



Information as Power

What is it?

How do we Use it?

How can we Measure it?

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My Opinions: not the USG, DOD, or NDU!



Information & National Power (1)

- The **information component of Power**:
 - “Combination of information content and technology used as a strategic instrument to shape fundamental political, economic, military and cultural forces on a long-term basis to affect the global behavior of governments, supra-governmental organizations, and societies to support national security strategies & objectives”
 - Drs Dan Kuehl/Bob Neilson, Georgetown’s *NSSQ* 1999
 - President Ronald Reagan: NSDD 130 (1984), National Security Strategy (1987)
 - Used by every nation state and strategic political entity, regardless of technological development

Information & National Power (2)

- “The relative ability to **operate in and exploit the information environment** — the aggregated and synergistic combination of **CONNECTIVITY, CONTENT, & COGNITION**, within a complex human and technological context to generate strategic advantage.
 - An indispensable underpinning for all other forms of power, yet unique in its own right.
 - Employed across all other forms of human activity—economics, war, diplomacy—and across all levels of conflict, from peace to war.
 - Its elements can be described, and its impact measured, albeit not necessarily to the exactness as other components of power.”
 - Dan Kuehl--as yet unpublished—based on JP 3-13
 - Analogous to air-sea-space power

Information Environment

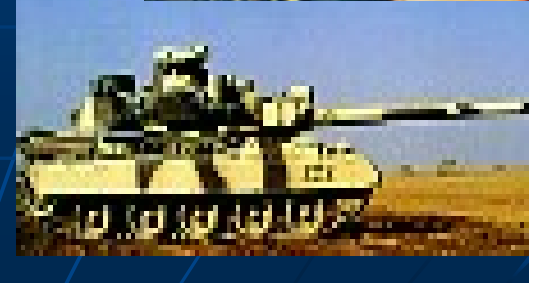
- **Physical: “Ether”/Cyberspace/”eSpace”**
 - Electronic connectivity, means of delivering information
 - Infrastructures, wires, networks, etc
 - A unique physical space (land, sea, air, space)
- **Information**
 - Content: words, images, databases, 11010111000s
- **Cognitive: “influence/perception”**
 - **Meaning and the Mind**: “most important”
 - Example: Serbian TV vs NATO cohesion 1999
- **“Theater of Operations – Global Commons”**
 - Interrelated factors: human, procedural, organizational, technological
 - Joint Doctrine Pub 3-13 “Info Ops” Feb 2006
 - US National Defense Strategy, 2005

Information as Power: DIME

- Distinct from yet employed across/integrated with all other elements of power
 - Economic
 - 1980's/Reagan NSSs: synergy of IT and economy
 - Diplomatic/(Political)
 - "Why We Fight" to RFE to "War of Ideas"
 - Military
 - MTR/RMA to Net-Centric Ops to "Transformation"
- How well are these incorporated and integrated across our curricula?

Measuring DIME

- Traditional measure of power emphasized control of resources
 - Land, iron/coal/oil, people
- **M** and **E**: easily visible and quantifiable
 - Military: weapons, troops, training
 - Economic: GDP, trade, industry
- **D**: may have some usable metrics
 - Embassies, treaties, diplomats
- **I** most difficult of all
 - What measures can we use?



Information Power

- “Use of information **content and technology as strategic instruments** to ... affect the global behavior of governments, supra-governmental organizations, and societies”
- “The relative ability to **operate in and exploit the information environment...** Its elements can be described, and its impact measured”
- Two Critical and somewhat measurable factors:
 - **CONNECTIVITY**
 - Exchange of information
 - **CONTENT**
 - What’s exchanged
- One somewhat less—but still-measurable factor
 - **COGNITIVE**
 - Influence/behavior
- Bottom Line:
 - Impact and Effectiveness
 - Desired/Expected results

Connectivity

- Ability to transmit, receive, share, use information
 - Many commercial metrics
 - Electronic:
 - ISPs, Phone systems, providers, households online, cell phone nets, etc
 - TV/Radio stations, viewers, listeners, market share, etc
 - Satellite systems, Blogs
 - Print:
 - Newspapers, magazines, readers, market share
 - Growing military use, dependencies and advantages
 - Systems and Concepts:
 - GIG, Milstar, ISR, Forcenet, etc.
 - Organizations
 - JTF-GNO, 1st IO Cmd, NetWarCom, JFCC-NW
- Includes ability to protect the connectivity
 - Includes governmental and private sector
 - Information Assurance and CIIP
 - International aspects hidden but critical
- Integration of human, procedural and technological factors

Content

- **Ability to create information**
 - Includes both organizations and their output
 - Film: Hollywood-Bollywood
 - Radio-TV: Domestic-Global (Fox, BBC, Al Jazeera, VOA)
 - JAG case study: 90 countries
 - Print: books, magazines, newspapers (this still matters!!)
 - Internet
 - Websites, BLOGs...a wired world combining all of the above
 - Quality-Credibility
 - **Credibility is essential and is audience-dependent**
 - Governmental-Military aspects
 - NRO, Agencies, VOA, BBG, Sawa & Al Hurra, etc
 - NetWarCom, 1st IO Cmd, JIOC, etc
- Integration of human, procedural and technological

Cognitive Impact

- **Tough question: how to measure this**
 - Market research and analysis, Polling
 - Commercial sector has untapped expertise (eg. TV)
 - Voter turnout and election results
 - Iraq, Afghanistan, Serbia
 - Changes: market/viewer/listener/reader share
 - Al Jazeera vs Al Hurra vs Al Arabiya vs etc ??
 - Warfighting: surrenders, morale, innovation, etc
 - Boyd Cycle: decision superiority
 - NOT the same as "influence superiority"
- **Behavior**
 - Observable, predictable...this is first payoff

Impact-Effectiveness

- Across the entire DIME model
 - Economic impact
 - Productivity, globalization, markets, GDP
 - Diplomatic and Informational impact
 - Influence
 - From Sawa to AlHurra to BBC
 - a multiplicity of global and niche audiences
 - Military impact
 - Network Centric Warfare/Operations
 - Transformation
 - Counter-Insurgency / 4th Generation Warfare...
 - ...Or Major Theater War vs a real nation-state

Conclusion

- Long-term strategic and national security decisions based on assessments of power
- Information has vital synergies with all other elements of power
- War of Ideas/Influence critical to survival
- Understanding Information Power, how its used, how we can measure it, may be a key to victory...or defeat



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<http://www.ndu.edu/irmc/programs/index.html>

Programs/Certifications for/in...

Chief Information Officers

Information Assurance

Organizational Transformation

...and **Information Strategists**

