



The Next War?

Four Generations of Future Warriors

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I AM ERIC WALTERS, A PROFESSOR TEACHING AT AMERICAN MILITARY UNIVERSITY OF MANASSAS. ONE OF MY UNDERGRADUATE COURSES DEALS WITH THE FUTURE OF WARFARE; I'VE OFTEN BEEN ASKED TO PROVIDE A "COMPRESSED" VERSION OF THE SYLLABUS. WHAT FOLLOWS IS A SYNTHESIS OF THE RESEARCH AND READING I'VE DONE ON THIS TOPIC.

DoD Innovation: A Case Study—the Marine Corps

- History suggested amphibious warfare impractical (lesson of Gallipoli, 1915)
- Marine visionaries thought differently; the rest is history



MajGen John A. Lejeune



Major Earl "Pete" Ellis

Source: Allan R. Millett, "Assault From the Sea," in Williamson Murray and Allan R. Millett, [Military Innovation in the Interwar Period](#) (Cambridge, UK: Cambridge University Press, 1996), pp. 50-95.

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AS THE DEFENSE DEPARTMENT IS THINKING OF A MAJOR OVERHAUL IN HOW IT DOES BUSINESS, IT'S WORTH LOOKING AT OURSELVES TO SEE WHERE WE CAN IMPROVE.

ONE CAN FIND A GOOD EXAMPLE IN THE MARINE CORPS OF THE 1920'S AND 1930'S.

THE MARINE CORPS HAS ENJOYED A TRADITION OF INNOVATION. PERHAPS THE BEST KNOWN IS THE CREATION OF AMPHIBIOUS WARFARE DOCTRINE, INITIATED BY THE MARINE CORPS COMMANDAN, MAJOR GENERAL JOHN LEJEUNE, BUT IT WAS POWERED BY THE INTELLECTUAL GENIUS OF AN ECCENTRIC, MAJOR EARL ELLIS. LITERATURE ON MILITARY INNOVATION UNIVERSALLY ACKNOWLEDGE THAT THIS WAS AN UNUSUALLY BOLD STEP, ESPECIALLY GIVEN THE FAILURE OF THE ALLIES TO SUCCEED USING AMPHIBOUS WARFARE AT GALLIPOLI IN WORLD WAR ONE.

Future DoD Innovation Should Be Where?

- **Rapid Decisive Operations (RDO) concept?**
- **Multi-spectral Battlespace Dominance?**
- **Something else?**



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ELLIS AND LEJEUNE'S INNOVATIONS WERE EXECUTED IN BETWEEN THE WORLD WARS, DURING A TIME OF RELATIVE INTERNATIONAL TRANQUILITY. THE QUESTION WE FACE TODAY IS, GIVEN OUR VICTORY OVER THE SOVIETS IN THE COLD WAR AND OVER THE IRAQIS IN THE PERSIAN GULF WAR, WHERE SHOULD THE DEPARTMENT OF DEFENSE GO FROM HERE? THERE HAVE BEEN A NUMBER OF IDEAS IN THE PAST DECADE—WE SHOULD ASK OURSELVES IF THESE POSE POSSIBLE ANSWERS OR WHETHER WE NEED SOMETHING ELSE. WE'LL COME BACK TO THIS AT THE END OF THE PRESENTATION.

Agenda

- What is the Context? Trends Within the world battlespace
- Threat Evaluation: The Four Warrior Classes
- Threat Integration: The New Strategic Dilemma
- Strategic/Operational/Tactical-level Challenges to the Nation, the DoD, and tactical units...

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TO DISCUSS FUTURE WAR IN THE VERY BRIEF TIME WE'VE GOT, I'M GOING TO TAKE THE APPROACH YOU SEE HERE. WE'RE HOPING THE DISCUSSION WILL FOCUS ON THE LAST BULLET— TAKING THE ABSTRACT THEORY INTO SOMETHING PRACTICAL. IN SHORT, WHAT CAN THE MILITARY SERVICES DO? WHAT WILL WORK FOR THE SOLDIERS, SAILORS, AIRMEN, AND MARINES?

What's the Danger of "Getting It Wrong?"

The Battle of Agincourt: 25 October 1415



HISTORY OFFERS SOME USEFUL LESSONS ON THE DANGERS OF MISTAKING THE REAL THREAT. THE FRENCH LAUNCHED THREE WAVES OF KNIGHTS AGAINST A THIN LINE OF ENGLISH MEN-AT-ARMS AND LONGBOWMEN AT AGINCOURT DURING THE HUNDRED YEARS WAR. THE FRENCH WENT AFTER WHAT THEY THOUGHT WAS THE THREAT—THE MEN-AT-ARMS. WHAT KILLED THE KNIGHTS IN DROVES WERE THE STAKES HIDDEN BY THE LONGBOWMEN WHICH, WHEN EXPOSED JUST BEFORE CONTACT, STOPPED THE HORSES AND UNSEATED THE KNIGHTS. THE FLOWER OF FRENCH CHIVALRY PAID NO ATTENTION TO THE LONGBOWMEN OR THE POSSIBILITY OF ANTI-CAVALRY STAKES BECAUSE THEY CONSIDERED BOTH TO BE COWARDLY WEAPONS—IT TAKES A REAL MAN TO FIGHT ONE-ON-ONE, FACE TO FACE.

WHAT IS SIGNIFICANT ABOUT THIS EXAMPLE IS THAT THE FRENCH WERE EXCELLENT IN EXECUTION. THEY HAD ARGUABLY THE BEST TRAINED KNIGHTS, ARMED WITH THE LATEST TYPES OF ARMOR AND INDIVIDUAL COMBAT WEAPONS, AND WERE MOUNTED ON MAGNIFICENT HORSES. BUT NONE OF THESE THINGS MATTERED WHEN THE HORSES REFUSED TO IMPALE THEMSELVES INTO THE STAKES OR WERE KILLED BY ARROWS. IN FACT, THEY WERE LIABILITIES AS THE HORSES BUCKED THEIR HEAVILY ARMORED RIDERS ONTO THE GROUND WHERE ENGLISHMEN KILLED THEM WITH HALBERDS.

Obligatory Dead Guy Quote

“The first, the supreme, the most far-reaching act of judgment that the statesman and commander have to make is to establish by that test the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature.”

-- Karl von Clausewitz



Source: Carl von Clausewitz, *On War*, Michael Howard and Peter Paret, editors and translators. (Princeton, NJ: Princeton University Press, 1976, p. 88

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NO MILITARY THEORY PRESENTATION IS COMPLETE WITHOUT ONE OF THESE—THE OBLIGATORY DEAD GUY QUOTE.

