**Center for Strategic and International Studies**
**Arleigh A. Burke Chair in Strategy**
1800 K Street, N.W. • Suite 400 • Washington, DC 20006
Phone: 1 (202) 775-3270 • Fax: 1 (202) 457-8746

# The Iraq War and Lessons for Counterinsurgency

**Anthony H. Cordesman**
**Arleigh A. Burke Chair in Strategy**
**acordesman@aol.com**

**With the Assistance of Eric M. Brewer and Sara Bjerg Moller**

**Working Draft, Revised: March 16, 2006**

## Executive Summary

The rising insurgency in Iraq has become a "war after the war" that threatens to divide Iraq and thrust it into full-scale civil war. It dominates the struggle to reshape Iraq as a modern state, has become a growing threat to the Gulf Region, and has become linked to the broader struggle between Sunni and Shi'ite Islamist extremism and moderation and reform throughout the Islamic world.

In military terms, the insurgency has evolved into a "long war," or war of attrition that has produced ten times as many Coalition casualties as the fight to topple the Regime and defeat Iraq's army. It is a conflict with no clear end and which can either gradually fade if the Iraqi political process and development of Iraqi forces succeeds; or suddenly divide the country in ways that no amount of Coalition effort may be able to avoid.

There is no clear or meaningful difference between insurgency and civil war, or between largely national terrorism and civil war for that matter. They are all forms of civil conflict. The insurgency in Iraq, however, has evolved over time in ways that increase the risk of intense or full-scale civil war. It is increasingly driven by sectarian and ethnic struggles, rather than national movements and causes.

The forces in insurgency include a number of of different elements. Shi'ite and Kurdish groups now dominate the government. Their militias and Shi'ite and Kurdish dominated elements of the Iraqi forces do, however, play a role in what is already a low-level civil conflict. They would play a far greater role if Iraq drifts into the kind of civil war that divides the country. There are Sunni insurgency movements, most with Ba'ath origin, that are more secular and nationalist in character, and concerned with Sunni rights and preventing Shi'ite dominance. These groups probably have a large base of popular Sunni support, but have been increasingly overshadowed by the Islamist extremists.

The current violence is dominated, however, by Sunni Islamist extremists who oppose any negotiations or arrangement with the new Iraqi government and compromise with Coalition forces. These extremists now focus more on attacking Shi'ites, Kurds, and those Sunnis who support the new government or who might participate in the political process than on Coalition forces. Nonetheless, they still attack Coalition, diplomatic, NGO, and other non-Iraqi targets. They are seeking to force the US and its allies to withdraw from Iraq, and to defeat them through a war of attrition, but their primary goal is to prevent Iraq from emerging as unified national state dominated by a Shi'ite majority

This report provides an overview of both how the Iraqi insurgency has moved towards civil conflict from its inception in the spring of 2003 through the first months of 2006, and of the ways in which insurgent tactics and methods have changed over time. It is divided into five general sections.

- The first section examines the immediate post-war aftermath and the development of a violent insurgency in the spring and summer of 2003. It shows the evolution of insurgent tactics, methods of attack and the political, psychological and informational warfare lessons from 2003-2006.
- The second chronicles developments in the nature of the insurgency and examines Coalition operations to counter it.
- The third section explores different methods to measure the insurgency including patterns of attack; the number of bombings, suicide bombings, IED attacks and act of sabotage; and the cost in blood for both U.S. soldiers and Iraqis.

- The fourth section assesses the composition of the insurgency including Iraqi Sunni Arabs, foreign jihadists, and the uncertain status of the Shi'ites. It also addresses the degree to which these factions cooperate or conflict and the role of outsiders in the insurgency.
- The fifth and final section considers Iraqi views of the threat.

## Trends in the Fighting and the Risk of More Intense Civil War

The insurgency remains highly sectarian and highly regional. It not only is driven by a relatively small number of Sunni insurgents, it is concentrated in a limited portion of Iraq. Some 83% of the attacks from August 29, 2005 through January 20, 2006 occurred in only four of Iraq's 18 provinces, although these provinces do include Baghdad and Mosul and have some 43% of the population. Twelve provinces, with over 50% of Iraq's population, have been the scene of only 6% of the attacks.

At the same time, the insurgents have shown a consistent capability attack at two major levels of operations: First, through a wide range of constant low-level methods that have a serious cumulative effect. Second, through large attacks designed to capture media attention, intimidate and kill the government's supporters, and prevent any form of normalization by provoking Shi'ite and Kurdish response and a more intense civil war. The attacks on Shi'ite targets have increasingly led to Shi'ite reprisals and broader Sunni anger and fear in response.

If one looks at the cycles in the evolving struggle, there are no clear signs that the struggle is being lost or won. For example, the number of attacks peaked to some 700 per week in October 2005, before the October 15th referendum on the constitution compared to 430 per week in mid-January. This was more a function of insurgent efforts to peak operations in sensitive periods than any outcome of the fighting. Similarly, the number of US killed has averaged some 65 per month since March 2003. The total of US killed was 96 in October 2005, 84 in November 68, in December, and 63 in January 2006.[1] This reflected shifts in the cycles of attacks and in their targets. US experts estimated that some 500 Iraqis were killed between the December 15, 2005 elections and mid-January 2006, an "average" period in US casualties.[2]

The key issue is not so much the intensity of the fighting, but rather whether the more extreme Sunni Islamists can paralyze or defeat the political process and intensity the level of civil conflict on all sides.

### Changing Patterns in Attacks on Iraqi and Coalition Targets

The insurgency is not yet "winning," although there is a serious that it may be able to paralyze political progress and create a more intense civil war. The previous data show that insurgency has not been able to increase its success rate, establish sanctuaries, win larger-scale military clashes, or dominate the field. It is active largely in only four of Iraq's 18 governorates. (Some 59% of all US military deaths have occurred in only two governorates: Al Anbar and Baghdad.)[3] Much of its activity consists of bombings of soft civilian targets designed largely to provoke a more intense civil war or halt the development of an effective Iraqi government, rather than progress towards control at even the local level. So far, the insurgency has done little to show it can successfully attack combat-ready Iraqi units, as distinguished from attacks on vulnerable casernes, recruiting areas, trainees or other relatively easy targets.

The insurgents have, however, learned and adapted through experience. They have shown the ability to increase the number of attacks over time, and they have hit successfully at many important political and economic targets. Provoking civil war and undermining the Iraqi political

process may not bring the insurgents victory, but it can deny it to the Iraqi government and the US. The Sunni insurgents continue to strike successfully at politically, religiously, and ethnically important Shi'ite and Kurdish targets with suicide and other large bombings.

The insurgents have continued to carry out a large number of successful killings, assassinations, kidnappings, extortions, and expulsions. These have included a significant increase in the number of successful attacks on Iraqi officials, Iraqi forces, and their families. Well over 2,700 Iraqi officials and Iraqi forces were killed in 2005. The Department of Defense estimated that 2,603 members of the Iraqi forces had been killed in action by October 2005, far more than the 1,506 members of US forces that had been killed in action up to that date.[4] The insurgents continue to succeed in intimidating their fellow Sunnis. There is no way to count or fully assess the pattern of such low level attacks, or separate them from crime or Shi'ite reprisals, but no one doubts that they remain a major problem.

Suicide attacks have increased, and killed and wounded Iraqis in large numbers. The number of car bombs rose from 420 in 2004 to 873 in 2005, the number of suicide car bombs rose from 133 to 411, and the number of suicide vest attacks rose from 7 in 2004 to 67 in 2005.[5] In case after case, Shi'ite civilians and Sunnis cooperating with the government were successfully targeted in ways designed to create a serious civil war.

The use of roadside bombs (improvised explosive devices IEDs) remains a major problem for US and other Coalition forces. The total number of IED attacks nearly doubled from 5,607 in 2004 to 10,953 in 2005. While the success rate of IED attacks dropped significantly, from 25-30% in 2004 to 10% in 2005, they still had a major impact. During 2005, there were 415 IED deaths out of a total of 674 combat deaths, or 61.6 % of all combat deaths. IEDs accounted for 4,256 wounded out of a total of 5,941, some 71.6% of the wounded. From July 2005 to January 2006, IEDs killed 234 US service members out of a total of 369 total combat deaths, or 63.4%. They accounted for 2,314 wounded out of 2,980 total combat wounded, or 77.7 %.

To put these numbers in perspective, IEDs caused 900 deaths out of a total of 1,748 combat deaths, or 51.5 % during the entire post-Saddam fall from March 2003 and January 2006. IEDs caused 9,327 wounded out of a total of 16,606 or 56.2%.[6] However, the numbers of personnel killed and wounded by IEDs are scarcely the only measure of insurgent success. Casualties may have dropped but the number of attacks has gone up. IED attacks tie down manpower and equipment, disrupt operations, disrupt economic and aid activity, and interact with attacks on Iraqi civilians and forces to limit political progress and help try to provoke civil war.

One other point is worth noting. There is no evidence as yet that Iraq is somehow a unique "magnet" for global terrorist activity. It certainly has a powerful political and ideological impact, and is a key source of Arab and Islamic anger. The number of foreign volunteers remains so limited, however, that Iraq must be regarded as just one of several areas of Islamic extremist activity – others include Afghanistan, Algeria, Egypt, Chechnya, Pakistan, Saudi Arabia, the Sudan, and Yemen.

