Let us Fight the Future and Not Rebuild the Past

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Resumé

Den 15 oktober beslutades om budgetökningar till Försvarsmakten. Regeringen utlovar återetablering av regementen och flottiljer, men är det en återetablering som är prioritet för att kunna möta de samtida hoten. Författaren resonerar i denna artikel om ytterligare möjligheter för att öka Sveriges förmåga att möta en allt mer skiftande samtid och framtid. Läs om hur de senaste lärdomarna från olika konfliktområden kan tillämpas, hur information och rapporter bör kopplas ihop i en gemensam databas. Slutligen, kan och bör Sverige etablera en närvaro i de olika innovationshubbar som finns runt om i Världen, fördelar och nackdelar.

ON OCTOBER 15, 2020, the Swedish Government introduced an increased defense budget which among many things aims to re-establish four Army regiments, one Marine regiment, and one Air force flotilla, in remembrance of the Cold-War conventional strategy. The budget increase projection from 2021-2025 is 27,5 billion Swedish kronor, reaching an annual budget of almost 80 billion Swedish kronor per year in 2025. The defense spending agreement finds support among several of the parties in the Swedish Parliament, according to the Swedish newspaper Svenska Dagbladet.2 However, it should also raise a concern: are the Swedish Armed Forces using the budget increasement correctly, or are they trying to recreate what once was?

Sweden builds its military doctrine and security strategy from lessons learned after World War II and how the country postured its defense during the Cold war. In addition to this, Sweden does not implement many of the beneficial aspects of using artificial intelligence and shared databases. The innovation perspective when it comes to military doctrine might be seen from an overly

narrow lens. This article aims to highlight some of the challenges facing Sweden when seeking to counter its adversary's actions. As a solution this article suggests adding three new approaches to Sweden's defense strategy: Learn from the Loser, Connect the Connected, and finally, Unconventional Short Cuts or how to outpace the international bureaucracy.

Every year until 2016, the Swedish Defense University conducted several annual major field exercises with the Staff College Program students. The emphasis was placed on one of the studies, much appreciated (by students), which follows the German breakthrough at Sedan in May 1940.3 Under the command of two well-known Generals, Guderian and Rommel, with air superiority and a new doctrine - blitzkrieg - the German troops achieved a breakthrough on May 14, which resulted in Guderian reaching the Channel coast on May 20.4 Students at the Swedish Defense University examined several of the battles during this episode of World War IIera. The lessons learned from the Germans during this part of the war, proves their successful adaption to new technologies – tanks and close air support, and the transformation of its strategy, blitzkrieg, enabled in maneuver warfare.

The French Armed Forces had learnt from the result of World War I, which suggested that defense was superior to offense. The French created the Maginot Line named after the Minister of War, Andre Maginot. The Maginot line can be described as a system of underground fortresses and bunkers.⁵ This defense line did not provide its intended effect. Maneuver warfare has since WW II been the leadership philosophy for conventional forces and the armored assault, according to several doctrinal documents. However, there is a problem with that picture since conventional wars are outnumbered by unconventional wars. As shown in figure 1, wars between states have decreased, meaning conventional battles have done so as well.

ARMED CONFLICT BY TYPE, 1946-2019

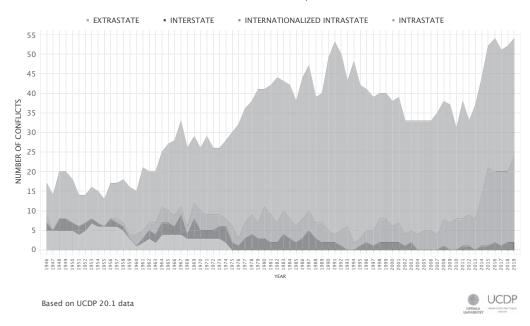


Figure 1 Armed Conflict by Type, 1946–2019⁶

Why do the Swedish officers study the German successes at Sedan in 1940? It is not because Sweden applies the strategy of preemptive attack, it is because Sweden, as other countries adheres, to the leadership philosophy of mission tactics and maneuver warfare. Arguably, an officer should recognize the basis and history from which leadership

philosophies originate. But, could Rommel's and Guderian's adventures create a false picture of what type of war officers in Sweden will fight, and could this be the main reason why Sweden strives to re-create its conventional strength?