THE TRANSLATION FROM CLAUSEWITZ IS SIMPLY THIS—DON'T MISUNDERSTAND THE KIND OF WAR, THE KIND OF FIGHT YOU'RE GOING TO GET INTO. MORE SIMPLY PUT, BRINGING A KNIFE TO A GUNFIGHT IS A BAD IDEA. AND IT DOESN'T MATTER HOW GOOD YOU ARE WITH THAT FANCY KNIFE YOU'VE GOT.

Obligatory Defense Critic Comment

“We are preparing for the war we want to fight...not for the conflicts we cannot avoid.”

“No matter how hard we try to take our world with us, we will still find that we sometimes must fight the enemy on his ground, by his rules.”

-- Ralph Peters

Source: Ralph Peters, [Fighting For the Future: Will America Triumph?](#)
(Mechanicsburg, PA: Stackpole Books, 1999).

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AND NO MILITARY THEORY CLASS IS COMPLETE WITHOUT ONE OF THESE EITHER. LTCOL PETERS IS SAYING THAT JUST BECAUSE WE ARE GOOD AT EXECUTING WHAT WE WANT TO EXECUTE, THIS DOESN'T MEAN IT WILL NECESSARILY MAKE A DIFFERENCE.

U.S. National Goals

- Survival (well, isn't that obvious?)
- "Vital Interests" (IAW 1997 NSS) are:
 - Foster a peaceful, undivided, democratic Europe
 - Forge a strong and stable Asia Pacific community
 - Build a new, open trading system for the twenty-first century one that benefits America and the world
 - Keep America the world's leading force for peace
 - Increase cooperation in confronting security threats that disregard national borders
 - Strengthen the diplomatic and military tools required to address these challenges

Source: U.S. Government, [A National Security Strategy For A New Century](http://www.fas.org/man/docs/strategy97.htm#IV), May 1997 (Washington DC: Government PrintingOffice, 1997), available on the Internet at URL: <http://www.fas.org/man/docs/strategy97.htm#IV>

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FIRST THING WE NEED TO DO IS KEEP IN MIND WHAT OUR STRATEGIC GOALS ARE; AFTER ALL, THAT'S WHY WE HAVE A MILITARY. EXPECT PRESIDENT BUSH TO CHANGE OUR STATED NATIONAL GOALS SOMEWHAT FROM THE CURRENTLY PUBLISHISHED VERSION, DATED 1997. YOU CAN ASSUME WE'RE SUPPOSED TO SURVIVE AS A NATION—THAT WAS AN ARTICULATED GOAL DURING THE COLD WAR, AND MOST THINK IT DOESN'T NEED RESTATING THESE DAYS.

THE KEY HERE IS TO EVALUATE HOW FUTURE CONFLICT CAN KEEP THE MILITARY FROM HELPING ACHIEVE THESE GOALS. SO THIS IS THE YARDSTICK YOU WANT TO USE IN DECIDING HOW GOOD WE ARE...AND WHEN THE BUSH ADMINISTRATION PUBLISHES A NEW NATIONAL SECURITY STRATEGY WITH NEW GOALS, THEN WE'LL USE THOSE.



THE LOGICAL THING TO ASK NEXT IS, WHAT'S THE THREAT? WHAT CAN KEEP US FROM ACHIEVING OUR NATIONAL GOALS AS SET FORTH IN THE NATIONAL SECURITY STRATEGY? THE DIRECTOR OF CENTRAL INTELLIGENCE, THE HONORABLE MR. GEORGE TENET, LISTED THESE YOU SEE ON THE SLIDE—AND THEY'RE NOT ALL-INCLUSIVE. AS YOU CAN SEE, THERE'S A DIZZYING ARRAY OF ACTUAL AND POTENTIAL THREATS TO WHAT WE WANT TO ACHIEVE IN THE WORLD.

MY JOB HERE IS TO MAKE SENSE OUT OF ALL THIS FOR YOU—GIVE YOU ONE WAY TO THINK ABOUT THE THREATS SO YOU CAN DECIDE WHERE THE DEPARTMENT OF DEFENSE AND THE MILITARY SERVICES OUGHT TO GO.

“Terrain Analysis:” Trends Within the World Battlespace

- **States unlikely to risk outraging the US—they know the line between pushing for maximum gain and “goading the elephant” into extreme anger (Steele)**
- **State versus State war more a “clash of civilizations” and cultures than ideology (Huntington, Horowitz)**

Sources: Robert D. Steele, *On Intelligence* (Fairfax, VA: AFCEA Press, 2000), p. 86.
Samuel P. Huntington, “The Clash of Civilizations?” in *Foreign Affairs*, Summer 1993, pp. 22-49.
Donald L. Horowitz, “A Harvest of Hostility: Ethnic Conflict and Self-Determination After the Cold War” in *Defense Intelligence Journal*, 1991, pp. 1-27.

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NOW THAT WE KNOW THE GOALS AND HAVE SOME IDEA OF THE COMPLEXITY OF THE THREATS—WHICH WE’LL GET TO—WE OUGHT TO DO A LITTLE “TERRAIN ANALYSIS.” WHAT IS THE POLITICAL, MILITARY, ECONOMIC, AND INFORMATIONAL TERRAIN WITHIN THE GLOBAL BATTLESPACE THAT CAN AFFECT US? I WILL SUMMARIZE SOME OF THE MORE MAJOR TRENDS IN THE NEXT SEVERAL SLIDES.

FIRST OF ALL, HISTORY SHOWS POTENTIAL ENEMY STATES THAT THEY PROBABLY DON’T WANT TO REALLY GET THE UNITED STATES SO ANGRY THAT THE US PUBLIC GETS BEHIND A WAR EFFORT. THINK OF THE ALAMO, THE USS MAINE, THE LUSITANIA, PEARL HARBOR. IF THEY TAKE ON UNCLE SAM, THEY WILL DO IT A LITTLE BIT AT A TIME. OVER TIME LITTLE INROADS ADD UP TO ACHIEVING MAJOR GAINS AT OUR EXPENSE.

SECOND, WAR BETWEEN STATES IS EVOLVING LESS INTO A WAR OF IDEAS (COMMUNISM VERSUS DEMOCRACY) AND MORE INTO A CONFLICT OF CULTURES (ISLAM VERSUS WESTERN CIVILIZATION, ETC).

“Terrain Analysis:”

Trends Within the World Battlespace

- Economic, environmental, population growth/migration, and distribution of power mismatches seen as major causis belli. Gap between the “haves and “have nots” is growing. (Raspail, Snow, et. al.)
- Sovereignty versus anti-sovereignty paradox growing in modern international politics (Delmas)

Sources: Jean Raspail. *The Camp of the Saints*, (Pestosky, MI: The Social Contract Press, 1987). Donald M. Snow. *UnCivil Wars: International Security and the New Internal Conflicts*, (Boulder: CO, Lynne Rienner Publishers Incorporated, 1996). Philippe Delmas. *The Rosy Future of War*, (New York: The Free Press, 1995).