**The Economic Side of the Insurgency**

The insurgents have also continued to be successful in attacking the Iraqi economy and the Coalition aid effort, as well as human targets. They have often paralyzed aid efforts, particularly in Sunni or mixed areas where such efforts might win over current or potential insurgents. They have forced a massive reprogramming of aid into short-term, security-oriented activity, and well over 20% of aid spending now goes simply to providing security for aid activity. The attacks

have done much to discourage or reduce investment and development even in the more secure governorates, and have blocked or sharply limited efforts to renovate and improve Iraq's infrastructure. They have largely prevented efforts to expand Iraq's oil exports -- its key source of government earnings.

Insurgents had carried out more than 300 attacks on Iraqi oil facilities between March 2003 and January 2006. An estimate by Robert Mullen indicates that there were close to 500 and perhaps as many as 600-700. His breakdown of the number of attacks was: pipelines, 398; refineries, 36; oil wells, 18; tanker trucks, 30; oil train, 1; storage tanks 4; and 1 tank farm. In addition, there were at least sixty-four incidents in which the victims were related to Iraq's petroleum sector, ranging from high ranking persons in the Oil Ministry to oil workers at refineries, pipelines, and elsewhere in the sector, to contract, military, police, and tribal security people. The number killed in these directed attacks reached at least 100.[7]

The end result was that oil production dropped by 8% in 2005, and pipeline shipments through the Iraqi northern pipeline to Ceyan in Turkey dropped from 800,000 barrels per day before the war to an average of 40,000 barrels per day in 2005. In July 2005, Iraqi officials estimated that insurgent attacks had already cost Iraq some $11 billion. They had kept Iraqi oil production from approaching the 3 million barrel a day goal in 2005 goal that the Coalition had set after the fall of Saddam Hussein, and production had dropped from pre-war levels of around 2.5 million barrels a day to an average of 1.83 million barrels a day in 2005, and a level of only 1.57 million barrels a day in December 2005.[8] These successes have major impact in a country where 94% of the government's direct income now comes from oil exports.

The impact of such attacks has been compounded the ability of insurgents to steal oil and fuel. The *New York Times* has quoted Ali Allawi, Iraq's finance minister, as estimating that insurgents were taking some 40 percent to 50 percent of all oil-smuggling profits in the country, and had infiltrated senior management positions at the major northern refinery in Baji: "It's gone beyond Nigeria levels now where it really threatens national security…The insurgents are involved at all levels." The Times also quoted an unidentified US official as saying that, "It's clear that corruption funds the insurgency, so there you have a very real threat to the new state…Corruption really has the potential of undercutting the growth potential here." The former oil minister, Ibrahim Bahr al-Ulum, had said earlier in 2005 "oil and fuel smuggling networks have grown into a dangerous mafia threatening the lives of those in charge of fighting corruption."[9]

**The Changing Risk of Civil War**

The mosty important change since the transfer of power from the CPA to interim government in June 2004, however, is the slow and steady evolution of the insurgency towards efforts by Sunni Islamist extremist groups to target Shi'ites, Kurds, and Sunnis in ways that provoke civil conflict.

It is important to recognize that here has been political progress in spite of the violence. The final results for the December 15, 2005 elections gave the Sunnis significant representation, in spite of complaints about fraud. The new Council of Representatives had 275 seats and the final results for the election, which were certified on February 9, 2006, gave the main parties the following number of seats: Iraq Alliance (Shi'ites), 128 seats; Kurdish coalition, 53; The Iraqi List (Secular "Allawi list"), 25; Iraqi Accordance Front (Sunnis), 44; Iraqi front for National Dialogue (Sunni), 11. The Shi'ite coalition won 47% of the 275 seats, the Kurdish coalition won 21%, the Sunni coalition won 21%, and Allawi's secular nationalists (with significant Sunni support) won

9%.[10] The final 1% of the seats went to other parties.[11] As no party won a governing majority of the seats in the parliament, a coalition government will have to be formed.

More than 12 million Iraqi's voted in the December 2005 election. Sunni turnout increased markedly from the January elections. In Nanawa and Salah ad Din, it grew from 17% and 19% respectively to 70% and 98%. In al-Anbar Province it grew from 2% in January to 86% in December. Nationally, voter turnout was 77%, an increase from 58% in January.[12] Of the 1,985 election complaints received by the Independent Electoral Commission of Iraq, only 3% were considered to have possibly affected the results. These complaints amounted to no more than 1% of the total vote, which was voided and excluded from the final count.[13]

If the December 2005 election does eventually produce an inclusive national political structure that gives Iraq's Sunnis incentives to join the government and political process, many current Iraqi Sunni insurgents are likely to end their participation in the insurgency and the more extreme elements will be defeated.

No one can deny, however, that there is a very serious risk that that the political process will fail. The insurgency has found new targets and now opportunities to drive the nation towards a more intense civil war. The formation of a government gives the insurgency a strong incentive to do everything it can to prevent any meaningful unity between Arab Sunni and Arab Shi'ite, and to provoke counter-violence and attacks by Shi'ites that will drive Iraqi Sunnis to support the insurgency. It can seek to exploit divisions and fault lines within the dominant Shi'ite coalition, and try to provoke the Kurds towards increased separatism.

So far, the constitutional referendum and the election of a new Council of Representatives in December 2005 have not brought added security or stability. They have instead exposed the depth of the sectarian and ethnic divisions in Iraq, and raised serious questions as to whether any form of unified or inclusive national government can be effective.

While some form of "national" or "inclusive" coalition government is still likely to be formed, forming a government will at best be a prelude to new problems and challenges. The new government will then have to preside over a political process that offers the insurgency a host of new issues to exploit. Once the new Presidency Council, Prime Minister, and full slate of ministers are finally in place, the new government must pass legislation to clarify and codify the new constitution. This will involve a political struggle over some 55 enabling or implementing laws that are necessary to make the constitution operative. Many are potentially divisive and give the insurgency opportunities to paralyze the Iraqi political process and provoke full-scale civil war.

The key issues involved include:

- Whether the nation should be divided into federal components by province. If this happens, it would almost inevitably be along ethnic and sectarian lines although the "Kurdish" provinces have many non-Kurdish minority elements, the "Shi'ite" provinces often have large Sunni minorities, and the "Sunni" provinces lack oil and any economic viability. Soft ethnic cleansing has already begun in many parts of Iraq, including Baghdad. "Federalism" could lead to sweeping, violent struggles over given areas and population movements.

- How the nation's oil resources and revenues should be divided and how new areas should be controlled and developed. The Kurds lack oil reserves in their present areas and clearly want Kirkuk and the northern fields. Shi'ites in the south already talk about controlling the bulk of the nation's proven reserves in central and southern Iraq. The Sunnis have potential reserves but no immediate assets, and the central government gets virtually all of its revenue from oil exports.

- Related issues over how to tax and increase Iraq's revenue base, and who should control its revenues. This includes major debates over the powers of the central government, any federal areas, the provinces, and local governments.
- The future security structure of the country, who will really control the armed forces and security forces, and control over provincial and local police forces. This is complicated by a major gap between the intent of the present constitution and the reality of national and local militias. It is further complicated by the fact that the present forces are dominated by Shi'ite and Kurdish elements, and could divide along ethnic and sectarian lines if the nation moved towards full-scale civil war.
- Debates over the role of Islamic law in the government and every aspect of civil law. These issues not only have the potential to divide religious and secular Iraqis but also could lead to struggles over whether Sunni or Shi'ite interpretations should dominate. Both Sunni and Shi'ite Islamist extremists could resort to violence if their views were not adopted.
- Basic issues over governance including the resulting power of the central government and ministries versus provincial and local power.
- Resolving the future of Baghdad, a deeply divided city exempt from being included in any federal area and where soft ethnic cleansing and the relocation of Shi'ites and Sunnis has already become a low-level civil conflict.
- Deciding on how the coming and future budgets should be spent, and how economic aid and development resources should be allocated, in an era where the national budget already exceeds revenues, and massive outside foreign aid and pools of oil for food funds will have been expended.
- Societal issues closely linked to religious differences, and basic differences over the respective role of secular human rights and law and religious law and custom.

Such issues are explosive at the best of times, but the new government and Council of Representatives must act almost immediately to form a Constitution Review Committee that must try to resolve all of these issues in the middle of an ongoing insurgency and the risk of civil war looming within a four-month period of its formation. It must then win the support of whatever government and mix of the Council of Representatives that exists when it makes its recommendations, and *if successful*, hold a referendum 60 days later. Every element of this process offers new opportunities to the insurgency if Iraq's political process divides and falters. Every milestone offers new incentives to attack, and every leader that moves towards progress and compromise will be a target.

## A New Focus on Attacks on Religious Shrines

In fact, the insurgents have already intensified their attacks on Shi'ite shrines and provoked a new level of Shi'ite response. They scored a major victory by attacking the Askariya shrine in Samarra, a Shi'ite holy landmark, on February 22, 2006. They destroyed its golden dome, although they caused no deaths.

Long before this attack, there was increasingly dangerous trend towards Shi'ite revenge killings, and violence between Shi'ite and Sunni Sunnis had already become a low-level civil war. There is no easy way to quantify the scale of such Shi'ite attacks and abuses with any precision, but no one doubts that increased significantly after the spring of 2005.

Even so, the destruction of the shrine, which housed the graves of two revered Shi'ite imams, caused an unprecedented wave of sectarian violence in Iraq. In the five days that followed, some estimated that over 1,000 Iraqis were killed, that some 300 Sunni and Shi'ite mosques came under attack, and the country seemed to be on the brink of a large-scale civil war.[14] The Iraqi

government and MNF-I have put these totals at one-third to one-half these "worst case," but the fact is that no precise numbers exist, and sectarian attacks have continued in the weeks that followed.

