Lost in Translation:
Innovating to Failure

Review of "The Use and Abuse of Technology: In Insurgent Warfare"

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Translating military capabilities into political objectives has proven difficult throughout history. The events surrounding the recent US military withdrawal from Afghanistan echo in the minds of those who witnessed the fall of Saigon at the end of the Vietnam War. The drive to innovate lies at the heart of the greatest qualities of humanity and is particularly apparent in the speed of technological innovation within the United States. This retrospective will examine the relevance of Raymond Hain's 1999 article, "The Use and Abuse of Technology: In Insurgent Warfare," as it relates to today's focus on technological innovation to the exclusion of the human, social and cognitive domains.

Hain, among others, outlines in vivid detail the allure of new gadgets and their promise of military victory in Vietnam.[1] Hain's analysis of the challenges of translating technology to outcomes reveals three central points: (1) the context of conflict is highly important for successful means-ends alignment; (2) technology is limited in its efficacy for achieving political objectives and, in some cases, even detrimental to their achievement; and (3) in the age of information, narrative matters tremendously.

Two interrelated claims are central to these observations. One, the United States has a love affair with technology blinding it to the evolving context of

global competition; and two, this blind spot could prove fatal should the United States fail to make significant changes in how it innovates.[2] Awareness of the need for innovation is evident among senior leadership, as seen in US Air Force Chief of Staff General Charles Q. Brown Jr.'s initiative to "accelerate change or lose.[3]" These claims do not infer technology is no longer useful. But the drive for technological innovation may be elevated to a position incompatible with the state of world affairs. Examining Vietnam through Hain's article will aid in understanding this struggle to accept the limits of technology.

The Vietnam War—one of low-intensity conflict—proved to be significantly different than the conventional conflicts of the twentieth century to which the United States was accustomed. Hain defines low-intensity conflict as having four primary manifestations: counterterrorism, peace keeping, peacetime contingencies, and insurgency/counterinsurgency. Key unconventional aspects of this type of conflict include economic, political, and psychological warfare.[4]

A critical question many have asked is how the United States so impressively dominated the battlefield and yet lost the war. Hain offers a salient answer: the United States lost the war because of its love for military science and the neglect of military art.[5] US confidence in its mastery of military science and its blind faith in the promises of modern war-fighting technologies, are seen in the years leading up to the US invasion of Vietnam. This hubris leads to the second of Hain's arguments, that is, technology has its limits.

The French conflict in Vietnam lasted eight years. Rather confidently and subsequently erroneously, the United States did not consult the French about their hard lessons learned during the eight years prior to the launch of the US military campaign in Vietnam.[6] One possible explanation is that the United States believed its overwhelming military power did not necessitate a French consultation. Like France, America would have to learn the hard way. Technology has its limits, and the enemy gets a vote.[7]

The Viet Cong, learning from the enemy and adapting its military art, went to great lengths to avoid direct engagement with the better-armed French military forces. They traveled by night and engaged in short skirmishes against poorly protected French targets. If caught in the open, they would scatter and hide before the French could focus and mass artillery fire on their position.[8] The Viet Cong were able to negate the advantages offered by superior military science through asymmetric warfare. The military art adapted to fight the French offered even more promise for the Viet Cong and North Vietnamese Army when they encountered the US military.

Hain describes the US experience in Vietnam as a "bewildering disaster."[9] Key to this bewilderment was the realization that military success did not translate into

political success. The Johnson administration's stated goal was the creation of a stable, secure, noncommunist Vietnam, an objective that would prove too steep for even the world's mightiest standing military and its technology.[10] Hain includes a small sample of this technology: a bed bug operated "people sniffer," starlight scope, small personnel radar, sound detectors, and seismographs used to detect vehicles on a road. Special infrared detectors were used to locate heat sources beneath vegetation, and photographic films were used to identify dead vegetation.[11]

Many of these technologies failed to live up to their promise. For example, the XM-2 "People Sniffer" proved mostly useless during the war and was exploited by the Vietnamese who placed urine canisters throughout the jungle to lure US Soldiers away.[12] Even worse, rather than simply negating the US advantage, the Viet Cong and North Vietnamese Army succeeded in using the narrative these devices created against US political objectives. In this turnabout, the third and final point emerges—narrative may be the most potent weapon of all.

Speaking to the art of war, another critical US misstep in the application of technology was the destruction of Vietnamese rice fields in Operation Ranch Hand. Rice holds a special status in Vietnamese culture and to waste it was a cardinal sin. This turned normal peasants into active militants, exacerbating the US problem in Vietnam.[13] In 2011, Mark Clodfelter noted that in both Iraq and Afghanistan, the motivation for revenge in response to civilian casualties caused by the misapplication of military power was a particularly significant factor when measuring increases in enemy fighting strength.[14] Technology, when applied poorly at best or recklessly at worst can empower the enemy. Instead, the artful application of military science within conflict effectively links capabilities to outcomes.

Hain contends that throughout history, intervening powers overestimate the worth of their technology. Furthermore, these powers routinely fail to account for the needs and wants of the indigenous people.[15] Looking back at the conflict in Vietnam, then-US Secretary of Defense Robert S. McNamara argued the United States had gross deficiencies in its understanding of the Vietnamese people and their motivations.[16] The case for an American love affair with technology appears to have merit. Moreover, some studies suggest increased reliance on technology leads to a lack of awareness and connection with other humans and society.[17] Has the collective national strategic psyche become so wedded to technology that it has lost sight of the human component of warfare? The US military experience in Vietnam and more recently Afghanistan suggest this is a possibility.