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WE’RE ALSO SEEING WARS OCCUR MORE AND MORE OVER COMBINATIONS OF ENVIRONMENTAL, DEMOGRAPHIC, AND POLITICAL POWER ISSUES. USUALLY POOR PEOPLE ARE POLITICALLY DISPOSSESSED AND PUSHED INTO LESS VALUABLE LAND EVEN AS THEIR NUMBERS EXPLODE. IT’S ONLY A MATTER OF TIME BEFORE THEY WON’T TAKE IT ANY MORE. ECONOMIC TRENDS INDICATE FEWER PEOPLE “HAVE MORE” AND MORE PEOPLE “HAVE LESS”—AND THE GAP BETWEEN “MORE” AND “LESS” ITSELF IS GROWING.

FROM A POLITICAL STANDPOINT, THE UNITED NATIONS IS FACING THE PAINFUL PARADOX THAT IT AS AN INSTITUTION WAS FOUNDED ON THE UNCOMPROMISING PRINCIPLE OF STATE SOVEREIGNTY YET IS ENDORSING ACTIONS TO DESTROY IT IN THE NAME OF SELF-DETERMINATION OF PEOPLES. STATES AREN’T SUPPOSED TO TAKE AGGRESSIVE ACTIONS AGAINST STATES— THAT’S SUPPOSED TO STABILIZE THE WORLD AND BRING PEACE. UNFORTUNATELY, THE END OF THE COLD WAR HAS BROUGHT ABOUT MORE INTRASTATE CONFLICT THAN INTERSTATE WAR. TRYING TO GRANT POLITICAL AUTONOMY TO OPPRESSED PEOPLE—OFTEN TO THE POINT OF CREATING THEIR OWN STATE—WEAKENS THE HOST STATES AND LEADS TO A PROLIFERATION OF WEAK, UNSTABLE STATES. THIS IS NOT CONTRIBUTING TO WORLD STABILITY; INDEED, IT HAS PRECISELY THE OPPOSITE EFFECT!

“Terrain Analysis:” Trends Within the World Battlespace

- **Fallacy of misplaced concreteness—we readily accept programmed systems and approved force structure as a given of value**
- **Technological “race” leaves window of vulnerability open**
- **High dependence on civilian contractors in American military**

Source: Robert D. Steele, [On Intelligence](#)
(Fairfax, VA: AFCEA Press, 2000).

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FOR OUR PART, WE READILY THINK THAT WHAT WE’VE GOT IN TERMS OF UNITS AND WEAPONS ARE RELEVANT IN TODAY’S WORLD. WE DO THIS WITHOUT QUESTION. SHOULD WE? THE FRENCH THOUGHT THEIR KNIGHTS, ARMAMENT, AND HORSES WERE RELEVANT IN THE HUNDRED YEARS WAR, AND DIDN’T QUESTION IT. THEN CAME AGINCOURT. WILL WE HAVE TO AWAIT OUR OWN AGINCOURT?

IF YOU ARE INTO THE TECHNOLOGICAL ANGLES, MOORE’S LAW SUGGESTS THAT INFORMATION TECHNOLOGY BECOMES OBSOLETE OVERNIGHT. SUCH A TECHNOLOGY RACE MEANS A PERPETUAL WINDOW OF VULNERABILITY OPEN AS WE STRUGGLE TO CATCH UP—WE NEVER GET REALLY GOOD WITH WHAT WE HAVE BEFORE IT’S OBSOLETE.

WE ARE ALSO VERY DEPENDENT ON OUR CONTRACTORS TO SUPPORT THE LATEST TECHNOLOGY. DO WE CONSIDER THEM COMBATANTS OR NONCOMBATANTS? WHAT DO THEY CONSIDER THEMSELVES? MAYBE MORE TO THE POINT, WHAT DO OUR POTENTIAL ENEMIES CONSIDER THEM? AND ARE WE READY FOR THE CONSEQUENCES?

“Terrain Analysis:”

Trends Within the World Battlespace

- **US vulnerable to campaigns to manipulate international media and public perceptions (Adams)**
- **Political, economic, and technological climate favors increase in asymmetric attack/terrorism (Adams)**
- **US vulnerabilities to asymmetric attack lie largely in the civil sector (Adams, Sharp)**

Sources: James Adams, *The Next World War: Computers Are the Weapons & the Front Line Is Everywhere*. (New York: Simon and Schuster, 1998). Walter Gary Sharp, *CyberSpace and the Use of Force*. (Falls Church, VA: Aegis Research Corporation, 1999).

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GENERAL AIDEED PROVED THAT HE COULD MASTER OUR PUBLIC AND PRESIDENTIAL PERCEPTION EVEN WITHOUT HIGH TECHNOLOGY, SIMPLY BECAUSE WE ARE SO DEPENDENT ON OURS. DRAGGING THOSE BODIES OF THE DEAD RANGERS THROUGH THE STREETS OF MOGADISHU IN FRONT OF WESTERN TELEVISION CREWS DID MUCH TO END OUR INVOLVEMENT IN SOMALIA.

INDEED, GIVEN THE IMMENSE MILITARY STRENGTH OF THE UNITED STATES, POTENTIAL ADVERSARIES HAVE NO CHOICE BUT TO SEEK OUR WEAK POINTS BECAUSE THEY KNOW THEY CANNOT TAKE US ON IN A SYMMETRICAL FIGHT. THEY WANT TO FIND LONGBOWMEN TO FIGHT OUR KNIGHTS IN SHINING ARMOR. AND THE POLITICAL SITUATION, ECONOMIC SITUATION, AND CHAOTIC TECHNOLOGICAL SCENE ENCOURAGES THIS.

WHETHER YOU WANT TO ATTACK WITH WEAPONS OF MASS DESTRUCTION, A COMPUTER VIRUS, OR A TERRORIST ACT, THE BEST PLACE TO HIT USUALLY LIES NOT IN THE MILITARY REALM, BUT IN THE CIVILIAN SOCIETY AND LARGER CIVIL INFRASTRUCTURE THAT SUPPORTS IT.

“Terrain Analysis:” Trends Within the World Battlespace

- **Most men—especially men from non-Western cultures and less-developed areas—take great pleasure in waging war (van Creveld, Peters)**
- **Anti-war sentiment only prevalent in Western/westernized cultures (Bozeman)**

Sources: Martin van Creveld, *The Transformation of War*. (New York: The Free Press, 1991).
Ralph Peters, *Fighting For the Future: Will America Triumph?* (Mechanicsburg, PA: Stackpole Books, 1999).
Adda B. Bozeman, ed. *Strategic Intelligence and Statecraft: Selected Essays*. D (Washington D.C.: Pergamon-Brassey's Defence International Press, 1992).

