

Deciphering Asymmetry's Word Game

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THE TERMS “ASYMMETRY,” “asymmetric warfare,” “asymmetric approaches” and “asymmetric options” are popular sound bites found in many military journals today. Asymmetric-related terms are commonly associated with a potential opponent’s operations or actions against US interests or forces. The attacks are commonly described as chemical, biological, nuclear, terrorist or information attacks, or attacks against weak points. Arguably, these attacks are not asymmetric. In fact, except for the terrorist example, these are symmetrical attacks. The United States has chemical, biological, nuclear and information means; therefore, such attacks cannot be asymmetric.

The asymmetric aspect of a chemical, nuclear, information or traditional attack actually relates to asymmetries in capabilities, reliance, vulnerabilities and values. The capabilities of certain forces—some information systems can shut down command and control systems and prevent nuclear systems from launching—constitute one variable. A nation’s reliance on a particular system is another. For example, both sides can have information weapons, but one side may rely more on them than the other. The vulnerability of a system or platform’s performance parameters, operating principles or situational context is another asymmetric opening, the one most often associated with weak spots. Finally, cultural values determine whether a nation will or will not use one of these methods.

The Russo-US relationship provides an example of such reasoning. Both countries have had biological and nuclear weapons for decades, yet no one has called this an asymmetric Russian threat. Neither side has used these weapons because of discussions that led to a common understanding and because of a value structure that placed national interests above other interests. However, if a country that conducts operations based on very different values obtains

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biological weapons, then we should worry. In some cultures, social and religious reasons may override national interests when choosing whether to use such weapons.

What is Asymmetry?

Judging by the multiple applications of the term in military journals—“not fighting fair,” “attacking a weak point,” “information or cyberwar,” “public relations war,” “weapons of mass destruction”—very few people understand asymmetry’s formal definition. This is understandable since joint doctrine does not define the term.¹ One civilian lexicon explains asymmetry using the mathematical term “incommensurability,” the relationship between things which have no common measure.² Another civilian definition refers to defective, disproportionate correspondence between things or their parts.³

Other non-English-speaking cultures define the term in more distinct ways. A Russian dictionary definition of asymmetry is “the absence or destruction of symmetry.”⁴ This concept implies a more active role in changing symmetry’s parameters than the US or British definition, even the creation of asymmetry. Compared to Western deductive thinking, the Russian dialectic thought process of thesis and antithesis encourages an analysis of a situation from a different, more confrontational perspective.



A Predator flies above the USS *Carl Vinson* during a training exercise. The unmanned aerial vehicle broadcast real-time infrared and color video to intelligence analysts and controllers on the ground and the ships of the carrier battle group.

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There is no distinct word for asymmetry in Chinese. To express this concept one would negate the word for “to be symmetrical.” This word for symmetry, *duicheng*, is also comprised of two characters. The word *dui* in ancient texts means “to respond,” “to face or face off,” “to match”—both in the sense of complement but also in the sense of enemies matching in skill. The term *cheng* initially signified the concept of “a balance” and then evolved into a broader semantic sense of “to accord with.”⁵ Thus, in China, asymmetry would involve things not in accord with, out of balance, not responding and not matching or facing one another.

These definitions indicate that our understanding of asymmetry has strayed and become misused. None of the recognized definitions discusses weak points, unfair fighting or nontraditional means that many authors assert. The term apparently assumes whatever meaning military authors wish to portray and is thrown around like the grammatically incorrect term “irregardless.”

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comments following the conflict over Kosovo. Department of Defense (DOD) officials admonished other NATO countries that their equipment was not compatible with or as capable as US equipment.

If the United States is the most asymmetric force in the world, why are potential threats to US security almost always labeled asymmetric? For example, the US National Defense University (NDU), in its 1998 strategic assessment, listed four asymmetric responses that other nations could take to counter US superiority: acquiring weapons of mass destruction; acquiring high-technology weapons; acquiring cyberweapons; and fighting in environments that degrade US capabilities. The logic of considering these approaches asymmetric escapes reason, for the first three responses would improve symmetry according to the dictionary definitions. The United States has all of these capabilities now; if someone else acquires them, then we are in a symmetric relationship. Threats are mislabeled “asymmetric” because we do not understand what asymmetry means.