Government leaders did call for calm, and peaceful demonstrations were held across the Shi'ite dominated south and in ethnically mixed cities such as Kirkuk.[15] At the same time, many statements by participants and average civilians indicate that Shi'ite patience may well be wearing thin. A Shi'ite employee of the Trade Ministry summed up such views as follows: "You have a TV, you follow the news…who is most often killed? Whose mosques are exploded? Whose society was destroyed?" Another Iraqi put it differently: "We didn't know how to behave. Chaos was everywhere." Even the more moderate Shi'ite newspaper, Al Bayyna al Jadidah, urged Shi'ites to assert themselves in the face of Sunni violence. Its editorial stated that it was "time to declare war against anyone who tries to conspire against us, who slaughters us every day. It is time to go to the streets and fight those outlaws."[16]

Shi'ite religious leaders also continued to call for calm, but their message was sometimes ambiguous both in terms of words and actions. For example, the Moqtada Al-Sadr ordered his Mahdi Militia to protect Shi'ite shrines across Iraq, and blamed the U.S. and Iraqi government for not failing to protect the Askariya shrine saying, "If the government had real sovereignty, then nothing like this would have happened." In a speech from Basra, al-Sadr also called for restraint and unity amongst Iraqi's: "I call on Muslims, Sunnis and Shi'ites, to be brothers…Faith is the strongest weapons, not arms." He also publicly ordered his listeners to not attack mosques in retaliation saying, "There is no Sunni mosques and Shi'ite mosques, mosques are for all Muslims…it is one Islam and one Iraq."[17]

Despite Sadr's rhetoric, however, it appeared that his militia was responsible for at least some of the violence. Amid demonstrations and condemnations from both Sunni and Shi'ite political leaders, Shi'ite militias such as al-Sadr's Mahdi Army sought revenge against Sunni's and carried out numerous killings and attacks on Sunni mosques. Sunni groups reciprocated.

Sunni politicians have since made many charges that that Sunni mosques in Baghdad and some southern cities were attacked or actively occupied by the Mahdi Army in the days following the attacks.[18] The Association of Muslim Scholars, a hard-line Sunni clerical organization, alleged on Thursday that 168 Sunni mosques were attacked, 10 imams killed and 15 abducted.[19] The association also made direct appeals to al-Sadr to intervene and stop the violence, apparently suspecting he was a primary coordinator of the Shi'ite attacks. In early March however, U.S. government estimates put the number of mosque attacks at only 33, only nine of which were destroyed of sustained significant damage.[20] In some Sunni areas, residents, fearing attacks on their mosques, erected barricades and stood watch. In Al Moalimin district, armed men patrolled the roof of the Sunni mosque Malik bin Anas.[21]

There is no doubt that the attack and its aftermath threatened progress in forming an inclusive government. Iraqi political figures called on the country to recognize that the attack was an attempt to create a civil war and urged Iraqi's to be calm. President Jalal Talabani said the day of the attacks, "We are facing a major conspiracy that is targeting Iraq's unity…we should all stand hand in hand to prevent the danger of a civil war." President Bush echoed these sentiments saying, "The terrorists in Iraq have again proven that they are enemies of all faiths and of all humanity…the world must stand united against them, and steadfast behind the people of Iraq."[22]

The violence resulted in the announcement Thursday by the Sunni coalition party that it would suspend talks to form a coalition government and issued a list of demands. These demands, which were met shortly, and a telephone call from President Bush to the leaders of the seven major political factions urging them to reinstitute talks, brought Sunnis back to a meeting with their Shi'ite and Kurdish counterparts. Later that evening, Prime Minister al-Jaafari, accompanied by the leaders of the other major coalitions, announced at a press conference that that country would not allow itself to engage in civil war and that this was a moment of "terrific political symbolism."[23]

The reaction of Iraqi security, military and police units to the sectarian violence that followed the bombing of the Askariya shrine was considered by some in the U.S. and Iraq to be a test in how well these forces could provide security for their own country in a crises. Opinions differ greatly, however, over whether ISF forces passed this test. The MNF-I has claimed the armed forces played a major role in limiting and halting sectarian violence. Others have claimed they often allowed Shi'ite groups to attack Sunni mosques, and that the security forces and police did little to calm the violence. The data that have emerge since the attack tend to support many of the MNF-I claims, but the risks of growing divisions in the Iraqi forces, and a tilt towards the Shi'ite and Kurdish side remain all too real.

Some claim that Iraq has already reached the precipice of civil war, seen the dire consequences, and soberly held itself back. These individuals read events in late February as a "turning point" for Iraq. For others, the recent sectarian violence is a more limited "tipping point" toward a deepening civil conflict. In balance, the risks have clearly increased, but it may well be too soon for pessimistic predictions. Iraqis may have drifted toward more intense civil conflict, but the levels of violence are still comparatively limited. Moreover, for all of the political risks, there are opportunities as well and many Iraqis in every sectarian and ethnic faction understand the risks of further escalation and dividing the country.

## Insurgent Tactics and Goals

If one turns to the tactical level, many of the trends are clearer. The Sunni part of insurgency has become the equivalent of a distributed network: a group of affiliated and unaffiliated moves with well-organized cells. It is extremely difficult to attack and defeat because it does not have unitary or cohesive structure or a rigid hierarchy within the larger movements. The larger movements seem to have leadership, planning, financing, and arming cadres kept carefully separate from most operational cells in the field. Accordingly, defeating a given cell, regional operation, or even small organization does not defeat the insurgency although it can weaken it.

- The insurgency has effectively found a form of low technology "swarm" tactics that is superior to what the high technology Coalition and Iraqi forces have been able to find as a counter. It can move slowly, in cycles, and episodically, concentrating on highly vulnerable targets at the time of its choosing. Media coverage, word of mouth, and penetration into Coalition and Iraqi government operations provides both intelligence and a good picture of what tactics work in military, political, and media terms. Movements can "swarm" slowly around targets of opportunity, and rely on open source reporting for much of their intelligence and knowledge of combat effectiveness. The Internet and infiltration from other nations gives them knowledge of what tactics work from other areas. The ability to "swarm" against vulnerable civil and military targets at the time of the insurgent's choosing, and focus on political and media effects sharply reduces the need to fight battles -- particularly if the odds are against the insurgents.

- The insurgency operates both above and below the level of Coalition and Iraqi conventional superiority. It avoids battles when it can, and prefers ambushes and IED attacks that strike at Coalition and Iraqi targets with either great superiority at the local level or through remote attacks using IEDs. It attacks vulnerable

Iraqi and foreign civil targets using suicide bombings, kidnappings, assassinations, and other tactics in ways that the Coalition and Iraqi forces cannot anticipate or fully defend against. It takes advantage of substantial popular support in Sunni areas to disperse and hide among the population, forcing the Coalition and Iraqi forces to use tactics and detainments that often alienate the people in the areas where they attack or attempt to detain insurgents, while still allowing the insurgents to disperse and escape. These tactics deprive the Coalition and Iraqi forces of much of their ability to exploit superior weapons, IS&R assets, and conventional war fighting expertise, and use a countervailing strategy focused on Coalition and Iraqi government weaknesses. Coalition and Iraqi forces are adapting but are still often forced to fight the insurgency on the insurgency's terms.

- The insurgency attacks above the level of Coalition and Iraqi conventional superiority by exploiting a diverse mix of past loyalty to the Ba'ath Party, Sunni sectarianism and fears of the loss of power and resources, Iraqi nationalism against foreign occupiers and Iraq "puppets," and Islam against sectarianism. Its attacks are designed to wear down the Coalition forces through attrition and destroy their base of domestic political support. They are also designed paralyze the Iraqi government and force development effort, to prevent Iraqi Sunnis from joining the Iraqi forces and supporting the government, to provoke Shi'ite and Kurdish reactions that will further divide the country along ethnic and sectarian lines, and -- in some cases -- provoke a civil war that will both prevent Iraq emerging as a nation and divide in ways that will create a national and eventual regional struggle between neo-Salafi Islamic Puritanism and other Sunnis, Shi'ites, and secular voices. This political battle is more important to the success or failure of the insurgency than any aspect of the military battle.

The Shi’ite and Kurdish side of the insurgency assumes a  far more indirect role, and is more an actor in the low-level civil war than a player in the insurgency, but presents a serious problem. Shi’ite elements of the local police and Ministry of the Interior are attacking Sunnis and committing serious abuses. The Kurds are exploiting their control of the three provinces that made up the Kurdish enclave under Saddam Hussein in ways that give them advantages over other ethnic groups in the region, and present the threat of soft ethnic cleansing in the area of Kirkuk. The inclusiveness of the national government is at risk, as is the effort to create truly nation Iraqi forces.

## Probable Outcomes

The positive side is that that Shi'ite, Kurdish, and some key Sunni leaders still actively work for a united Iraq. More and more Iraqi forces are coming on-line, playing an active role, and taking over their own battlespace. They insurgency so far lacks major foreign support, although it does get limited amounts of money, weapons, and foreign supporters. It does not have the support of most Shi'ites and Kurds, who make up some 70-80% of the population.

*If* Iraqi forces become effective in large numbers, *if* the Iraqi government demonstrates that its success means the phase out of Coalition forces, and *if* the Iraqi government remains inclusive in dealing with Sunnis willing to come over to its side, the insurgency should be defeated over time -- although some cadres could then operate as diehards at the terrorist level for a decade or more.