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WE ALSO HAVE THIS MISPERCEPTION THAT WAR IS SOMETHING EVERYONE WANTS TO AVOID. AS WE'LL SEE, THIS FEELING IS CONFINED TO WESTERNIZED COUNTRIES THAT HAVE FELT THE HARD HAND OF TOTAL WAR IN THE TWENTIETH CENTURY. THESE FOLKS ARE REALLY THE MINORITY IN THE WORLD. THE REST OF MANKIND ACTUALLY LOVES WAR, LOVES THE VIOLENCE IN IT, LOVES THE SPORT OF IT.

“Terrain Analysis:” Trends Within the World Battlespace

- **Distinction between crime and war is blurring in underdeveloped areas (Kaplan, Snow)**
- **Today’s terrorism is tomorrow’s legitimate weapon of war (Hanle)**
- **Enemies will likely succeed by waging war between seams in legal system, not our operational capabilities (Peters)**

Sources: Robert D. Kaplan, *The Coming Anarchy*. (New York: Random House, 2000). Donald M. Snow, *UnCivil Wars: International Security and the New Internal Conflicts*. (Boulder, CO: Lynne Rienner Publishers Incorporated, 1996). Donald J. Hanle, *Terrorism: The New Face of Warfare*. (Washington, D.C.: Pergamon Brassey’s International Defence Publishers, Incorporated, 1989). Ralph Peters, *Fighting For the Future: Will America Triumph?* (Mechanicsburg, PA: Stackpole Books, 1999).

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ON TOP OF THIS, IN THE UNDERDEVELOPED AND EMERGING WEAK STATES, POLITICAL POWER IS USUALLY GAINED THROUGH CRIMINAL MEANS. IF WAR IS AN EXTENSION OF POLITICS/POLICY BY OTHER MEANS, THEN WAR AND CRIME ARE OFTEN BLURRED. ASK ANYBODY WHAT THE “WAR ON DRUGS” IS REALLY ABOUT.

MOST DON’T KNOW IT, BUT THE THINGS YOU THINK ARE TERRORIST ACTS TODAY WILL BE ACCEPTED AS LEGITIMATE TOOLS OF WAR TOMORROW. YESTERDAY’S TERRORIST WEAPONS INCLUDED THE SUBMARINE AND THE BOMBER—BOTH ARE CONSIDERED FAIRLY MUNDANE WEAPONS TODAY.

WE ARE ALSO SEEING OUR ENEMIES ATTACKING OUR LAWS, OUR VALUES, OUR PERCEPTIONS...NOT OUR ACTUAL MILITARY CAPABILITIES. WITH THE RISE OF INFORMATION WARFARE, WE CAN EXPECT THIS TO INCREASE. THE MORE WE FOCUS ON HUMANE WEAPONS—PRECISION GUIDED MUNITIONS AND NON-LETHAL TECHNOLOGIES—THE LOUDER OUR ADVERSARIES WILL ADVERTISE TO THE SCEPTICAL WORLD THOSE OCCASIONS WHEN THEY DO NOT WORK.

“Terrain Analysis:” Trends Within the World Battlespace

- **Nature of the Cold-War era planning process does not deal with unanticipated radical shifts (Owens)**
- **Soldiers make poor policemen (Callahan)**

Sources: Admiral Bill Owens & Ed Offley. [Lifting the Fog of War](#). (New York: Farrar, Straus, Giroux, 2000).
David Callahan. [Unwinnable Wars: American Power and Ethnic Conflict](#). (New York: Hill and Wang, 1997).

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AS OUR FORMER VICE CHAIRMAN OF THE JOINT CHIEFS OF STAFF POINTS OUT, WE ARE ALSO TRAPPED IN AN INDUSTRIAL AGE JOINT STRATEGIC PLANNING SYSTEM THAT TAKES A LONG TIME TO DO ANYTHING MAJOR.

AND EVERYBODY KNOWS THAT IT’S REALLY HARD TO ASK SERVICEMEMBERS WHO HAVE TRAINED THEIR WHOLE CAREER TO KILL PEOPLE AND BREAK THINGS TO FORGET ALL THEY’VE LEARNED WHEN DOING PEACE OPERATIONS. WE DO IT PRETTY WELL, BUT COPS DO IT BETTER. ONLY NOBODY ASKS FOR THE COPS.

Threat Identification: Four Warrior Classes

- **Traditional Conventional Threats: “The High-Technology Brutes”**
- **Traditional/Emerging Unconventional Threats: “The Low-Technology Brutes”**
- **Emerging Unconventional Threats: “The High-Technology Seers”**
- **Emerging Unconventional Threats: “The Low-Technology Seers”**

Source: Robert D. Steele, [On Intelligence](#)
(Fairfax, VA: AFCEA Press, 2000), p. 86.

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I’M GOING TO CHARACTERIZE THE MISHMASH OF THREATS INTO THE FOUR CATEGORIES YOU SEE HERE. THIS WILL HELP US THINK THROUGH THE CHALLENGE THEY POSE AND HOPEFULLY FIGURE OUT A RESPONSE.

Threat Evaluation



NOW WE GET INTO THE HEAVY THINKING—LOOKING AT THESE FOUR CLASSES OF THREATS AND HOW THEY THINK THEY'LL BEAT US...AND HOW WE MIGHT BEAT THEM.

High Technology Brutes



Saddam Hussein



Mu'ammar al-Qadhafi

- Threats: Iraq, North Korea, potentially Russia, China, Iran, Libya, and others

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THE UNITED STATES ACTUALLY IS A MEMBER OF THIS CLASS OF WARRIOR. YOU'LL SEE WHY IN A MINUTE. OUR POTENTIAL ADVERSARIES WHO BELONG TO THIS KIND OF GUN CLUB ARE LISTED HERE.

High Technology Brutes



SS-21



SCUD

- **Tools: Physical Stealth, “Precision” Targeting**

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HERE’S HOW HIGH TECHNOLOGY BRUTES LIKE TO DO BUSINESS. THEY FOCUS ON PHYSICALLY HIDING THEMSELVES WHENEVER POSSIBLE AND WORK ON BEING MORE PRECISE IN STRIKING WHO AND WHAT THEY WANT TO STRIKE. COMPARE WHAT WE LIKE TO DO WITH WHAT OUR POTENTIAL ADVERSARIES IN THIS CLASS ARE DOING AND YOU CAN SEE THE SIMILARITIES.