The belief that overwhelming technological power can overcome deficiencies in its application is subtle and dangerous. Military science is no substitute for military art. An awareness of this lesson is particularly important in a world where the United States and its near-peer adversaries are approaching or have achieved

technological parity. The race to technological superiority could not be more urgent, and the United States must, of course, continue its pursuit of technological innovation. But these pursuits should not come at the expense of innovation in other areas, specifically, national cognitive capacity.

The 1983 report "A Nation at Risk," highlighted waning intellectual capital in the United States when compared to other nations. The framework of this report was directed specifically at national security and emphasized, "history is not kind to idlers."[18] The suggestion that intellectual complacency had penetrated US culture caused significant concern for the Reagan administration. Some would argue the problems highlighted in this report exist in America today.

Although education reform is beyond the scope of this short article, it speaks to a corollary lack of interest (or lack of ability, or both) in enabling meaningful change intended to bolster the intellectual capacity of the nation. Viewing the military as a sample size of the broader population suggests that getting to the root of the problem highlighted herein will likely require not only efforts within the Department of Defense, but prior to military recruitment.

In the age of asymmetric information warfare, cognitive deficiency may prove to be irrecoverable even by the best technologies. The Russian disinformation campaign directed at the 2016 presidential election is a clear demonstration of the artful application of information warfare. A nation armed with gadgets and deficient in ideas could prove highly vulnerable in the twenty-first-century global order.

The likelihood of an increasing number of conflicts similar to Vietnam is driven by environments in which these conflicts emerge: societies with extreme wealth disparities; societies with a nonexistent middle class; nations and regions containing key trade routes or land or maritime choke points; and less-developed nations with raw material or mineral resources ripe for exploitation by larger nations.[19] Globally, an increasing number of countries and regions meet these criteria. For example, since the recent US withdrawal from Afghanistan—a country rich in unexploited mineral resources, the Taliban has received offers of assistance from China.[20] Only time will tell if China will choose to brave the graveyard of empires.

Facing the near certainty of such conflict centered around asymmetric warfare, the US military must continue to master the science of war, but it cannot afford to do so at the expense of also mastering the art of war, a primarily cognitive domain. Investment begins in the intellectual capital within the nation as a whole, and continues as military leadership encourages bold innovation within its ranks. The type of innovation needed includes bandwidth and incentive for military members to garner educational and professional opportunities outside defense circles. The time for doing more with less and oversaturating war fighters with mundane tasks rather than sharpening their cognitive capacity is over. Should the

United States fail to learn from these expensive examples of the limits of technology, it may find itself in a conflict that could have been avoided with a more creative understanding of the concept of innovation.

Hain recognized the dangers of an overreliance on technological capability in the war-fighting domain. Contextually, this recognition appeared during a time during undeniable US technological superiority. If this perception of misplaced US allegiance to technological capabilities above all other forms of innovation is as pervasive as is feared, the dangers of such misapportioned capital cannot be overstated.

The character and speed of conflict in the age of information demands defense professionals think bigger and allocate every available resource to the mission of creating and retaining the broadest possible intellectual capital and perspective. Failure to innovate beyond the realm of technology may result in adversaries beating the United States in a race of which it was unaware. History is littered with examples of powerful characters outmatched by smaller, more shrewd ones. America cannot afford to add to that shameful, embarrassing lineage. True innovation demands more. ✪

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Notes

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3. Charles Q. Brown Jr., *Accelerate Change or Lose* (Washington, DC: Headquarters, Department of the Air Force, August 2020), https://www.af.mil/.
4. Hain, "Insurgent Warfare," 2.
5. Hain, "Insurgent Warfare," 1.
6. Hain, "Insurgent Warfare," 6.
7. Mark Clodfelter, "Forty Five Years of Frustration: America's Enduring Dilemma of Fighting Insurgents with Airpower," *ASPJ* 25, no. 1 (2011), https://www.airuniversity.af.edu/.
8. Hain, "Insurgent Warfare," 5.
9. Hain, "Insurgent Warfare," 7.
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13. Hain, "Insurgent Warfare," 8.

14. Clodfelter, "Enduring Dilemma," 84.

15. Hain, "Insurgent Warfare," 14.

16. Errol Morris, "Review Essay: Vietnam, McNamara, and the Fog of History," *New Political Science* 26, no. 3 (September 2004): 461, https://doi.org/.

17. Anita L. Cloete, "Unstoppable: A Critical Reflection on the Socio-Economic Embedded-ness of Technology and the Implications for the Human Agenda," *HTS Teologiese Studies/Theological Studies* 75, no. 2 (2019), https://doi.org/.

18. David P. Gardner, *A Nation at Risk: The Imperative for Educational Reform* (Washington, DC: National Archives, 1983), 10.

19. Hain, "Insurgent Warfare," 2.

20. Simon Constable, "Why China Wants to Get in on Afghanistan's Reconstruction," *Forbes*, August 28, 2021, https://www.forbes.com/.