The negative side is that there is a serious risk of full-scale civil war. The efforts of the insurgents to divide Iraq along sectarian and ethnic lines are having some success and are leading to Shi'ite and Kurdish reprisals that are causing fear and anger among Sunnis. Shi'ite and Kurdish federalism, mixed with the rise of Shi'ite religious factions and militias, can divide the country. The Iraqi political process is unstable and uncertain, and parties and officials are now identified (and identifying themselves) largely by sect and ethnicity. Severe ethnic and sectarian divisions exist inside the government at the national, regional, and local levels. Popular support for the Coalition presence in Iraq is now a distinct minority in every Coalition country.

In short, the odds of insurgent success at best are even. Iraq could degenerate into full-scale civil conflict or remain divided and/or unstable for some years to come. There already is limited popular support in the US and Britain for a continued military role and major new aid programs, and continued political turmoil or serious civil war could make a continued Coalition presence untenable and force US and British forces out of Iraq. It seems likely that the US will have to slow its plans to reduce its military presence, adjust to new threats, and intensify its efforts to shape effective security and police forces if it is to deal with the growing risk of civil conflict during the period in which the new government must come to grips with all of the issues raised by the constitution -- a period which now seems likely to last until at least September of 2006.

Much depends on the success of the Iraqi political process following the December 15th election, how Iraqis deal with the range of issues raised by the Constitutional referendum and need for action on its outcome once a new government takes office. Much also depends on how well Iraqi forces succeed in becoming effective at both the military and political level, and in replacing Coalition forces. Finally, much depends on the ability of the new Iraqi government to take responsibility for what happens in Iraq, lead effectively, and establish effective police and government services in the field -- all areas where previous Iraqi governments have been weak.

There is also a continuing possibility that the insurgency will drive Iraq's political and religious leaders and various elements of the Iraqi forces into warring Sunni, Shi'ite, and Kurdish factions. Even the most committed leaders may be forced to abandon the search for a national and inclusive political structure if sectarian and ethnic fighting escalates out of control. Those that do not ,may be replaced by far more extreme voices.

The new Iraqi forces can divide along ethnic and sectarian lines and much of the police and security forces already are divided in this way. There is also a risk that Iraq could bring in outside powers supporting given factions. Iran supporting Iraqi Shi'ites, the Arab Sunni states supporting Iraq Sunnis, with the Kurds left largely isolated and facing increasing problems with the Turks. Any precipitous Coalition withdrawal would greatly encourage this possibility.

## The Lessons of Complexity, Uncertainty, and Risk

Whatever happens, the US and its allies need to consider the lessons of the "war after the war" in Iraq. One key lesson is the need for ruthless objectivity and to accept the political and military complexity of counterinsurgency. Far too often, policymakers, analysts, and intelligence experts approach the subject of counterinsurgency by trying to oversimplify the situation, underestimate the risks, and exaggerate the level of control they can achieve over the course and ultimate strategic outcome of the war.

They try to deny both complexity of most counterinsurgency campaigns, and the full range of issues that must be dealt with. In doing so, many try to borrow from past wars or historical examples, and they talk about “lessons,” as if a few simple lessons from one conflict could be transferred easily to another. The end result is that -- far too often -- they end up rediscovering the same old failed slogans and over simplifications and trot out all the same old case histories without really examining how valid they are.

There is a great deal to be learned from past wars if the lessons are carefully chosen and adapted as potential insights into a new conflict rather than transferable paradigms. The Iraq War, however, is not the Afghan War, much less Mao, Malaysia, Vietnam, Northern Ireland, and the Israeli-Palestinian conflict. There is nothing to be gained from efforts to revive the same old

tactical and technical solutions, without remembering past failures. "Oil spots," "hearts and minds," "Special Forces," walls and barriers, and sensor nets are just a few examples of such efforts that have been applied to the Iraq War.

## The Need For Accurate Planning and Risk Assessment

Much has been made of the intelligence failures in assessing Iraqi weapons of mass destruction. These failures pale to insignificance, however, in comparison with the failure of US policy and military planners to accurately assess the overall situation in Iraq before engaging in war, and for the risk of insurgency if the US did not carry out an effective mix of nation building and stability operations. This failure cannot be made the responsibility of the intelligence community. It was the responsibility of the President, the Vice President, the National Security Advisor, the Secretary of State, the Sectary of Defense, and the Chairman of the Joint Chiefs.

All had the responsibility to bring together policymakers, military planners, intelligence experts, and area experts to provide as accurate a picture of Iraq and the consequences of an invasion as possible. Each failed to exercise that responsibility. The nation's leading policymakers chose to act on a limited and highly ideological view of Iraq that planned for one extremely optimistic definition of success, but not for risk or failure.

There was no real planning for stability operations. Key policymakers did not want to engage in nation building and chose to believe that removing Saddam Hussein from power would leave the Iraqi government functioning and intact. Plans were made on the basis that significant elements of the Iraqi armed forces would turn to the Coalitions' side, remain passive, or put up only token resistance.

No real effort was made to ensure continuity of government or stability and security in Iraq's major cities and throughout the countryside. Decades of serious sectarian and ethnic tension were downplayed or ignored. Actions by Saddam Hussein's regime that had crippled Iraq's economic development since the early years of the Iran-Iraq War – at time when Iraq had only 17-18 million people were ignored. Iraq was assumed to be an oil wealthy country whose economy could quickly recover if the oil fields were not burned, and transform itself into a modern capitalist structure in the process.

The nation's most senior military commanders compounded these problems by planning for the conventional defeat of the enemy and an early exit from Iraq, by making a deliberate effort to avoid "Phase IV" and stability operations. The fact they did so to minimize the strain on the US force posture, and the "waste" of US troops on "low priority" missions played a major role in creating the conditions under which insurgency could develop and flourish.

The intelligence community and civilian and military area experts may not have predicted the exact nature of the insurgency that followed. Analysis is not prophecy. They did, however, provide ample warning that this was a risk that Iraqi exiles were often failing to provide a balanced or accurate picture, and nation building would be both necessary and extremely difficult. The nation's top policymakers choose to both ignore and discourage such warnings as "negative" and "exaggerated," and to plan for success. They did so having seen the disintegration of Yugoslavia and the sectarian and ethnic problems of Afghanistan.

To succeed, the US must plan for failure as well as success. It must see the development or escalation of insurgency as a serious risk in any contingency were it is possible, and take preventive and ongoing steps to prevent or limit it. This is an essential aspect of war planning

and no Chairman of the Joint Chiefs, service chief, or unified and specified commander can be excused for failing to plan and act in this area. Responsibility begins directly at the top, and failures at any other level pale to insignificance by comparison.

This is even truer because top-level policymakers failed to recognize or admit the scale of the problem as it developed. Their failures were as much failures of reaction as prediction or contingency planning, and failures to accurately assess and react to ongoing events are far less excusable. There were no mysteries involving the scale of the collapse of the Iraqi government and security forces within days of the fall of Saddam Hussein. The reaction was slow, inadequate, and shaped by denial of the seriousness of the problem.

This situation did not improve until more than a year after the fall Saddam's regimes, and at least six months after it became apparent that a serious insurgency was developing. Major resources did not flow into the creation of effective Iraqi forces until the fall of 2004. The US aid effort behaved for nearly a year and a half as if insurgency was truly a small group of diehards or "terrorists." Even in late 2005, top US civilian policymakers split hairs over semantics to try to even avoid the word insurgency, failed to perceive that many Sunni Arab Iraqis see such an insurgency has legitimate causes, and chose to largely publicly ignore the risks of civil conflict and the developing problems in Shi'ite forces and political structures.

The US denied risks and realities of the Vietnam War. European powers initially denied the realities that forced them to end their colonial role. Israel denied the risks and realities of striking deep into Lebanon and seeking to create a Christian-dominated allied state. Russia denied the risks and realities of Chechnya in spite of all the brutal lessons of having denied the risk and realities of Afghanistan.

The failure to learn the need for accurate characterization of the nation and region where counterinsurgency may -- or does -- exist seems to be a constant lesson of why nations go to and stay at war. The failure to plan for risk and failure as well as success is equally significant. Ruthless objectivity is the cheapest solution to be preventing and limiting insurgency, and planning and deploying for the full range of stability operations and nation building is an essential precaution wherever the stakes are high and the risk is significant.

## The Limits of "Oil Spots"

The "oil spot" theory, for example, is useful if it simply means securing key populated areas and allowing local governance to become effective and people to feel secure enough to see the insurgents as defeatable. Winning hearts and minds does not mean persuading people to accept constant daily threats and violence. The creation of safe areas is critical. Success in Iraq, and many other campaigns, will depend heavily on finding the right trade-offs between creating safe areas and aggressively pursuing the enemy to prevent the insurgents from creating safe areas of their own and attacking the safe area of the Iraqi government and Coalition.

At a different level, however, "oil spots" are simply one more slogan in a long list of such approaches to counterinsurgency. Iraq is not atypical of many insurgencies in the fact that the key areas where insurgencies are active are also centers of ethnic and sectarian tension, and that the insurgency within these areas is also a low-level civil war.

In cities like Baghdad and Mosul, the most important potential "oil spots," it simply is not practical to try to separate the constant risk of more intense civil conflict from defeating the

insurgency. Sectarian and ethnic conflict has intensified in spite of local security efforts, and a concept that ultimately failed in Vietnam is in many ways simply not applicable to Iraq.