High Technology Brutes: Strengths and Weaknesses

■ Strengths:

- Financial resources
- Strategic initiative
- Love of expediency

■ Weaknesses:

- Persistence of action limited to local region
- Vulnerability to information manipulation

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THE STRENGTHS OF THESE KINDS OF ENEMIES—AS WELL AS THEIR WEAKNESSES—ARE SHOWN. NOTE THAT THESE ARE RELATIVE STRENGTHS AND WEAKNESSES TO OTHER CLASSES OF WARRIORS, NOT NECESSARILY BETWEEN LIKE COMPETITORS.

Low Technology Brutes: “Into the Fourth Generation of War”



Gang Members from LA



RPF Guerilla Fighters



Pablo Escobar

- **Threats: Warlike ethnic groups, bandits & pirates, narco-traffickers, violent groups with no political agenda**

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THESE GUYS ARE YOUR CLASSIC “BAD ACTORS.” THEY JUST LOVE WAR/CRIME FOR THE SAKE OF IT AND ARE OUT FOR PERSONAL GAIN AT EVERYBODY AND ANYBODY ELSE’S EXPENSE.

(PABLO ESCOBAR)—FAMOUS COLOMBIAN BILLIONAIRE COCAINE TRAFFICKER, MEDELLIN CARTEL, KILLED IN DEC 1993.

(RPF GUERILLAS)—RWANDAN POPULAR FRONT (RPF) FIGHTERS

Low Technology Brutes



Viet Cong Guerilla Fighters



Powder Cocaine

- **Tools: Natural Stealth, Random Targeting**

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THESE GUYS ARE NATURALLY HARD TO PICK OUT—THEY BLEND IN WITH THEIR NATURAL SURROUNDINGS/PEOPLES. THEY ALSO DON'T CARE WHO THEY HURT, SO IT'S HARD TO PREDICT WHERE THEY'LL STRIKE NEXT.

Low Technology Brutes: Strengths and Weaknesses

■ Strengths:

- Ruthlessness and collective hatred
- Love of violence and disregard for life—theirs or others’—has no stake in civil order
- No strategic/operational critical vulnerability; decentralized

■ Weaknesses:

- Actors ultimately selfish; difficult to unify beyond clan or gang
- Limited resources over the long haul

Source: Ralph Peters, Fighting For the Future: Will America Triumph? (Mechanicsburg, PA: Stackpole Books, 1999). Robert D. Kaplan, The Coming Anarchy (New York: Random House, 2000). Martin van Creveld, The Transformation of War. (New York: The Free Press, 1991).

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BECAUSE THEY ARE SO SELF-CENTERED, THIS IS BOTH A STRENGTH AND A WEAKNESS. INDEPENDENT ACTORS ARE HARD TO UNIFY, THANKFULLY, BUT THEY ALSO DON'T POSE A SINGLE CENTER OF GRAVITY TO AVOID NOR A SINGLE CRITICAL VULNERABILITY TO STRIKE AGAINST. THEY ALSO AREN'T WELL EQUIPPED TO FIGHT OVER THE LONG-HAUL, BUT THIS IS MITIGATED BY THE FACT THAT MOST OF THEIR MORE "ADVANCED" OPPONENTS LACK THE POLITICAL/MORAL STAMINA TO GO AGAINST THEM THAT LONG.

High Technology Seers: “Cyber-War”



■ Threats: Hackers and hacker-spies

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AND THEN THERE’S THESE GUYS, WHO WE HEAR ABOUT FROM TIME TO TIME WREAKING HAVOC IN CYBERSPACE. WE CALL THEM THE HIGH TECHNOLOGY SEERS. SEERS BECAUSE THEY BELIEVE IN THE POWER OF IDEAS AND KNOWLEDGE. HIGH TECHNOLOGY BECAUSE THAT IS THEIR PREFERRED MEDIUM.

(KEVIN POULSEN--TOOK OVER TELEPHONE SERVICE TO RADIO STATIONS SO HE COULD GUARANTEE HIMSELF AS THE # CALLER IN RADIO SHOW CONTESTS.)

(JOHN HELSINGUS—aka JULF...LOVED REMAILING STUFF AND CLOGGING UP NETWORKS)

(MARK ABENE—AKA PHIBER OPTIK. A HACKING LEGEND. GOT A YEAR IN THE FEDERAL PEN TO SET AN EXAMPLE TO OTHERS)

High Technology Seers

“TEEN HACKER FACES FEDERAL CHARGES--
Caused computer crash that disabled
Massachusetts airport”



“SQUARING OFF WITH ‘GLOBAL HELL’
20/20 Looks at FBI Efforts to Combat
Teenage Hackers”



“GLOBAL HELL SAYS IT’S GOING LEGIT ”



- Tools: “Cyber-stealth” and database targeting

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IT’S REALLY HARD TO FIND THESE GUYS BECAUSE THEY OPERATE ANONYMOUSLY IN CYBERSPACE. THEIR ELECTRONIC SIGNATURES ARE VERY STEALTHY BY DESIGN. WHAT DO THEY GO AFTER? DATABASES OF ALL COLORS AND STRIPE—FROM SYSTEM ADMINISTRATOR PRIVILEGES TO GAIN UNAUTHORIZED ENTRY INTO COMPUTER NETWORKS TO CREDIT CARD, TELEPHONE, AND FINANCIAL RECORDS.

High Technology Seers: Strengths and Weaknesses

■ Strengths:

- Knowledge and lust for knowledge
- Technical ability and access
- Shares “trade secrets” freely, forms networks easily
- Naturally conspiratorial

■ Weaknesses:

- Cannot resist technical challenge
- Intensely individualistic; difficult to tame
- Challenges authority
- Craving for notoriety is key vulnerability

Threat changing as hacking goes professional...

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THE TECHNICAL ACUMEN OF THESE FOLKS BLOWS THE REST OF US AWAY. SINCE MOST OF THEM ARE BASICALLY GEEKS, THEY TEND TO CLOISTER TOGETHER IN CONSPIRATORIAL, SOCIALLY-CHALLENGED GROUPS. THEY LIKE CYBERSPACE BECAUSE THEY CAN USE THEIR KNOWLEDGE TO OVERCOME THEIR MORE PHYSICAL AND SOCIAL LIMITATIONS. THEY DO INDEED HOPE THAT THE GEEKS WILL INHERIT THE EARTH.

PROBLEM IS, THEIR STRENGTHS CAN BE USED AGAINST THEM AS YOU CAN SEE. THEY ARE EASILY BAITED, THEY DON'T WORK TOGETHER WELL, AND THEY LOVE TO GAIN FAME WITHIN THEIR NARROW CIRCLES.