There is a saying, "Generals always fight the last war." If that is correct, Sweden will follow the lessons learned from the Swedish-Norwegian war in 1814, over 200 years ago. 8 There is a problem in this focus on history: it does not prepare Sweden or its strategic thinking for the most likely form of future war, one heavily involving advanced weapon systems, computerization, and asymmetric warfare. Three new approaches are needed to ensure Sweden's new budget additions are well spent with an updated strategic understanding of the world.

Learn from the Losers

The application of Swedish war experience is limited; that is why Sweden seeks other expertise and wisdom and learns from the early German success of WW II, and from the U.S. over time. The challenge with this approach is that both the Germans during WW II and the U.S. are examples of mass-armies, utilizing superior force, a strategy (surprise-attack), and a luxury (mass, or attrition) that Sweden does not have and will not possess when it matters. The country has taken pride in its neutral approach and, since 2009, expanded the foreign policy with the solidarity clause.9 This position is understandable since the government has remained at peace for over 200 years. One challenge is that its strategy, doctrine, and technology take inspiration from the U.S. approach.

When drawing on lessons learned, Sweden looks at the coalition or winning, side when Sweden should also learn from the other party, the loser, or the long-term winner. Recent conflicts in Afghanistan (2001–), Iraq (2003–), and Israel's intervention in Lebanon (2006) have commonalities in that a superior (mainly) conventional force faced an adversary that is used irregular tactics.

In 2005, General James N. Mattis and Lieutenant-Colonel Frank Hoffman introduced the hybrid war term. Hybrid war is when an actor uses the full spectrum of instruments of power. Hoffman has developed this over time, and one of the examples he utilizes is the second Lebanon war in 2006, as per the following quote.¹⁰

The fusion of militia units, specially trained fighters, and the anti-tank guided missiles teams mark this case, as does Hizbollah's employment of modern information operations, signals intelligence, operational and tactical rockets, armed UAVs and deadly anti-ship missiles. Hezbollah's leaders describe their force as a cross between an army and a guerilla force, and they believe they have developed a new model.¹¹

The strategy utilized by Hezbollah was also used earlier by the beforehand much-underestimated Fedayeen in Iraq. Michael. R. Gordon and Gen. (Ret.) Bernard. E. Trainor expand on the topic in Cobra II: The Inside Story of the Invasion and Occupation of Iraq: They state, "as it turned out, the generals were well prepared to fight the enemy that they had war-gamed against. But, it would be the paramilitary Fedayeen that represented the principal challenge in Nasiriyah, Samawah, Najaf, Kifl, and Diwaniyah, and they fought tenaciously as well.12 In both the case of Hezbollah and the Fedayeen, irregular tactics challenged the conventional forces. As stressed by the authors: "but from the first day of the invasion, the U.S. was not fighting a purely conventional war...The attacks by the Fedayeen on the road to Baghdad demonstrated that the American-led coalition was contending with a decentralized enemy that was fanatical, not dependent on rigid command and control, and whose base of operations was dispersed throughout towns and cities of Iraq."13

Arguably there is evidence in history to suggest that battles are won, but wars are lost when a superior conventional force invades or intervenes in another country if it does not adapt to the situation. As the evidence in the article suggests, it is highly possible for small-unit decentralized troops, with access to both advanced weapons and skills, and with external support, to cause overwhelming dilemmas for far superior adversaries. Characteristic operations, such as raids and ambushes, are what Swedish Rangers and Special Forces consistently train to execute. Dr. Sean McFate argues that "the whole military should become more like special operations forces, and future training should reflect this. Tactics, techniques, and procedures common in special operations forces should become more mainstream, especially among ground forces."14

Minorities defending their own territories in an asymmetric fight should be an attractive framework within the Swedish Armed Forces; they can appear to be automatic losers at the outset and yet prevail over time. Such a framework requires the very type of soldiers that Sweden has normally within its troops; those have a high level of capacity as a light force, semi-independently dispersed over a vast geographical area, and armed accordingly, as shown in the conclusions form the earlier quote. The United States Marine Corps (USMC) has thoroughly war-gamed to develop its new force design, Force Design 2030.15 The Commandant suggests the divestment of all tanks from the USMC and investment in long-range precision munitions. 16 The recent conflict between Nagorno-Karabakh suggests that tanks or conventional forces struggle on the battlefield when an adversary employs Intelligence Surveillance and Reconnaissance (ISR) platforms and precision munition.¹⁷ The conflict is still ongoing and has so far offered limited opportunities to draw any meaningful conclusions. In recent wars, the losing side has shown us

that they are the winning side in the longterm struggle between interests if they deploy small, decentralized units, empowered with effective munition and ISR platforms.