Neither option can really be chosen over the other. Worse, in a highly urbanized country – where many major urban areas and their surroundings have mixed populations and the insurgency can exploit serious ethic and sectarian tensions -- creating coherent safe areas in major cities can be difficult to impossible. Rapid action tends to force the US to choose one sect or ethnic group over others. It also presents major tactical problems in the many mixed areas including Iraq's major cities. It is far from clear whether it is even possible to guard any area against well-planned covert IED and suicide bombing attacks, or make it feel secure unless enough political compromise has already taken place to do a far better job of depriving insurgent of popular support.

Creating secure "oil spots" in sectarian and ethnic based insurgencies like the Iraqi War also requires effective local governance and security forces. US and allied Coalition forces cannot create secure areas because they are seen as occupiers and lack the area expertise, language skills, HUMINT, and stable personal contacts to know if the insurgents are present or the area is really secure. Iraq is a good example of a case where an ally may be able to eventually make areas secure, but where the political dimension is critical, and Coalition forces cannot solve either the security or political problem without a local ally's aid.

## The Limits of Technology and Western "Swarm" Techniques

An honest assessment of the insurgent Iraq War, and particularly of its political and ideological dimensions, also illustrates that technology is not a panacea even for the warfighting part of the conflict. This is particularly true when the insurgency is far more "human-centric" than net-centric and when insurgency is mixed with civil ethnic and sectarian conflict

For example, sensors, UAV, and IS&R can have great value in Iraq, just as they did in Vietnam and South Lebanon, but they are anything but “magic bullets.” The unattended ground sensor program in Vietnam was once touted as such a magic bullet but took less than a year to defeat. Decades later, the Israelis tried using UAVs and unattended ground sensors in Southern Lebanon, and developed a remarkable amount of statistical evidence and technical data to indicate a more modern approach *would* work. In practices, the IDF's efforts led Hezbollah to develop more sophisticated tactics and IEDs at a fraction of the cost of the Israeli detection and defense effort, and Israel was eventually defeated. Both experiences are warnings about the limits of technology.

At a different level, the informal distributed networks and "swarming" of the Iraqi insurgents is a serious warning about the limits of technology-based efforts to rely on high technology formal networks and "swarming" of the kind Australia choose in its Complex Warfighting doctrine, and efforts to use small, semi-autonomous combat elements that can suddenly come together and "swarm" an enemy concentration with a mix of different joint force elements integrated by modern IS&R systems and battle management. This may work where the insurgency is small, and where the population is neutral, favorable to the outside force, and/or hostile to the insurgents. The Iraq War shows that it has very acute limits in a more modern state where political and military conditions are far less favorable.[24]

The same is true of the British Future Land Operating Concept (FLOC) and so-called C-DICT (Countering Disorder, Insurgency, Criminality and Terrorism) approach. It is certainly wise to adopt a "system centric" approach that combines the human element, all elements of joint forces,

and tailored IS&R and battle management. But, this is no solution to force density problems or the challenges raised by an insurgency that can still attack both below and above the level of operations that FLOC forces can use. It is a useful tool, but scarcely an answer to ideological and political warfare where the insurgent operates against different targets at a different pace, and large elements of the population support the insurgency and/or are hostile to the counterinsurgents. Under these conditions, a foreign force with a different culture and religion can use such an approach to aid a local ally but cannot win on their own.

The US Army and Marine Corps approach to "distributed operations," and approaches to "counterinsurgency," "small wars," "a modular army," and "pacification" come up against the same basic problem in a case like Iraq. Like the Australian and British approaches, they can have value under the right conditions. They become dangerous and self-defeating, however, the moment tactics and technology become ends in themselves, and the dominance of political and cultural factors are ignored. Mao's description of the people as a sea that insurgents can swim in, indistinguishable from all those around them, is no universal truth but it is a warning that in many cases, only allied forces and allied governance can prevent the outside force from losing to a vastly cheaper and smaller force simply because it is perceived as a crusader or occupier and the insurgency does not face an effective local government or mix of local forces.

## The "Undrainable Swamp"

These political risks illustrate another lesson that Iraq teaches about both counterinsurgency and counterterrorism. Many analysts have suggested that the key to victory is to remove the causes of terrorism or insurgency, to remove popular support for such movements and give terrorists and/or insurgents' incentives to join civil society. In short, to "drain the swamp."

The fundamental wisdom of such an approach is undeniable, but everything depends upon its feasibility. In Iraq's case, in Vietnam, and in many other cases, the problem is that the US cannot drain the swamp. It is dealing with a foreign country, different religions and ideologies, and different goals and values. It is perceived by a significant percentage of the people as an invader, occupier, neo-colonial power, "crusader," or simply as selfishly serving its own strategic interests. Language alone presents serious problems, and American public diplomacy is too ethnocentric to be effective.

The US can encourage political, economic, and social reform, but cannot implement it. Like Iraqis, people must find their own leaders, political structures, and methods of governance. The US lacks basic competence in the economics of nation building in societies whose economic structures, ability to execute reforms and projects, and perceived values differ significantly from its own. Different cultures, human rights practices, legal methods, and religious practices can be influenced to evolve in ways the US sees as positive, but there are no universal values, and the US cannot shape a different nation, culture, or religion.

In many cases, the sheer scale of the problem is also a major factor. Demographic, ethnic, and sectarian problems can take a generation or more to fully solve. Decades of economic failure, neglect, and discrimination can also take a decade or more to fix. A lack of rule of law, working human rights, pragmatic and experienced leaders and political parties cannot be fixed by a few years of outside aid and education.

It should be stressed that this in no way means that the US cannot exert tremendous influence during a major counterinsurgency or counterterrorism campaign, or that the US should not seek reform and change. But, the swamp will almost always be undrainable unless a host government

and power-set of local political movements drives the process. Religious, cultural, and ideological reform must come largely from within. The local populace must see the reason for economic reform, and believe in it enough to act. Governance and security must be largely local to be perceived as legitimate. Equally important, if the swamp can be drained, the process will generally take so long that a US counterinsurgency campaign will be lost or won long before the process is completed.

The US failed to act on these realities in Vietnam. It began the Iraq War by rejecting them, and greatly strengthened the insurgency in the process while wasting critical months before it made effective efforts to help the Iraqis help themselves. More than two years after the "end" of the war, it still has not shaped an aid process focused around the Iraqis, local methods, local needs, and local methods and execution. Part of an effective counterinsurgency strategy is to honestly assess all of the underlying causes that sustain an insurgency, know what the US can credibly hope to do to address them, understand that the US will only be effective if local leaders can help themselves, and face the fact that so much time will be needed to fully deal with such problems that the US can normally only hope to start the process of reform and removing underlying causes during the duration of most counterinsurgency campaigns.

## The Limits of Cheerleading and Self-Delusion

There is no way to avoid the fog of war, but there is no reason to make it a self-inflicted wound. Counterinsurgency cannot be fought on the basis of political slogans, official doctrine, ideology, and efforts to spin the situation in the most favorable terms. Unless warfighters and policymakers honestly address the complexity, unique characteristics, and risks and costs of a given conflict, they inevitably come up with solutions that, as the old joke states, are "simple, quick and wrong." History shows all too clearly that this "simple, quick and wrong" approach is how Americans have created far too many past problems in US foreign policy, and that it is a disastrous recipe for war. In retrospect, fewer US failures occurred because it lacked foresight, than because it could not resist praising itself for progress that did not really exist and choosing simplicity at the expense of reality.

To use another old joke, Iraq is another case where Americans have tended to treat counterinsurgency as if were a third marriage, "a triumph of hope over experience." The prior history of the insurgency shows that the US began by underestimating the scale of the problems it really had to face and just how many resources, how much time, and how expensive in dollars and blood the cost would be. Counterinsurgency campaigns cannot be based on hope and best cases if the US wants to win. American policy and military planners have to examine all of the variables, prioritize, and be very careful about the real-world importance of any risks and issues they dismiss. They must be ready for the near certainty of major problems and gross failure in unanticipated areas.

The reality is that counterinsurgency warfare is almost always a "worst case" or nations like the US would not become involved in it in the first place. The US and other Western states become involved in counterinsurgency because an ally has failed, because a friendly nation has failed or because diplomacy and foreign policy have failed. Almost by definition, counterinsurgency means things have already gone seriously wrong.

## The New Fog of War and the "Law of Unattended Consequences"

Iraq is one more illustration of the reality that the "fog of war" evolves at the same rate as technology and tactics. Regardless of success in battle, no country can afford to ignore the fact

that the course and outcome of counterinsurgency wars is inevitably affected by the "law of unintended consequences." Risk analysis is remarkably difficult, because risk analysis is based on what we think we know going in, and that set of perceptions almost invariably proves to be seriously wrong over time. Both allies and enemies evolve in unpredictable ways. Political, social and economic conditions change inside the zone of conflict in ways the US and its allies cannot anticipate.

Wars broaden in terms of the political impact on regions and our global posture. Conflict termination proves to be difficult to impossible, or the real-world outcome over time becomes very different from the outcome negotiators thought would happen at the time. The reality proves far more dynamic and uncertain than is predicted going in; the fight requires far more time and resources necessary to accomplish anything than operators plan for.

All planning for counterinsurgency warfare must be based on the understanding that there is no way to eliminate all such uncertainties, and mistakes will inevitably be made that go far beyond the ones that are the result of political bias or ideology. There are some who would believe that if only planners and analysts could work without political bias or interference, this would solve most of counterinsurgency problems. In reality, even the best planners and analysts will face major problems regardless of their political and military leadership. The scale of ignorance and uncertainty will inevitably be too great when we enter most counterinsurgency contingencies. The US and its allies must accept this as part of the price of going to war.

