Principles of Warfare Culminating Seminar
April 13, 2005

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Introductory Comments

- The nature of war has not changed since Clausewitz.
  - The character of war has.
- Access to information is changing the speed of war.
- War continues to surprise the fighters.

In the early 20th Century physicists believed they had all the Principles of Physics worked out with only a few complications to explain. Then new technologies allowed them to see more deeply into the inner core of molecules/atoms/etc. At that point all the principles fell apart. We are at that point with the Principles of War now.

The speaker offered a new way of looking at war. It is not a perfect way but it will permit us to look more deeply into the structure.

Discussion

- Need to look at existing technologies and link them together differently for innovations not normally identified
  - US facing an enemy with nothing equivalent to DARPA
    - Obviously, they will be looking at things differently than we do
  - US very good at fighting an enemy with an address that we can strike at
    - However, if we are attacked again we will go head-hunting for an enemy with no address

There is a need to look at warfare technology innovations as either sustaining or disruptive.

- Sustaining: ‘improves performance of established warfighting methods along an established trajectory that the warfighters currently value.'
This is a typical S-curve
  o We have spent a great deal of money to determine
    ▪ Where the line is going
    ▪ How much we need to cover
  o Business has only one line to worry about but Defense must cover more
    ▪ So identifying this curve is more complex than in business school
    ▪ The key may be that the measures of effectiveness may vary greatly between battleships and carriers

Today we need to be more concerned with Disruptive Innovation which “improves performance along a trajectory path that traditionally has not been valued.”
• When dealing with sustaining innovation, you think your MOE must be the only one
  o New forces such as Expeditionary Strike Forces would have different MOEs
  o Clearly, we would need different MOEs for dealing GWOT and China

• An example of a disruptive innovation using the then-current technologies that were of central to both the British and the American way of war.

How the disruptive innovation of the Blitzkrieg looks on the S-curve model:
Current ways of looking at war and the strategic environment do not allow us to predict outcomes. Complications of the day include:

- A different sense of time for enemies in Iraq
  - US has been working to get inside the enemy’s OODA loop
  - This enemy thinks in terms of 3-6 years with cells around the world working for at least that long
- Always at the core of a war is the paradox of the familiar versus continual surprise
  - Need to identify the minimum number of elements, so that outcomes can be predicted

Enemies, when they are outgunned on Level 1, are under pressure to move up to Level 2

- In Level 2, enemies work to embed themselves with the local populace
- Level 1 forces are then forced to move up to Level 2 and spend time trying to separate the fighters from the populace
- Today, US forces are at Level 1 but they are fighting forces at Level 3
  - This could only happen with the expansion of information technology
  - Individual fighters are not at Level 3 but their organizations are

When in Level 3 fighters are invisible until they may be preparing to attack

- Then they must *decoy* at least for a bit to carry out those attacks
  - Example: bin Laden’s occasional video appearances
- We need to use technology to make use of those *decoying* instances
  - Need to know instantly where bin Laden is when he sends that video
  - Need to be ready to attack him at that point
US has faced Level 2 enemies before – both the Viet-Cong and the Apaches worked at that level

- Today, enemy cells are hidden worldwide waiting directions to attack
- Using the principles of simultaneity, enemies will come from more than one place at the same time
- US needs to focus on precipitating enemies out Level 3

The problem is that the American Way of War works only at Level 1

- However, there are some things happening that could help – technologies that make the enemy’s virtual state into a non-virtual one
  - Technologies to identify where videos are shot
  - But also have the problem of maintaining civil rights

- Model is only in beginning stages of mapping out how this should work
  - Work is being done on tools that commanders can use to help make the virtual into non-virtual
  - New types of forces will be needed
  - Legal and political issues are not being discussed here but need to be elsewhere

**Future War**

- Combined-effects warfare: a new term meaning all elements of the government are working together for the same cause
- In the future of warfare there should be tools that tell a commander what will happen with when different elements of a situation are combined
  - This would need to include diplomatic and other efforts
- The enemy is on the verge of a big breakthrough given the addition of the virtual world
  - Therefore, US needs more work on bringing the virtual down to non-virtual level
- In the future of the Navy there may be Precipitation Force ships which would include
  - Analysts
  - Linguists
  - Embarked Special Forces
  - Comms to support all elements involved
  - Their task would be to identify where the enemy is and at least drop them back to Level 2

US must also look at other basic concepts differently than in the past

- Time issues are especially difficult
- US forces need not to be faster but better
Comments from the Q&A Session

• Focus needs to be on intelligence – especially looking at the virtual level
  o US can operate in the virtual level, too
  o The technology is almost available to get bin Laden within minutes after he “decloaks” via a video
  o The problem is that it will cost a great deal of money
  o At the same time the US military is also being held responsible for being ready to handle other potential problems such as a China-Taiwan dispute
• Also must understand that the enemy measures casualties differently than we do
• In the Precipitation effort we want to get to the planners

See the full PowerPoint version of this presentation at http://www.jhuapl.edu/POW/library/Pierce_4-13_POW.ppt