THIS THREAT IS CHANGING, HOWEVER. STATES TRADITIONALLY HIRE HACKERS TO PROTECT THEMSELVES FROM OTHER HACKERS, WHICH SOMETIMES WORKS BUT OFTEN DOESN'T. YET WE ARE NOW SEEING HIGH TECH BRUTES DEVELOP HIGH TECH SEER CAPABILITIES...IT REMAINS TO BE SEEN WHETHER THEY WILL ALSO DEVELOP THESE SAME STRENGTHS AND WEAKNESSES.

Low Technology Seers: “War For the Cause”



Osama Bin
Ladin



Ayatollah
Ruhollah
Khomeini

- Threats: religious extremists, violent religious/ political groups, terrorists

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THE LAST CLASS OF WARRIORS ARE THOSE WHO FIGHT FOR IDEAS/BELIEFS, BUT DON'T ENJOY THE HIGH TECHNOLOGY SKILLS OF THE HI-TECH SEER. WE'VE RUN ACROSS A NUMBER OF THESE FOLKS IN THE PAST THIRTY YEARS AND EVEN EARLIER.

Low Technology Seers



Beirut Bombing (Before)



Beirut Bombing (Aftermath)



Khobar Towers

- **Tools: Ideological stealth, mass targeting**

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THEY ARE HARD TO PICK OUT BECAUSE WHAT THEY BELIEVE IS INSIDE THEM; UNTIL THEY PROFESS THEIR ALLEGIANCE BY WORD OR DEED, THEY LOOK LIKE EVERYONE ELSE. AND WHEN THEY STRIKE, THEY LIKE TO DO IT ON A LARGE SCALE BASIS. THESE ARE THE FOLKS MOST LIKELY TO USE WEAPONS OF MASS DESTRUCTION.

Low Technology Seers: Strengths and Weaknesses

■ Strengths:

- Ideology/faith
- Emotional & mass appeal
- Disregard for life if expended for the cause

■ Weaknesses:

- Victim of moderating influences over time (sometimes temporary, sometimes not)
- Limited resources over the long haul

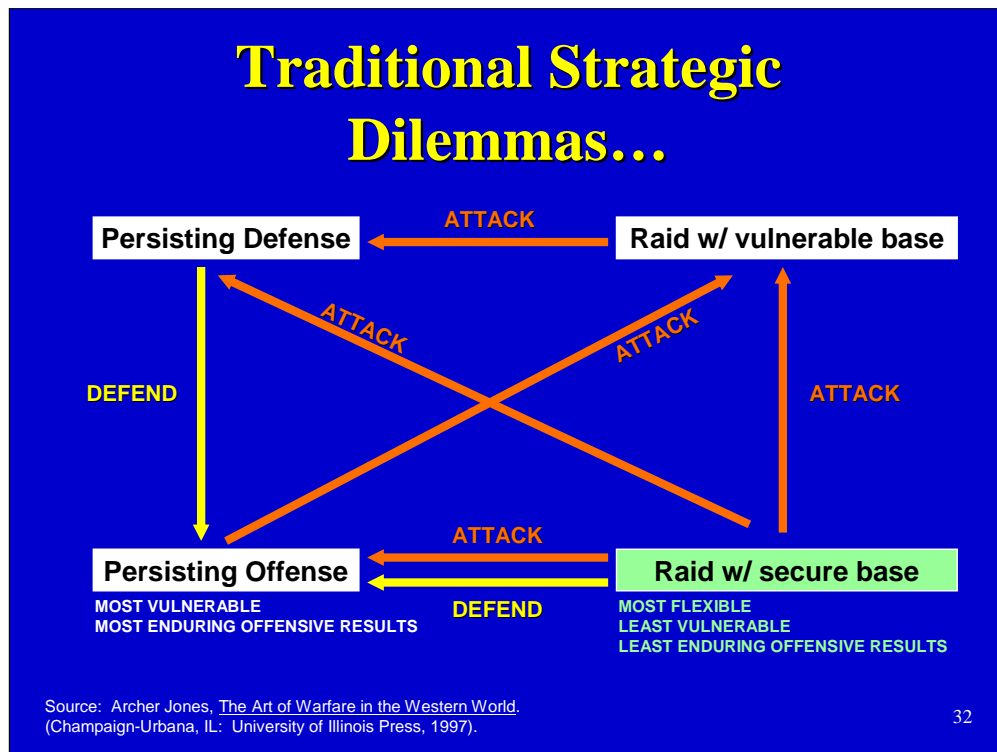
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THE POWER OF IDEAS CAN CREATE IRRESISTABLE FORCE, BUT IS DIFFICULT TO SUSTAIN ON A LARGE SCALE FOR VERY LONG. SO THE STRENGTH OF THESE WARRIORS COMES AND GOES. TIMING IS ESSENTIAL FOR THEM TO MITIGATE THIS PROBLEM, TO KEEP THEIR SUPPORTERS WHIPPED UP ON A CONTINUING OR NEAR-CONTINUOUS BASIS. OF COURSE, IN PRACTICE, THIS DOES NOT HAPPEN EXCEPT AMONG A VERY FANANTIC MINORITY. THOSE FOLKS ARE THE MOST DANGEROUS.

Threat Integration: The “New” Strategic Dilemmas



NOW LET'S LOOK AT WHAT HORNS OF A DILEMMA THESE THREATS PUT US IN. ONCE WE DO THAT, WE CAN FIGURE OUT TO THROW SAND IN THE BULLS EYES.