Some highly respected publications stress that if an opponent does not fight the way we expect, then we automatically label his fighting technique asymmetric. The NDU study stated that “asymmetric threats or techniques are a version of ‘not fighting fair,’ which can include the use of surprise in all its

operational and strategic dimensions and the use of weapons in ways unplanned by the U.S.” If this definition were accurate, Serbs and Iraqis could claim that NATO and the multinational coalition did not fight fair—face to face—but from afar with long-range, precision weapons. With such a broad appli-

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cation, any action can be considered asymmetric and further confuse the issue. The terms “atypical” or “nontraditional” better fit a situation in which an opponent uses an unexpected technique or exploits some factor better or faster than his opponent. The imprecise US terminology is faulty.

An Australian officer, Major J.J. Frewen, offered a reason for this imprecision. He noted that globalization has expanded the definition of national security beyond physical security to include economic, environmental, informational and cultural security.⁶ Threats to these elements are often considered asymmetric by many US academic institutes and leaders when, more precisely, these are matters for which our armed forces are not well designed. They undermine national interests without shots being fired and demonstrate that military intervention is problematic when the definition of “decisive force” is unclear. Frewen notes that problems in Somalia were caused not by a lack of armored vehicles but by failure to understand the environment. The problem was about “apples” attending an “oranges” event; any hardware-only solution suggests asymmetric vulnerability.

Some analysts have defined asymmetry with vision. Lloyd J. Matthews offers a strategic vision for his description of asymmetry. He defines it as any militarily significant disparity between contending parties that clearly fits the “lack or want” of symmetry idea expressed in *Webster’s*. He notes: “The process of calculating the resultant of the various vectors of power wielded by two asymmetrically related opponents—in order to measure the dimen-

sions of the threat that each poses to the other—can be quite problematic. But it is a process that must be undertaken if we are to give due weight to all the relevant elements of power.”⁷ Threats in the sense of capabilities, reliance on systems and vulnerabilities are important in this regard.

Steven Metz and Douglas Johnson of the US Army War College offer another visionary definition of asymmetry: “acting, organizing and thinking differently than opponents in order to maximize one’s own advantages, exploit an opponent’s weaknesses, attain the initiative or gain greater freedom of action. It can be political-strategic, military-strategic, operational or a combination of these. It can entail different methods, technologies, values, organizations, time perspectives or some combination of these.” The authors add that asymmetry can be short-term or long-term, deliberate or by default, discrete or pursued in conjunction with symmetric approaches and can have both psychological and physical dimensions.⁸

Retired Brigadier General David L. Grange writes that asymmetry is best understood as a strategy, tactic or method of warfare and conflict. It is not something new, he reminds us, noting that strategists define asymmetric warfare as conflict deviating from the norm or an indirect approach to affect the balance of forces.⁹

Perhaps the most asymmetric and least-discussed element is values. Operating principles—individual, social group and national values—all play a role in the information age. There is always a lack of symmetry in values, even between two people. For example, discussions of abortion, homosexuality and religion bring out individual differences. In the international arena, some decisionmakers abide by international treaties; others do not. The values of President George H. Bush and Iraqi leader Saddam Hussein during the Gulf War clearly represented this asymmetry. Bush prevented a march on Baghdad because it was not in the UN mandate, while Hussein ignored international treaties and invaded Kuwait.

Vulnerabilities and Asymmetries

Many authors consider asymmetry to be the ability to exploit situations by attacking weak points or using nontraditional approaches in unexpected ways. These vulnerabilities can be uncovered by using a specific methodology to examine a situation. The methodology uses one of four means:

- Performance parameters.
- Situational context.

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- Operating principles and rules of engagement.
- Will.

Each mean uses nontraditional or intellectual methods to exploit a situation, degrading capabilities and inducing unpredictability and chaos into military operations. It limits advantages, capitalizes on weaknesses, and tests patience and will. The methodology is a thinking man’s strategy that encourages out-of-the-box concepts that could be labeled asymmetric because they capitalize on asymmetries in capabilities and reliance.

Such moves would be innovative or bold actions that could apply equally to either high- or low-tech opponents. It might mean using low-tech options to counter high-tech equipment—the rocket-propelled grenade (RPG) launcher versus a helicopter or using fuel-air explosives on an opponent. Or it could mean attempts to strike a people’s political will and patience. The United States lost the battle of wills at home but not on the Vietnam battlefield. Asymmetry can even express itself as a strategy of mass

destruction or annihilation, prolonged attrition or creating large groups of refugees.