Connect the Connected

General Valery Gerasimov, currently Chief of the General Staff of the Armed Forces of Russia, 18 studied and adapted to the changing character of war, resulting in the Gerasimov doctrine or the new generation warfare. 19 The strategy was exemplified in the Russian annexation of Crimea in 2014 and the continuing conflict in Ukraine and Syria and Libya intervention. Russia is, at the same time, the direct threat to stability in the Baltic Sea region.20 Due to recent Russian aggression and policy, the Swedish Armed forces focus on rebuilding its conventional military defense.21 Like the Germans after their defeat in WW I, Russians, after the Cold War, developed and renewed their strategy. Russia still possesses far superior numbers of personnel and weapons than does Sweden, no matter how much Sweden strives to increase its numbers.

At the Beijing Winter Olympics in 2018, Intel broke the world record of coordinating 1218 drones simultaneously.22 The drones performed simultaneously and in the end, they shaped the Olympic rings. Modern technology can compensate for a lack of personnel. In one way, mass is back. Imagine equipping a six-man Ranger team with lethal drones. Suddenly a group becomes a squadron. However, the solution is not to rebuild a conventional army, the mass will not counter the new generation warfare, but it will help puzzle it. A solely military solution will not meet the challenge. The new generation warfare utilizes all instruments of power, and distributed over time, if necessary.

Meeting the challenge, the strategy imposes on a small state that one essential tool will be the intelligence community. The community needs to attach to all agencies to detect patterns of adversarial action. Imagine a comprehensive database, including daily reports from a broad spectrum of agencies, running an artificial intelligence algorithm to identify those antagonistic patterns. Occurring reports of a disturbance in the communications sector, such as sabotaged masts, drones flying over the parliament, or adversarial personnel getting their leave canceled, all of the above cross-checked to trends on social media and current news reports. All are being connected within the database and analyzed at speed, not comparable or achievable with human computation.

The military thinker John Boyd suggests that if a community can observe from unfolding circumstances and environmental interaction and organize that information (orientation) towards its experience, cultural traditions, and generic heritage, the same organization can outpace its adversary decision-making process.²³ In other words, create a dilemma by what Boyd calls "compress own time and stretch-out adversary time."24 John Boyd's thoughts mirror the connected approach. The idea of connect the connected suggests two solutions to counter the new generation warfare strategy: First, there are drones to counter the lack of personnel. Second, there is a comprehensive database, mixing open and confidential information in a timely fashion, aiming to achieve a possibility to make decisions at a faster pace than our adversary.

Unconventional Shortcut

Herein lays the core of the challenge: how to adapt to the future. The problem is not solely Swedish. In front of the U.S. House of Representatives Armed Service Committee, Dr Eric Schmidt, member of the defense innovation board, said, "DoD does not have an innovation problem; it has an adoption problem."25 Innovative development outpaces the speed at which the DoD adapts to emerging technologies and strategies. Sweden shows a similar pattern. The country is innovative to its core, and several successful companies originate from it, such as IKEA, Volvo, Spotify, etc. It has its defense industry with the leading manufacturer SAAB. However, emerging technologies and the adaption within the Swedish armed forces seem to tail the U.S. and NATO trends rather than adopting innovations ahead of them.

Following the big ideas in products and strategies from larger nations and regional organization will make Sweden lag behind in the race to outpace its adversary. Sweden has a strength in its smallness compared to both Russia and the U.S., and its bureaucracy could move at a higher pace due to shorter lines of communication. Arguably fewer personnel within an organization could enable faster communication. A prerequisite to outpace its competitors is to be aware of new technologies when they first appear.