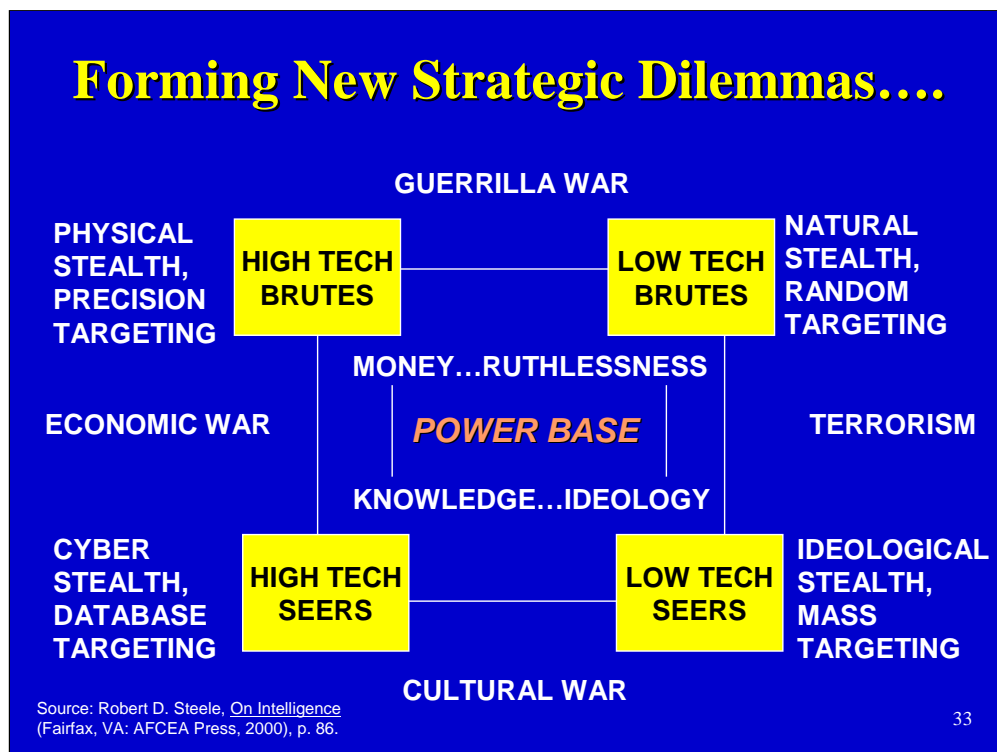


ARCHER JONES PROPOSED A NOVEL WAY TO CHARACTERIZE MILITARY STRATEGY IN HIS LANDMARK WORK, THE ART OF WARFARE IN THE WESTERN WORLD. HERE WE SEE THE FOUR MAJOR STRATEGIES BELLIGERENTS HAVE PURSUED THROUGHOUT WESTERN HISTORY.

PERSISTING DEFENSE MEANS ONE DOES NOT ATTACK, BUT COUNTS ON THE GRADUAL, ACCUMULATING POWER OF THE DEFENSE TO WEAR DOWN AN ATTACKER. THE ARROWS SHOW THAT IT IS VULNERABLE TO RAIDS, WHETHER FROM A SECURE BASE OR A VULNERABLE ONE, BUT HAS POWER OVER A PERSISTING OFFENSIVE—IT CAN DEFEAT THE OFFENSIVE, IF NOT THE GUY WHO LAUNCHED IT.

PERSISTING OFFENSE MEANS ONE CONTINUOUSLY ATTACKS ON A SUSTAINED BASIS. IT IS FRAUGHT WITH DANGER, BEING VULNERABLE TO RAIDS FROM A SECURE BASE IN BOTH OFFENSIVE AND DEFENSIVE SENSES, AS WELL AS DEFENSIVELY FROM A PERSISTING DEFENSE. BUT IT'S GREAT AGAINST A RAIDER FROM A VULNERABLE BASE. IT TENDS TO HAVE THE MOST LASTING OFFENSIVE RESULTS.

RAIDING FROM A VULNERABLE BASE WORKS WELL AGAINST A PERSISTING DEFENSE BUT IS VULNERABLE TO RAIDS FROM A SECURE BASE AND A PERSISTING OFFENSE.



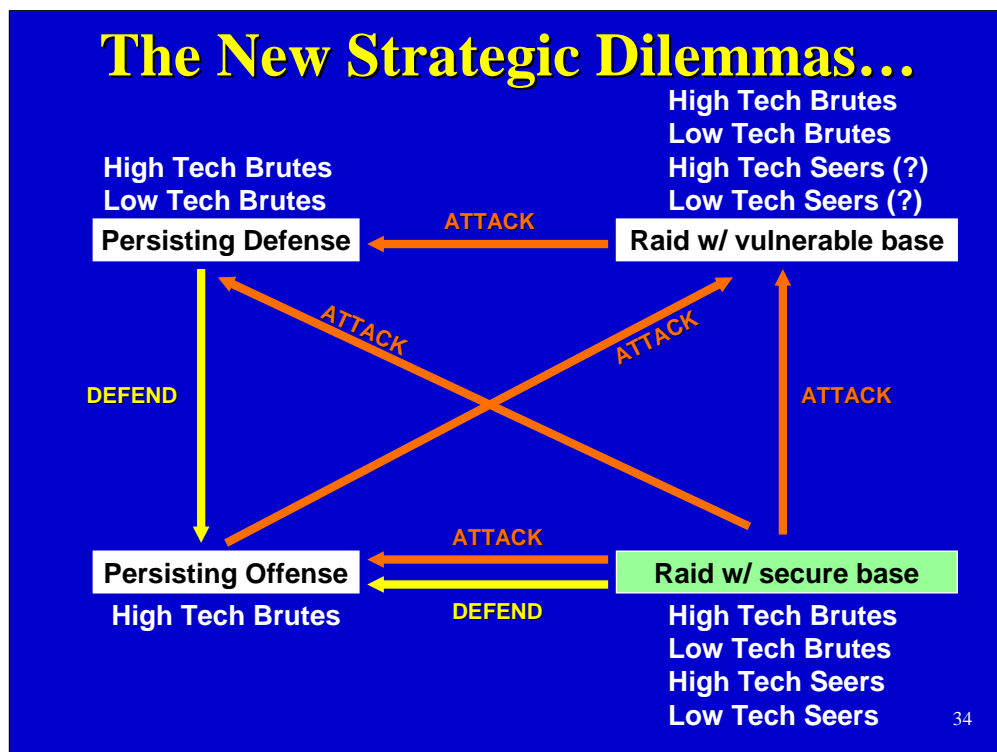
WHAT WE'RE GOING TO DO IS OVERLAY OUR FOUR CLASSES OF WARRIORS ON TOP OF JONES' STRATEGIES. BUT BEFORE WE DO THAT, IT'S WORTH SEEING THE RELATIONSHIPS THAT EXIST BETWEEN THEM.

HIGH TECH BRUTES OFTEN USE LOW TECH BRUTES TO PURSUE GUERRILLA WAR TO ACHIEVE THEIR OWN ENDS.

LOW TECH SEERS LOVE USING LOW TECH BRUTES TO DO THEIR TERRORIST DIRTY WORK, ESPECIALLY FOR THE MORE HEINOUS ACTS.

HIGH AND LOW TECH SEERS, PROVIDED THEY SHARE COMMON IDEAS, CAN SOW THE SEEDS OF CULTURAL WAR AMONG NOT ONLY THE MASSES, BUT THE ELITE CLASSES.

HIGH TECH BRUTES WOULD LOVE TO USE HIGH TECH SEERS TO SCREW UP ADVERSARIAL FINANCIAL AND INFRASTRUCTURAL NETWORKS IN ECONOMIC WARS, PROVIDED THEY COULD CONTROL THEM.



