Insights", (US Army War College, Strategic Studies Institute, May 2004) P 61
- 116. For Details see Scott Feil, "Building Better Foundations: Security in Post Conflict Reconstruction", Washington Quarterly 35: 4, (Autumn 2002) P 98
- 117. These operations included Operation Peninsula Strike, Operation Desert Scorpion, Operation Side Winder and others. In June 2003, the Sunni triangle was perceived to consist of regions north of Baghdad to Tikrit, to the West of Fallujah and Ramadi. See Thomas Donnelly, "Operation Iraqi Freedom: A Strategic Assessment", (Published by the American Enterprise Institute, Washington DC, 2003) P 103-106
- 118. Ibid 108
- 119. The Iraqi army was disbanded on May 24, 2003. Details on the implications of this decision can be found in: Jon Barnett, Beth Eggleston, Michael Webber, "Peace and Development in Post War Iraq", Middle East Policy, 10:3, (Fall 2003) P 23-27
- 120. For details on both positions See Tobby DoDge, "Iraq's Future: The Aftermath of Regime Change", Adelphi Paper 372, (March 2005) P 28-30
- 121. Dan Balz and Richard Morin, "Nation is Divided on Draw-Down of Troops", Washington Post, June 27, 2006.
- 122. Robert Kagam, "Paradise and Power", (Atlantic Books, London), 3-4
- 123. Joseph. S. Nye Jr., "Soft Power", (Public Affairs, New York, 2004), X
- 124. Ibid 27
- 125. http://www.globalsecurity.org/military/ops/iraq\_orbat\_coalition.htm
- 126. Joseph S. Nye Jr, "Soft Power", (New York, Public Affairs, 2004) P 26-27

- 127. Article 5 of the Washington treaty states The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defence recognised by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area. See http://www.nato.int/docu/basictxt/treaty.htm
- 128. Frank G Wisner II, Nicholas Plott, & Marshall M Bonton (Co-Chairs), "Afghanistan: Are we Loosing the Peace", Chairman's Report of an independent Task Force, Co-sponsored by Council on Foreign Relations and the Asia Society, (June 2003), Available at: www.cfr.org/content/publications/attachments/Afghanistan\_TF.pdf P 8-18
- 129. Quoted by Paul Wolfowizt in Nicole Genesotto, "Reacting to America", Survival 44:4, (2003-2003), P 100
- 130. By following a largely multilateral path of action the option of pre-emptive and preventive war may not be as accepting to America's traditional allies, also, while working with international society through the framework of the UN, such strategies may contradict the very fabric of international law. For a detailed analysis see, Stephen D Biddle, "American Grand Strategy After 9/11: An Assessment", (US Army War College, Strategic Studies Institute, April 2005), Available at: www.carlisle.army.mil/ssi/pdffiles/pub603.pdf
- 131. "Chinese Response to US Military Transformation and Implications for the Department of Defence", (RAND Corporation Publication, 2006) P XI XII
- 132. It should be noted that this is not an exhaustive list, and should not be treated as one. It merely aims to highlight the fact that US force transformation may provide the Indian military establishment with lessons that India may consider taking forward
- 133. K. Alan Krondstadt, "India-US Relations", CRS Issue Brief for Congress, The Library of US Congress, April 6, 2006
- 134. Sridhar Krishnaswami, "India, US Sign Framework for Defence Cooperation", The Hindu, June 30, 2005
- 135. Details can be found at K. Alan Krondstadt, "India-US Relations", CRS Issue Brief for Congress, The Library of US Congress, April 6, 2006
- 136. For details see Ibid
- 137. For a detailed analysis on General Malik's viewpoint: See General V. P. Malik 'Kargil: From Surprise to Victory', (Harper Collins Publishers India, 2006), P 183-293
- 138. According to the Goldwater Nichols Act of 1986 the positions Chairman of the Joint Chiefs of Staff, the principal military advisor the President of the USA, was established; a mandate of joint operations was created which was meant to allow the military to think in an integrated fashion. For details See Bernard Rostker, "Transformation and the Unfinished Business of Jointedness" (ed), Lynn E Davis and Jeremy Shapiro, "The US Army and the New National Security Strategy", (RAND Corporation Publication, 2003), P 129
- 139. This assessment is based on the analysis of the author and cannot be corroborated with adequate sources.
- 140. Details on the evolution of a joint doctrine can be found in: Thomas G Mahnken & James Fitz Simonds, "Revolutionary Ambivalence: Understanding Officer Attitudes Towards Transformation", International Security 28, No.2, (Fall 2003) P 112-148
- 141. Lynn E Davis & Jeremy Shapiro (Ed), The US Army and the New National Security Strategy, (RAND Corporation Publication, 2003), 135-148
- 142. General Tommy Franks, American Soldier, (New York, Regan Books, 2004) P 278
- 143. Jim Garamane, Joint Operations Key to Military Lessons Learned From Iraq, American Forces Press Service, (Washington, July 9 2003) Available at: http://www.defenselink.mil/news/Jul2003/ n07092003\_200307095.html
- 144. This point has been explicitly made in: Lt. General V.K Kapoor, "Transforming the Army for the Future" in General V. P. Malik & Brig. Vinod Anand, "Defense Planning: Problems & Prospects", (Manas Publications in Association with Observer Research Foundation, New Delhi, 2006), P 133