It is frightening to look back at the almost endless reams of analyses, plans, and solutions that people advanced in war colleges, think tanks and universities during the Vietnam War, El Salvador and Lebanon. Vietnam may have represented the nadir of American analysis, planning, and objectivity. However, Somalia, the Dayton accords, and Iraq also represented a failure to analyze the situation properly. Even when the US analyzed well, it failed to translate this analysis into effective counterinsurgency plans and operational capabilities within the interagency process.

Moreover, time and again, the US drifted into trying to win in tactical terms rather than focusing on how it could achieve the desired national, regional, and grand strategy outcome. It forgot that it is only the endgame that counts, and not the means. It also forgets that slogans and rhetoric, ideology, and a failure to fully survey and assess ultimately all become a source of self-inflicted wounds or friendly fire.

## The Lesson of Strategic Indifference; Of Knowing When to Play -- and When Not to Play, the Counterinsurgency Game

The seriousness of the insurgency in Iraq, and the costs and risks imposed by such a comparatively small insurgent force with so many tactical limitations, also raise a lesson the US seem to repeatedly learn at the end of counterinsurgency campaigns and then perpetually forget in entering into the next conflict. Not every game is worth playing, and sometimes the best way to win is not to play at all—even if this does mean years of instability and accepting the uncertainties of civil conflict

It is far easier to blunder into a war like the Iraq War than blunder out. It is easy to dismiss the risks of becoming bogged down in local political strife, ignore the risks of counterinsurgency, and civil conflict, downplay economic and security risks, and mischaracterize the situation by seeing the military side of intervention as too easy and the political need for action as too great.

It is far too easy to exaggerate the threat. It is equally easy to both exaggerate the ability of a counterinsurgency campaign to achieve a desired strategic outcome and ignore the fact that history is often perfectly capable of solving a problem if the US does not intervene.

Personal anecdotes can lead to dangerous overgeneralizations, but they can also have value. A few years ago, I toured Vietnam, and saw from the Vietnamese side their vision of what had happened in the war. There were many tactical and political lessons I drew from that experience, one of which was how thoroughly we ignored what was happening to Buddhist perceptions and support at the political level while we concentrated on the tactical situation and the politics of Saigon.

The lesson I found most striking, however, was seeing the grand strategic outcome of the war as measured by even the most trivial metrics. I bought a bottle of mineral water in Hanoi airport and discovering that on the front label it said "USA Water," while its back label stated that it had been processed through a 14-step process developed by NASA. When I looked at the toy counter, I saw that the bulk of toys consisted of US fighters or fighters with US marking. When I walked over to the news counter, I saw the "Investor's Journal" in Vietnamese and English. This was after being told repeatedly how glad the Vietnamese were that we stayed in Asia as a deterrent to China. We were right in many ways about the domino theory, we just forgot that dominoes could fall in two directions.

## Is Counterinsurgency the Right Means to the End?

This raises another lesson the US needs to carefully evaluate in dealing with future security problems and crises. Even if the game is worth playing, counterinsurgency may not be the way to play it, particularly if the nation is divided along sectarian, ethnic, or tribal lines in ways where there is no clear "good side" or positive force for change. Robert Osgood made the point a long time ago that when a nation engages in limited war, it does it for limited purposes. If a nation cannot keep the war and the purposes limited, it should not engage. History shows that it is amazingly easy to forget this. There are times when a counterinsurgency campaign is necessary or will be forced on the US from the outside, but there are many times when the US has a choice of the means it can use to achieve a given end, and can choose options other than counterinsurgency.

Containment is one such option. Every reader will have to decide for him or herself if they had known when the Coalition went into Iraq what they know today, whether they would still have rejected containment as the option? If one considers military involvement in Iran or Syria, the same issues arise as to whether containment and diplomacy are quite that bad a choice versus expanding a limited war or regime change -- at least by force?

If containment is not a substitute for counterinsurgency, the US must ask whether it should take advantage of military options where it retains advantages insurgents cannot counter: the ability to carry out selective strikes with limited cost. Placing US forces on the ground where they must conduct a major counterinsurgency or counterterrorism campaign is far more costly and risk-oriented than using limited amounts of force in precision strikes or other carefully limited forms. Sanctions and sustained political pressure often have severe limits, but they too can sometimes achieve the desired result in ways that are less costly than counterinsurgency.

Even when a counterinsurgency or counterterrorism campaign is necessary, using US forces may often be the wrong answer. It is true that the US will normally only consider engaging in counterinsurgency because the nation it is going to fight is weak or divided. Far too often,

however, we seem to commit our forces to combat. In many cases, it will still be better to rely on the local ally and build up their forces, even if this means a higher risk of losing in what is, after all, a limited war.

No nation is every likely to stay a "failed nation." This does not mean, however, that the US can "fix" any given country in the face of massive political and social divisions, economic weakness or collapse, and/or ideological and religious turmoil. The world's worst problems are its most tragic problems, but this does not mean that the US can decisively change them with affordable amounts of force, aid, and efforts at political reform. If anything, Iraq is a warning that the US does not know how to measure and characterize the risks of intervention, is not structured to combine nation building and counterinsurgency on a massive scale, and cannot impose its system and values on another people unless they actually want them. In retrospect, the US could almost certainly have done far more good spreading the same resources among the nations and peoples where they would have had real benefits, and by concentrating on the wars it actually had to fight.

At the same time, these are questions that events in Iraq may still answer in ways that give both the Coalition and the Iraqi people enough of a victory to defeat the insurgency. The right answer in future crises may never be clear, easy to choose, or be the same for different crises and problems. It is also important to emphasize, that that the lessons of Iraq are scarcely that the US should not use and improve its counterinsurgency techniques. It is rather a warning that the US and other powers should only engage directly in counterinsurgency after it assesses the costs, risks, ability to achieve the desired end objective, *and alternative means* honestly and in depth.

## Counterinsurgency Does Not Always Mean Winning

There is a grimmer lesson from the evolution of the insurgency in Iraq. It is a lesson that goes firmly against the American grain, but it is a natural corollary of limited war. If the course of the political and military struggle shows the US that it cannot achieve the desired grand strategic outcome, it needs to accept the fact that the US must find ways to terminate a counterinsurgency war. Defeat, withdrawal, and acceptance of an outcome less than victory are never desirable in limited war, but they are always acceptable. For all the arguments about prestige, trust, and deterrence, there is no point in pursuing a limited conflict when it becomes more costly than the objective is worth or when the probability of achieving that objective becomes too low.

This is a lesson that goes against American culture. The whole idea that the US can be defeated is no more desirable for Americans than for anyone else, in fact, almost certainly less so. But when the US lost in Vietnam it not only lived with the reality, it ultimately did not suffer from it. When the US failed in Lebanon and Haiti, it failed at almost no perceptible cost. Exiting Somalia was not without consequences, but they were scarcely critical.

This does not mean that the US should not stay in Iraq as long as it has a good chance of achieving acceptable objectives at an acceptable cost. But, it does mean that the US can afford to lose in Iraq, particularly for reasons that are frankly beyond its control and which the world will recognize as such. There is no point in "staying the course" through a major Iraqi civil war, a catastrophic breakdown of the political process, or a government coming to power that simply asks us to leave. In all three cases, it isn't a matter of winning or losing, but instead, facing a situation where conditions no longer exist for staying.

## Telling the Truth About Risks and the Value of Strategic Objectives

In the future, the US will need to pay far more attention to the option of declaring that it is fighting a limited war for limited objectives if it really is a limited war. It may well need to fully explain what the limits to its goals and level of engagement are and develop a strategy for implementing, communicating and exploiting these limits. One mistake is to tell the host government, or the people you are fighting with, that your commitment is open-ended and that you can never leave; the incentive for responsibility vanishes with it.

Similarly, if you tell the American people and the world that a marginal strategic interest is vital, the world will sooner or later believe it, which is very dangerous if you have to leave or lose. You are better off saying you may lose, setting limits, and then winning, than claiming that you can't lose, having no limits, and then losing. This should not be a massive, innovative lesson, but it is one we simply do not seem prepared to learn.

## If the US Must Fight a Counterinsurgency Campaign, It Must Focus Firmly on the Strategic, Political, and Allied Dimension of the Fighting

The evolution of the insurgency in Iraq is yet another lesson in the fact that focusing on the military dimension of war is an almost certain path to grand strategic defeat in any serious conflict, and particularly in counterinsurgency in a weak and divided nation. If the US must engage in counterinsurgency warfare, and sometimes it must, then it needs to plan for both the complexity and cost of successful conflict termination and ensuring a favorable grand strategic outcome. It must prepare for the risk of long-term engagement and escalation, civil war and ethnic and sectarian conflict, and risks that will require more forces and resources. If such "long wars" are too costly relative to the value of the objective, the US must set very clear limits to what it will do based on the limited grand strategic value of the outcome and act upon them -- regardless of short-term humanitarian costs.

The US needs to prepare for, and execute, a full spectrum of conflict. That means doing much more than seeking to win a war militarily. It needs to have the ability to make a valid and sustainable national commitment in ideological and political terms. It must find ways of winning broad local and regional support; stability operations and nation building are the price of any meaningful counterinsurgency campaign.

### The US Normally Cannot Win Serious Counterinsurgency Wars Unless It Creates an Ally and Partner Who Can Govern and Secure the Place Where the US is Fighting.