NOW LIFE GETS INTERESTING..... IT'S PRETTY EASY TO SEE WHO HAS THE NATURAL POWER TO USE THE VARIOUS STRATEGIES. I'VE PUT QUESTION MARKS NEXT TO THE SEER CLASSES IN THE "RAID WITH VULNERABLE BASE" BECAUSE MUCH DEPENDS WHETHER YOU THINK THEY ARE VULNERABLE. SO FAR, THEY'VE PROVEN THEMSELVES TO BE REMARKABLY RESILIENT AND NOT TERRIBLY VULNERABLE.

THE STRATEGIC DILEMMA FOR US IS THAT WE CAN ADOPT THE MOST FLEXIBLE, LEAST VULNERABLE STRATEGY—RAID FROM A SECURE BASE—BUT UNLESS OUR ADVERSARIES PICK A STRATEGY THAT IS VULNERABLE TO IT (AND WHY WOULD THEY?), IT WILL ACCOMPLISH THE LEAST! KEEP THIS IN MIND WHEN YOU GO BACK TO OUR NATIONAL GOALS...AND HOW WE THINK WE CAN USE THE MILITARY TO ACCOMPLISH THEM!

Some Lethal Combinations...

- **Cyberterrorism (operational/tactical-level combination):**
 - Remotely destroy economies, air traffic control, pharmaceutical formulas, telecommunications, commercial distribution, etc.
 - **Cyber-supported guerrilla war (strategic/operational-level combination):**
 - Guerrilla/revolutionary war supported by information operations
 - **Cultural warfare (strategic combination):**
 - Combined seers with or without brutes
- Combinations will have centrifugal tendencies that can be exploited....*

Source: William S. Lind, et. al. "The Changing Face of War: Into the Fourth Generation" in [Military Review](#), October 1989, pp. 2-11.

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EVEN WORSE ARE THE DILEMMAS POSED WHEN THE VARIOUS GROUPS GET TOGETHER AND PURSUE COMPLEMENTARY AND/OR COMBINED ARMS ACTIONS ON A STRATEGIC SCALE... THERE IS GOOD NEWS SINCE ALLIANCES OF THIS TYPE ALWAYS HAVE DIVISIVE ELEMENTS THAT CAN BE EXPLOITED—PROVIDED YOU KNOW HOW TO DO IT AND THEIR COLLECTIVE RESOLVE IS LESS THAN YOURS.

Challenges for the Nation... and for the DoD

- Technologies demanded by JV 2010 and 2020 to fight conventional threats probably won't be available by those years (O'Hanlon)
- Against unconventional warrior classes, it may not be possible to mount attacks against critical vulnerabilities by military force (Snow, Barnett, Lind)

DoD innovation should be where?

Sources: Michael O'Hanlon, *Technological Change and the Future of Warfare*, Washington, D.C.: The Brookings Institution, 2000). Donald M. Snow. *UnCivil Wars: International Security and the New Internal Conflicts*. Boulder, CO: Lynne Rienner Publishers Incorporated, 1996). Col Jeffrey R. Barnett, USAF. "Nonstate War" in *Marine Corps Gazette*, May 1994, pp. 83-89. William S. Lind, et. al. "Fourth Generation Warfare: Another Look" in *Marine Corps Gazette*, December 1994, pp. 34-

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A FEW CLOSING OBSERVATIONS ON PROSPECTS FOR THE UNITED STATES DEPARTMENT OF DEFENSE. WE MIGHT WANT TO TALK ABOUT THIS FOR A MINUTE.

(DISCUSSION)

Tactical unit challenges: Topics For Discussion

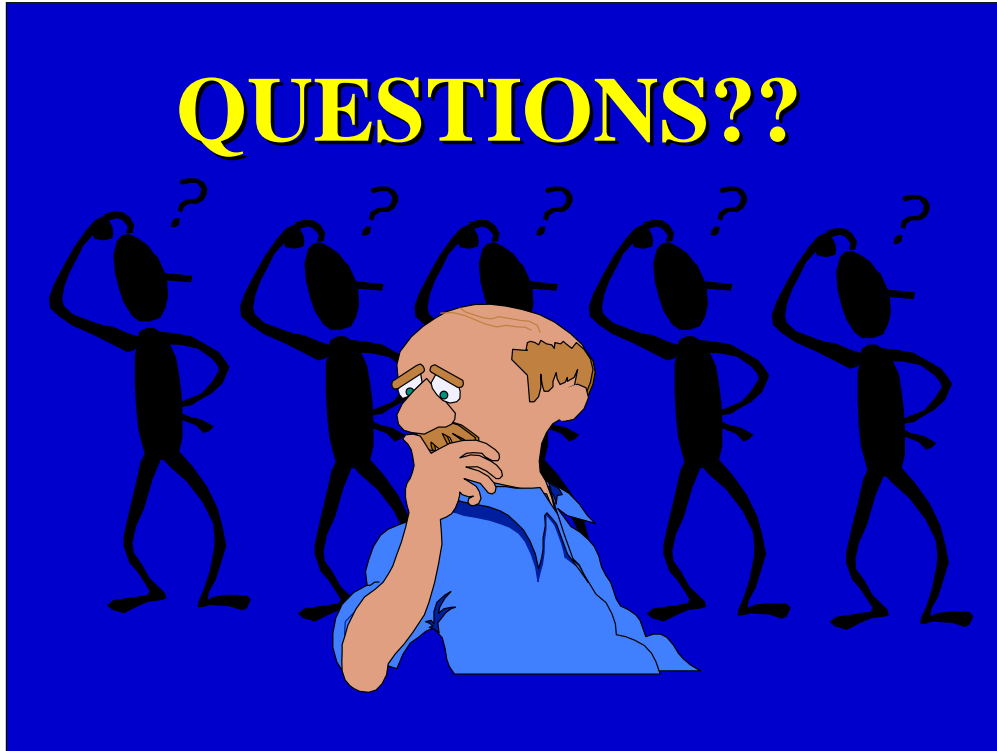
- Against what class(es) of warrior & strategies are we most effective? Least effective?
 - How can we boost our strengths against those we are most effective against?
 - How can we mitigate our weaknesses against those we are most vulnerable to?
 - How do we handle “the lethal combinations?”
- What elements of Doctrine, Organization, Training, Equipment, and Support is most important in being combat ready against each warrior class & strategy? Against some or all in combination?

How can we avoid being like the knights at the Battle of Agincourt?

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HERE’S A FEW MORE THINGS TO PONDER—WE MIGHT WANT TO TALK ABOUT THEM AS WELL....

HOW DO WE AVOID BEING LIKE THE KNIGHTS OF AGINCOURT--REFINING AND PRACTICING WHAT WE ALREADY DO WELL, ONLY TO LOSE TO AN ADVERSARY WE DON’T PAY ENOUGH ATTENTION TO?



ANY QUESTIONS? COMMENTS?