Performance parameters. Weapon parameters, whether signature, such as sound or image display, or performance characteristics, are susceptible to manipulation and are vulnerable. The Serbian military demonstrated its awareness of this principle during the recent conflict in Kosovo. The Serbs reportedly sent air defense crews to Iraq in February 1999 to study Iraqi procedures. The Iraqis have fought against these planes and tactics for 10 years. Who could better tell Serbian crews what a NATO or US air attack might look like? Every performance parameter was recorded on radar.

In another example, the Serbs reportedly used smoke to deflect NATO precision-guided weapons. When the pilot could no longer keep the cross hair on a smoked target, the weapons went off-course as the performance parameter was exploited. In Chechnya, the Chechens knew the elevation and depression limits of the Russian T-72 battle tank’s

An Iraqi SA-3 Goa crew trains with their medium-altitude surface-to-air missile battery.



US Army

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main gun. They hid below the depression level in basements and in windows above the maximum elevation while fighting in Grozny during 1994 and 1995 and used RPGs to immobilize tanks.

When NATO's air forces engaged Serbia's armed forces, Serbian deceptions fooled NATO's high-tech equipment. The Serbian military found a flaw in NATO's electronic-reconnaissance system—targets could be seen but not clearly identified. Decoys and fake positions protected the real ones. When the Serbs wanted to block NATO's thermal-imaging systems, they used industrial heat sources to construct "thermal-cover" positions to protect tanks and artillery.

Another performance parameter is that of an actual force: tempo. Understanding an opponent's concept of operational tempo gets one inside an important performance parameter of his force and provides an asymmetric option.

Situational context. Situational context includes an area's dominant historical, cultural, geographic and political factors and how an opponent might manipulate them. For example, what is the regime protecting and what does it want? Other factors include a country's particular warrior culture, guerilla movements or use of time and geography. In most conflicts, both combatants have some elements that a thinking belligerent can exploit. Two unequal forces, such as a high-tech force confronting a low-tech force, fighting on similar terrain could use an asymmetric approach. If a low-tech force moves to the sanctuary a city offers, it can offset the high-tech

force's superior firepower, maneuverability and intelligence capability. In the city environment, the high-tech force often finds that its force structure does not fit the terrain. The high-tech force may find itself opposed by an entire population, as the Russians were in Grozny in 1996. A high-tech force, on the other hand, could prevent the low-tech force from entering the city.

Operating principles and rules of engagement. Operating principles of presidents, parliaments and armed forces vary from nation to nation. International treaties bind most nations to some common principles, but this adherence varies with time and opponents. Warsaw Pact members' allegiance to the Soviet Union waned and disappeared in the 1990s. The recent NATO operation over Kosovo offers a stark example. Breaking with traditions of time, opponent and principles, NATO acted out of area and may have placed human rights above sovereignty. If democratic nations bend their operating principles, what type of behavior and adherence to operating principles might we expect from totalitarian or rogue regimes?

Below the level of presidents and parliaments, combat involves operating principles. Combatants can estimate opposing leaders' tolerance for loss and damage, and threshold for capitulation. Unlike nation-states, guerillas are not bound by international treaties, codes of conduct or operating principles. This difficulty is compounded by Western reliance on technology, a vulnerable operating principle in the age of off-the-shelf products. Sometimes underdeveloped countries can acquire high-tech equipment faster than developed countries because of research, development and acquisition time lines: "In a world in which state-of-the-art is off-the-shelf, industry, and potentially our foes, can obtain better information systems and technology cheaper and faster than DOD because our current acquisition system buys computers in the same way we buy bullets."¹⁰ Buying off the shelf becomes an asymmetric approach to developed nations' longer-term procurement cycles.

Operating principles also refer to the rules of engagement, strategy, tactics and organizational principles that guide a side's actions and decisions. NATO politicians decided that pilots could fly only above 15,000 feet in Kosovo, a rule of engagement that affected precision.