- 145. Details can be found in: Gurmeet Kanwal, "Cold Start & Battle Groups for Offensive Operations", Observer Research Foundation Strategic Trends, IV:18, June 5, 2006, Available at: http://www.orfonline.org/strategic/st060605.htm
- 146. These vehicles were used extensively during OEF and proved extremely useful. For a detailed analysis of imagery over Afghanistan see "Air Surveillance", Guardian Unlimited at www.guardian. co.uk/flash/0,5860,567587,00.html
- 147. Gurmeet Kanwal, "Cold Start & Battle Groups for Offensive Operations", Observer Research Foundation Strategic Trends, IV:18, June 5, 2006, Available at: http://www.orfonline.org/strategic/st060605.htm
- 148. Ibid

153. lbid

- 149. For details on softer security paradigms, See, Paul Cornish, "Transatlantic Intelligence and Security Intelligence", International Affairs, 80:4, 2004, P731-753
- 150. Quoted in Fotios Moustakis & Rudra Chaudhuri, "The Transatlantic Alliance Revisited: Does America Still Need Old Europe"?, Defense & Security Analysis, 21:4, December 2005, P 391-392
- 151. It should be noted that India's experience in Sri Lanka was at the behest of the Sri Lankan government which invited India to assist in quelling the threat posed by the LTTE
- 152. Ashton. B. Carter, "America's New Strategic Partner", Foreign Affairs, July/August 2006

• • • • • • • • • • • • •	 	 • • •

### RECENT ORF PUBLICATIONS:

- Documenting Reforms: Case studies from India, Ed. S Narayan, (ORF-Macmillan, 2006)
- Sri Lanka : Peace without process, Ed. B Raman , N.Sathiya Moorthy, Kalpana Chittaranjan, (ORF-Samskriti 2006)
- post revolutionary era, by Azarmi Dukht Safawi & AW Azhar Dehlvi, (ORF-Rupa, 2006)

• Revolution and Creativity: A survey of Iranian literature, films and art in the

Cherian Samuel, (ORF-Pearson-Longman, 2006)
 Pakistan's Nuclear Disorder: Weapons, proliferation and safety, Garima Singh, (ORF-Lancer, 2006)

• The Second Bush Presidency: Global perspectives, Ed. Amit Gupta &

- Defence Planning: Problems and Prospects, Gen V.P. Malik, Brig Vinod Anand, (ORF-Manas, 2006)
- Terrorism in Southeast Asia: Implications for South Asia, Ed. Wilson John and Swati Parashar (ORF-Pearson-Longman, 2005)
- ORF Occasional Paper The Dynamics of LTTE's Commercial Maritime Infrastructure, Vijay Sakhuja, (April 2006)
- ORF Report: Terrorist Strikes in Ayodhya and London: Lessons for the future
   ORF Issue Brief The Jihadi Factor in India-Pakistan Peace Process, Wilson
- Maoist Insurgency in Nepal, S.D. Muni, (ORF-Rupa, 2003)

John, (June 2006)

• Karachi: A terror capital in the making, Wilson John, (ORF-Rupa, 2003)

Observer Research Foundation is a public policy think-tank that aims to influence formulation of policies for building a strong and prosperous India. ORF pursues these goals by providing informed and productive inputs, in-depth research and stimulating discussions. The Foundation is supported in its mission by a cross-section of India's leading public figures, academics and business leaders.



Observer Research Foundation 20, Rouse Avenue, New Delhi-110 002 Email: orf@orfonline.org Phone: +91-11-43520020 Fax: +91-11-43520003 www.orfonline.org