Being aware of, and then ahead in, the technological curve allows Sweden to maximize its advantages. To allow that speed, Sweden should strive to establish a cell in the heart of technological development, the Silicon Valley. Dr. Chris C. Demchak explains, "military history suggests consistent success comes if one has foreknowledge of adversaries actions at a faster speed and the larger-scale ability to act disruptively... the United States and its allies are holding their own only in one area – the commercial speed of adoption." ²⁶

A couple of years ago, the DoD established its own venture capitalist company in the "Valley," the Defense Innovation Unit

- Experimental (DIUx). It was created with the sole purpose of accelerating the incorporation of new technologies and has proven itself so well that it is no longer experimental, but an established vector for force capacity advances.27 Hence, this is the importance of getting access to emerging technologies and trends as they arise in vibrant commercial ITC hubs rather than after they have been adopted elsewhere—particularly critical for Sweden. The unconventional shortcut suggests that Sweden should establish a factfinding liaison and investment cell in Silicon Valley, California. The new unit would accelerate the awareness of technological development, and directly enhance early perception of future trends and opportunities by Swedish officers rotating through the unit, all of which would travel home to maximize the effectiveness of Sweden's forces.

Conclusion

This article points to some of the challenges the Swedish Armed forces face and gives examples of three additional approaches that could mitigate some of the challenges. This project is exceptionally timely. With broad support and an increasing budget, the demand to invest in the most effective defense for the funding available will increase. The armed forces must question themselves and their activities. Is Sweden doing the right thing or doing what the country thinks is right, based on its perceptions of history and old thinking on defense? Many decisionmakers were in the game when Sweden aimed to meet an invader with a strong defense. It is easy to fall back on those earlier truths instead of seeking new ways to counter current and future threats. To awaken the debate and move it further away from regional politics and old truth, three unconventional approaches that support historical and comprehensive

research are suggested. They are not farfetched dreams; they are within reach and provide a relatively cheap force enhancement. Two of the approaches demand doctrinal development; the third aims to drive both technological and doctrinal growth. It would be appropriate for the special forces to spearhead this development.

Learn from the loser, suggests that Sweden, rather than getting influenced mainly from stories from WWII and U.S. achievements in recent years, should learn from how the insurgents fought in Iraq, Afghanistan, and Lebanon, and how they adopted and decentralized. Enhance knowledge of tactics and techniques within the conventional units by making Rangers and Special Operations Forces share their experience, tactics, and procedures. As an example, the USMC is divesting all tanks in their Force Design 2030.²⁸ The AK-47 remains one of the deadliest weapons of all in history. Arming on a broader scale will likely create an exponential effect.29

Connect the Connected suggests that modern technology countering mass is done by, at least, initiating the discussion of lethal drones. Imagine what a small Ranger team behind enemy lines could do with a snowmobile and a sled with hundreds of killer drones. It is for real; as shown by Intel in Beijing in 2018, the technical function exists. The second part of the approach compiles a comprehensive database powered by an artificial intelligence function, with machine learning, perhaps an artificial neural network, scanning all sources and all agency reports, and comparing them to social media and current news. All of this is to enable detection and deliver options for countering the Gerasimov doctrine.

Unconventional shortcuts highlight the problem of adapting to innovative technologies and strategies. I suggest Sweden could

short cut some of the bureaucracy imposed on great powers by establishing a Swedish version of DIU in the Silicon Valley. Perhaps in cooperation with other Swedish agencies, and maybe with parts of the Swedish defense industry. It will allow for detecting, investing, and adapting to emerging technologies and strategies at a higher pace or faster speed than our competitors due to our smallness and short lines of communication and decision.

All three approaches are feasible and, with the new budgetary consensus, affordable. Sweden cannot afford to wait any longer to adapt to the new reality and be ready to win when challenged.

The author is a major, studying at the Naval Postgraduate School in Monterey, California, USA. He has a long background in ranger and special forces units.