Will. Colonel Charles Dunlap Jr. notes that the Western mind-set Samuel Huntington describes includes concepts (values) such as "individualism, liberalism, constitutionalism, human rights, equality, liberty, the rule of law, democracy, free markets, [and] the separation of church and state."¹¹ However, entirely different principles and ideologies may drive logic in other cultures. Foreign societies may

believe it is easier to attack the Western psyche or will to fight than to meet it on the battlefield in a contest between technologies, a truly asymmetric approach from the Western viewpoint. Many Russians believe that the United States did just that when it convinced Soviet Secretary General Mikhail Gorbachev to end the Cold War. His loss of will allowed the West to win the Cold War without firing a shot.

This discussion offers several conclusions. First, the word “asymmetry” highlights the problem of using terms loosely or improperly. When this happens, words are not properly understood, confusion reigns, and endless time is spent in futile explanation. The international arena further exacerbates the situation because different cultures interpret words with slight nuances. Not using one’s own language correctly only heightens misunderstanding. Second, a methodology that considers a situation asymmetrically offers a way to analyze and choose courses of action. Third, perspective is equally as important as methodology. The United States might be the most asymmetric force on Earth, but Americans do not see themselves that way. They view others as an asymmetric force or threat when, in fact, they are not. US citizens should be proud to be on the right side of the asymmetric ledger.

Asymmetries exist everywhere, of course. They can be found in market economies of varying degrees versus centrally planned economies and in political systems. There are also strategic, operational and tactical asymmetries. Strategically, theorists discuss asymmetries in the force structure of intercontinental ballistic missiles or information warfare forces, while tactical-level analysts try to calculate the correlation of forces between sides. In these cases, asymmetries refer to quantities, total numbers or different philosophies. Asymmetries also refer to approaches to attack vulnerabilities.

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Asymmetry is a matter of two unlike systems interacting, each within its capabilities. Attacks can be swift (like an earthquake) or progressive (like termites or rust, silently undermining a formidable structure). Progressive attacks are usually associated with cultural strengths than can be maintained for long periods (sacrifice, resilience, deception, media sympathy). Unlike systems do not understand how to counter each other because of contradictory paradigms. Consider the term “rasingigin.” When the term is understood as “singing in the rain,” then deciphering other terms is easier. For example, the word insertion paradigm helps interpret the term “beilld” as “sick in bed.” Understanding the threat requires thinking in threat paradigms.

Agents using asymmetric analytic methodologies—performance parameters, situational context, operating principles and will—start with an advantage. When striving to attack a vulnerability, having a template for action is the name of the game. Each methodology allows analysts to visualize better how to attack and defend enemy and friendly vulnerabilities. In the end, this is where the focus should be and not on the so-called asymmetric threats of weapons of mass destruction and chemical, biological and information attacks. 

NOTES

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3. J.A. Simpson and E.S.C. Weiner, *The Oxford English Dictionary*, Second Edition, Volume I (Oxford, UK: Clarendon Press, 1989), 738.
4. S.I. Ozhegov, *Dictionary of the Russian Language* (Moscow, 1984), 29.
5. Discussion between the author and Dr. Deborah Porter, University of Utah, Associate Professor of Chinese, 4 August 2000.
6. Discussion between the author and Royal Australian Infantry Major J.J. Frewen regarding a two-year exchange with the US Army as a G3 strategic plans officer, Headquarters, US Army Pacific.

7. Lloyd J. Matthews, Introduction in *Challenging the United States Symmetrically and Asymmetrically: Can America Be Defeated?* ed. Lloyd J. Matthews (Carlisle Barracks, PA: US Army War College [USAWC], Strategic Studies Institute [SSI], July 1998), 20.
8. Steven Metz and Douglas V. Johnson II, “Asymmetry and U.S. Military Strategy,” USAWC, SSI, January 2001, 5, 6.
9. David L. Grange, “Asymmetric Warfare: Old Method, New Concern,” *ROA National Security Report*, March 2001, 1. Reprinted with permission from *National Strategy Forum Review*, Winter 2000.
10. *Ibid.*, 16.
11. Charles Dunlap Jr., “Preliminary Observations: Asymmetrical Warfare and the Western Mindset,” in *Challenging the United States Symmetrically and Asymmetrically: Can America Be Defeated?*, Lloyd Matthews, ed. (Carlisle Barracks, PA: USAWC, SSI, July 1998), 3.

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