Iraq, like so many other serious Post-WWII insurgencies, shows that successful counterinsurgency means having or creating a local partner that can take over from US forces and that can govern. Both Vietnam and Iraq show the US cannot win an important counterinsurgency campaign alone. The US will always be dependent on the people in the host country, and usually on local and regional allies. To some extent, it will be dependent on the quality of its operations in the UN, in dealing with traditional allies and in diplomacy. If the US can't figure out a way to have or create such an ally, and fight under these conditions, a counterinsurgency conflict may well not be worth fighting.

This means the US must do far more than creating effective allied forces. In most cases, it will have to find a way to reshape the process of politics and governments to create some structure in the country that can actually act in areas it "liberates." Pacification is the classic example. If the US or its allies can't deploy allied police forces and government presence, the result is far often to end up with a place on the map where no one in his right mind would go at night.

## Economics and Counterinsurgency: Dollars Must Be Used as Effectively as Bullets

The US must be prepared to use aid and civic action dollars as well as bullets, and the US military has done far better in this area in Iraq than it has in the past. Unfortunately, the history of the insurgency shows that the same cannot be said for USAID in Washington, or for any aspect of the economic planning effort under the CPA. The US ignored the economic and related political and cultural realities of nation building going into Iraq and ignores the economic realities now.

Every independent assessment of the US aid effort warns just how bad the US performance has been in these areas -- even in critical areas like the oil industry. The US has now spent or committed its way through nearly $20 billion, and has virtually no self-sustained structural economic change to show for it. Most aid projects spend more money on overhead, contractors, and security than gets to Iraqis in the field. It can't protect most of its aid projects; for too much of post-March 2003 Iraqi economic "growth" has been illusory and comes from US waste and wartime profiteering.

Self-congratulatory measures of achievement are mindless. Who cares how much money the US spends or how many buildings it creates, unless this effort goes to the right place and has a lasting impact. The number of school buildings completed is irrelevant unless there are books, teachers, furniture, students and security, and the buildings go to troubled areas as well as secure ones. Bad or empty buildings leave a legacy of hostility, not success. Empty or low capacity clinics don't win hearts and minds. Increasing peak power capacity is meaningless unless the right people actually get it.

## Long Wars Mean Long Plans and Long Expenditures

The US announced on February 4th that its new Quadrennial Defense Review was based on a strategy of long wars, and an enduring conflict with terrorists and Islamist extremists. As the Iraq War and so many similar conflicts have shown, "long wars" can also take the form of long nation buildings, long stability operations, and long counter insurgencies. This means they can only be fought with patience, over a period of years, and with sustained investment in terms of US presence, military expenditures, and aid money.

In the case of Iraq, virtually every senior officer and official came to realize by 2005 that a short campaign plan had failed to prepare the US and Coalition for a meaningful effort, helped create a serious insurgency, and led to a situation that cost thousands of additional killed and wounded and meant tens of billions of addition dollars were needed to have any chance of success. Talk of major reductions in US forces moved to end-2006, and many experts talked about 2007. Most senior serving officers privately talked about a major advisory and combat support effort through 2010. A "three month" departure had turned into what threatened to be a decade-long presence *if* the US and its allies were to succeed. Estimates of total costs in the hundreds of billions of dollars that senior officials in the Bush Administration had dismissed in going to war had already become a reality, and the US was well on its way to a war that would cost at least 3,000 dead and 20,000 wounded.

The message is clear. Any plan for counterinsurgency and stability operations must include years of effort, not months. Spending plans for military operations and all forms of aid must be shaped accordingly. The American tendency to begin operations with the same plan for immediate success -- "simple, quick, and wrong" -- needs to be replaced with an honest assessment of the fact that history takes time. The tendency to oversell the ease of operations, demand quick and

decisive success, is a natural one for both policymakers and senior military officers. It is also a path to failure and defeat. At best, it is likely to be paid for in unnecessary body bags and billions of dollars.

## Honestly Winning the Support of the American People

The sharp gap between the evolution of the insurgency described in the preceding analysis, and the almost endless US efforts to use the media and politics to "spin" a long and uncertain counterinsurgency campaign into turning points and instant victory, has done America, the Bush Administration, and the American military great harm. Spin and shallow propaganda loose wars rather than win them. They ultimately discredit a war, and the officials and officers who fight it.

Iraq shows that it is critical that an Administration honestly prepares the American people, the Congress and it allies for the real nature of the war to be fought. To do so, it must prepare them to sustain the expense and sacrifice through truth, not spin. But there is only so much shallow spin that the American people or Congress will take. It isn't a matter of a cynical media or a people who oppose the war; rubbish is rubbish. If the US "spins" each day with overoptimistic statements and half-truths, it embarks on a process that will sooner or later deprive itself of credibility -- both domestically and internationally.

Iraq is also yet another warning that serious counterinsurgency campaigns often take five to fifteen years. They don't end conveniently with an assistant secretary or a President's term in office. Again and again we deny the sheer length of serious counterinsurgencies. Planners, executers, and anyone who explains and justifies such wars needs to be far more honest about the timescales involved, just how long we may have to stay, and that even when an insurgency is largely over, there may be years of aid and advisory efforts.

## Lessons for Warfighting

Finally, this analysis of the insurgency raises lesson about warfighting, that go beyond the details of military strategy and tactics, and provide broader lessons that have been surprisingly consistent over the more than 40 years from Vietnam to Iraq.

- **First, warfighters must focus relentlessly on the desired outcome of the war and not simply the battle or overall military situation**. In strategic and grand strategic terms, it doesn't matter how well the war went last month; it doesn't matter how the US is doing tactically. The real question warfighters must ask is whether the US is actually moving toward a strategic outcome that serves the ultimate interests of the US? If warfighters don't know, they should not spend the lives of American men and women in the first place.

  The US, and any military force engaging in counterinsurgency warfare, should teach at every level that stability operations and conflict termination are the responsibility of every field-grade officer. (And, for that matter, every civilian.) Warfighters need to act on the principle that every tactical operation must have a political context and set of goals. The US needs to tie its overall campaign plan to a detailed plan for the use of economic aid at every level, from simple bribery to actually seeking major changes in the economy of a given country.

- **Second, warfighters need to understand, as Gen. Rupert Smith has pointed out, and as Iraq has shown, that enemies will make every effort to try to win counterinsurgency conflicts by finding ways to operate below or above the threshold of conventional military superiority**. It is stupid, as some in the US military have done, to call Iraqi insurgents cowards or terrorists because they will not fight on our terms. The same remarkably stupid attitudes appeared in 19th century colonial wars and often cost those foolish enough to have them the battle. The Mahdi's victories in the Sudan are a good case example.

  The US has to be able to fight in ways that defeat insurgents and terrorists regardless of how they fight. Insurgents are not cowards for fighting us in any way that does so at the highest cost to us and the least cost

to them. If they can fight below the US threshold of conventional superiority, then technology is at best a limited supplement to US human skills, military professionalism, and above all, our ability to find ways to strengthen local allies.

It is far more important, for example to have effective local forces than more technology. Net-centric is not a substitute for human-centric, and for that matter, human-centric isn't a substitute for competent people down at the battalion level. Systems don't win. Technology doesn't win.

- **Third, warfighters and their political leaders need to acknowledge that enemies can fight above the threshold of US conventional ability, not just beneath it.** The character of America's political system, culture, and values are not the answer to winning the political and ideological dimension of many counterinsurgency campaigns. There is no reason Americans should think *they* can win an ideological struggle over the future of Islam and/or the Arab world. Our Muslim and Arab allies, in contrast, may well be able to win this struggle, particular if the US works with them and not against them.

  US public diplomacy and political actions can have a major impact in aiding counterinsurgency and counterterrorism. But, Iraq shows that the local, cultural, ethnic, religious, and political issues have to be fought out in such wars largely by our ally on the ground and other Islamic states. The US can help, but cannot win, or dominate, the battle for hearts and minds. Moreover, only regional allies with the right religion, culture, and legitimacy can cope with the growing ability of ideologically driven opponents to find the fault lines that can divide us from local allies by creating increased ethnic and sectarian tensions.

- **Fourth, although the US does need to improve its counterinsurgency technology, it cannot win with "toys."** Technology is a tool and not a solution. Israeli technology failed in Lebanon as US technology did in Vietnam, and some of the same IED systems that helped defeat Israel have now emerged in Iraq: twin IR sensors, shaped charges, radio-controlled devices, and foam painted to look like rocks. Like Israel, the US can use technical means to defeat many IEDs, but not enough. Moreover, it is possible that the total cost of every insurgent IED to date is still lower than that cost of one AH-1S that went down over Iraq.

- **Fifth, the force must have the right balance of numbers and expertise.** Many have argued since the beginning of the Iraq War that the Coalition needed far more manpower for stability operations. This is a solution to some problems, where a simple security presence will deter terrorism and the growth of an insurgency. It is, also, however, a dangerous illusion in other cases. Large numbers of forces that will never have the right language and area skills with any serious proficiency, which lack the necessary specialist training, and have a different culture and religion will simply compound local resentments and the feeling the US or US-led force is at best an occupier and at worst an enemy. "Stabilizers" can easily become targets, and deployed large numbers of forces means more incidents with the local population, more problems in getting the host country to take responsibility, the growth of more rear-area military bureaucracy, and dealing with large number of no or little-purpose troops that need to be protected.

  At the same time, too few ordinary troops can be equally dangerous, particularly in establishing initial security and presence. Small elites cannot do large or routine jobs. There must be enough military and civilians in country to establish basic security. There is no point in wasting Special Forces, translators, military police, counterinsurgency and counterterrorism experts, civil-military experts and other scarce elite forces in "presence" and "support" missions.