Notes

- "Omfattande satsningar på totalförsvaret", Regeringen och Regeringskansliet, 2020-10-15, https://www.regeringen.se/pressmeddelanden/2020/10/omfattande-satsningar-pa-totalforsvaret/, (2020-10-18).
- Wallberg, Peter: "Försvarsuppgörelse klar tillskott på 13 miljarder", Svenska Dagbladet, TT, 2020-09-18, https://www.svd.se/dn-regeringenc-och-l-overens-om-forsvaret, (2020-12-09).
- 3. Knighton, Andrew: "The German Breakthrough at Sedan, May 1940", War History Online (blog), 2019-03-08, https://www.warhistoryonline.com/instant-articles/german-breakthrough-at-sedan.html, (2020-10-18).
- 4. Ibid.
- History com Editors, "Maginot Line", History, https://www.history.com/topics/world-war-ii/ maginot-line, (2020-12-07).
- 6. "UCDP Charts, Graphs and Maps", https://ucdp.uu.se/downloads/charts/, (2020-10-18).
- "Fighting The Last War and The Next, American Heritage", https://www.americanheritage. com/fighting-last-war-and-next, (2020-10-18).
- 8. "Sweden Celebrates 200 Years of Peace", 2014-08-15, https://www.thelocal.se/20140815/swedencelebrates-200-years-of-peace, (2020-10-18).
- "Sweden and NATO 23 Years down the Road", NATO Review, 2018-01-11, https://www.nato.int/docu/review/articles/2018/01/11/swedenand-nato-23-years-down-the-road/index.html, (2020-10-18).
- 10. Freedman, Lawrence: "The Future of War: A History", *PublicAffairs*, 2017, p. 223.
- 11. Ibid.
- Gordon, Michael R. and Trainor, Bernard E.: Cobra II: The Inside Story of the Invasion And Occupation of Iraq, Vintage Books, 2007, p. 572.
- 13. Ibid., p. 573.
- McFate, Sean: The New Rules of War: Victory in the Age of Durable Disorder, HarperCollins, 2019, p. 38.
- 15. CMC38 Force Design 2030 Report Phase I and II, https://www.hqmc.marines.mil/Portals/142/Docs/CMC38%20Force%20Design%202030%20Report%20Phase%20I%20and%20II.pdf?ver=2020-03-26-121328-460,p.3,(2020-10-18).
- 16. Ibid., p. 7.

- 17. Morgan, Jared: "Armor Attrition in Nagorno-Karabakh Battle Not a Sign US Should Give up on Tanks, Experts Say", Military Times, 2020-10-02, https://www.militarytimes.com/news/ your-military/2020/09/30/armor-attrition-innagorno-karabakh-battle-not-a-sign-us-shouldgive-up-on-tanks-experts-say/, (2020-11-02).
- 18. "Valery Gerasimov", Wikipedia, December 4, 2020, https://en.wikipedia.org/w/index.php? title=Valery_Gerasimov&oldid=992305072, (2020-12-07).
- 19. Op. cit., Freedman, Lawrence, see note 10, p. 224.
- 20. "National-Security-Strategy.Pdf", https://www.government.se/4aa5de/contentassets/0e04164d7eed462aa511ab03c890372e/national-security-strategy.pdf, (2020-10-18).
- Op. cit., "Omfattande satsningar på totalförsvaret", see note 1.
- 22. Barret, Brian: "Inside the Olympics Opening Ceremony World-Record Drone Show", *Wired*, 2018-02-09, *https://www.wired.com/story/olympics-opening-ceremony-drone-show/*, (2020-10-18).
- 23. Boyd, John A.: A Discourse on Winning and Losing, Air University Press, 2018, p. 384, https://www.airuniversity.af.edu/Portals/10/AUPress/Books/B_0151_Boyd_Discourse_Winning_Losing.PDF, (2021-02-15).
- 24. Ibid., p. 206.
- 25. HHRG-115-AS00-Wstate-SchmidtE-20180417. Pdf, House Armed Services Committee, 2018-04-17, https://docs.house.gov/meetings/AS/AS00/20180417/108132/HHRG-115-AS00-Wstate-SchmidtE-20180417.pdf, (2020-06-06).
- 26. Wright, Nicholas D.: "AI, China, Russia, and the Global Order: Technological, Political, Global, and Creative Perspectives", *NSI Incorporated*, 2018, p. 108.
- 27. "Defense Innovation Unit", https://www.diu. mil/, (2020-10-18).
- 28. Op. cit., CMC38 Force Design 2030 Report Phase I and II.Pdf, see note 15, p. 7.
- Gunderman, Richard: "World's Deadliest Inventor: Mikhail Kalashnikov and His AK-47",
 The Conversation, 2019-11-08, http://theconversation.com/worlds-deadliest-inventor-mikhail-kalashnikov-and-his-ak-47-126253, (2020-10-18).