  Finding the right balance will be difficult and case specific, and must deal with contingency risks and not simply the outcome policymakers and military planners want. The key to success is to fit the force to the case, and not to the desire or the doctrine.

- **Sixth, the best "force multiplier" will be effective allies, and interoperability with a true partner.** If it is true that the US can win most counterinsurgency campaigns if it creates strong allies, the US must act decisively on this principle. US victories will often only be a means to this end. The real victories come when the US has allied troops that can operate against insurgents in the field, and a friendly government to carry out nation building and civil action activities at the same time. The US really begins to win when it can find ways to match the military, political, economic, and governance dimension.

  Creating a real partnership with allies also means respect; it doesn't mean creating proxies or tools. It means recognizing that creating the conditions for effective governance and police are as important as the military. So is the creation of effective ministries. Iraq shows all too clearly that this kind of warfare, if you

focus on the ministry of defense and ignore the ministry of the interior or the ministry of finance, just doesn't work.

In most places, the actual counterinsurgency battle is local and as dependent on police and effective governance as effective military forces. In hyper-urbanized areas, which represent many of the places where we fight, the city is the key, at least as much as the national government. Incidentally, Iraq has already shown time after time that it is difficult to sustain any victory without a lasting presence by local police and government offices

- **Seventh, political legitimacy in counterinsurgency is measured in local terms and not in terms of American ideology.** Effective warfighting means the US must recognize something about regional allies that goes against its present emphasis on "democracy." In most of the world, "legitimacy" has little to do with governments being elected, and a great deal to do with governments being popular.

  By all means, hold elections when they do more good than harm. But bringing the people security, the rule of law, human rights, and effective governance is far more important. In many cases, elections may be disruptive or bring people to power that are more of a problem than a solution. This is particularly true if elections come without the preconditions of mature political parties, economic stability, a firm rule of law, and checks and balances. In most cases, the US and its allies will still need to worry about the people who don't win—people, ethnicities, and sects who will not have human rights protection. (If anyone thinks there is a correlation between democracy and human rights, congratulations, they got through college without ever reading Thucydides. The Melian dialogue is the historical rule, not the exception.)

- **Eighth, the US needs to have a functional interagency process and partner our military with effective civilian counterparts.** Iraq has shown that political leaders and senior military cannot afford to bypass the system, or to lack support from the civilian agencies that must do their part from the outset. The US needs to begin by deciding on the team it needs to go to war, and then make that team work. It is one of the oddities historically that Robert McNamara got his largest increase in US troops deployed to Vietnam by bypassing the interagency process. The Bush Administration began by going through an interagency process before the war, but largely chose to ignore it after January of 2003.

  This is the wrong approach. Counterinsurgency wars are as much political and economic as military. They require political action, aid in governance, economic development and attention to the ideological and political dimension. The US can only succeed here if the interagency process can work.

  At another level, the US needs civilian risk-takers. It needs a counterpart to the military in the field. There is no point in supporting the staffing of more interagency coordination bodies in Washington unless their primary function is to put serious resources into the field. The US is not going to win anything by having better interagency coordination and more meetings, unless the end result is to put the right mix of people and resources out in the countryside where the fighting takes place.

  The US needs to put a firm end to the kind of mentality that overstaff the State Department and intelligence community in Washington, and doesn't require career civilians to take risks in the field. Foreign Service officers should not be promoted, in fact should be selected out, unless they are willing to take risks. The US can get all of the risk takers we want. There already is a flood of applications from qualified people. It can also ensure continuity and expertise by drawing on the brave group of people already in Iraq and Afghanistan -- a remarkable number of whom are already contract employees -- and giving them career status.

  In the process, the US also needs to "civilianize" some aspects of its military. It needs to improve both their area and language skills, create the added specialized forces it needs for stability and nation building operations, and rethink tour length for military who work in critical positions and with allied forces. Personal relationships are absolutely critical in the countries where the US is most likely to fight counterinsurgency wars. So is area expertise and continuity in intelligence.

  Counterinsurgency needs a core of military and civilians who will accept 18 month to 24-month tours in key slots. The problem today is often that the selection system does not focus on the best person but rather on external personnel and career planning considerations. Moreover, it fails to recognize that those who take such additional risks should be paid for it in full, and be given different leave policies and promotion incentives. Today, a solider that is only a battalion commander is *only* a battalion commander. The key

> officers are those with area and counterinsurgency skills that go beyond the combat unit level. Those officers need to have more diverse skills, and deal adequately with the broader dimension of war, and stay long enough to be fully effective.

Finally, human-centric warfare does not mean "super-soldiers" or super-intelligence officers. Military forces -- and the civilian support needed for stability operations, nation building, and counterinsurgency -- do need better training in the nature of such operations, local languages, and local cultures. *But*, military forces and civilians that are outstanding is a dangerous illusion. Effective operations require both adequate force quality and adequate force quantity, and the understanding that most people are, by definition, "average." Elites are an essential part of military operations, but only a part.

This demand for elites and super-intelligence officers is a particular problem for warfighting intelligence, given the limits of today's technical systems and means. It is also a problem because Iraq shows that developing effective US-led and organized HUMINT may often be impossible.

It is true that better intelligence analysis and HUMINT are critical. But, there will be many times in the future where we will also have to go into counterinsurgency campaigns without being able to put qualified Americans in the field quickly enough to recruit effective agents and develop effective HUMINT on our own.

Does that mean HUMINT isn’t important? Of course it doesn’t; it is a useful tool. But to create effective HUMINT abilities to deal with security issues, the US will need an effective local partner in most serious cases of both counterinsurgency and counterterrorism. Having allied countries, allied forces, or allied elements, develop effective HUMINT will be a critical answer to US shortcomings.

[1] Reuters, "US Military Death Toll Down Past 2 Months," Washington Times, February 1, 2006, p. 3.

[2] Patrick Quinn, "US Says Violence will Rise in Iraq," Philadelphia Inquirer, January 13, 2006.

[3] John Diamond, "Insurgent Give US Valuable Training Tool," USA Today, January 26, 2006, p. 8.

[4] Rowan Scarborough, "Iraqi Troops Suffer Fatalities Nearly Twice USA Rate," Washington Times, October 4, 2005, p. 6.

[5] Rick Jervis, "Attacks in Iraq Jumped in 2005," USA Today, January 23, 2006.

[6] Data provided by Brian Hartman and Luis E. Martinez of ABC News and Department of Defense, January 29, 2006.

[7] Robert K. Mullen, The Energy Incident Data Base, February, 2006.

[8] Charles Kraul, "Decline in Oil Output Dims Iraqi Recovery," Washington Post, January 25, 2006, p. 2.

[9] Ellen, Knickmeyer, "Graft Alleged in Oil Protection Effort," Washington Post, February 5, 2006, p. A17; Robert F. Worth and James Glanz, " Oil Graft Fuels the Insurgency, Iraq and U.S. Say," New York Times, February 5, 2006.

[10] ABC News, February 10, 2006.

[11] "Measuring Stability and Security in Iraq," February 2006 Report to Congress In accordance with the Department of Defense Appropriations Act 2006, p.9.

[12] "Measuring Stability and Security in Iraq," February 2006 Report to Congress In accordance with the Department of Defense Appropriations Act 2006, p.7.

[13] "Measuring Stability and Security in Iraq," February 2006 Report to Congress In accordance with the Department of Defense Appropriations Act 2006, p.8.

[14] Ellen Knickmeyer and Bassam Sebti, "Toll in Iraq's Deadly Surge: 1,300; Morgue Count Eclipses Other Tallies Since Shrine Attack," The Washington Post, February 27, 2006, p. A1.

[15] Jonathan Finer and Bassam Sebti, "Sectarian Violence Kills Over 100 in Iraq; Shi'ite-Sunni Anger Flares Following Bombing of Shrine," Washington Post, February 24, 2006, A1.

[16] Sabrina Tavernise, "Violent Cycle of Revenge Stuns Iraqis," The New York Times, February 24, 2006.

[17] ABC TV News, February 27, 2006.

[18] Jonathan Finer and Bassam Sebti, "Sectarian Violence Kills Over 100 in Iraq; Shi'ite-Sunni Anger Flares Following Bombing of Shrine," Washington Post, February 24, 2006, A1.

[19] Nelson Hernandez, "Diplomacy Helped To Calm the Chaos; U.S.-Kurdish Campaign Sought to Steer Sunnis, Shiites From Brink of Civil War," The Washington Post, February 27, 2006, p. A11.

[20] David I. McKeeby, "U.S. General Praises Iraqi Government's Security Efforts (Insurgents continue targeting civilians to inflame sectarian violence)," U.S. State Department, March 2, 2006.

[21] Sabrina Tavernise, "Violent Cycle of Revenge Stuns Iraqis," The New York Times, February 24, 2006.

[22] Alexandra Zavis, "Dozens of bodies found, Sunni bloc suspends talks with rival parties in wake of shrine attack," The Associated Press, February 23, 2006.

[23] Nelson Hernandez, "Diplomacy Helped To Calm the Chaos; U.S.-Kurdish Campaign Sought to Steer Sunnis, Shiites From Brink of Civil War," The Washington Post, February 27, 2006, p. A11.

[24] For background, see the excellent discussion in Chapter Nine, "Complex Irregular Warfare: The Face of Contemporary Conflict," The Military Balance, 2005-2006, pp. 411-420.