



# INSIGHTS

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## *The Benefits of Wargaming and Futurism for Irregular Warfare Professionals*

**“The key to minimizing the risk of being surprised and of suffering catastrophic failure is not to ignore risks in the hope of muddling through but rather to take uncertainty into account to identify areas of potential risk, and to employ planning tools, like scenarios, to narrow the range of uncertainty where possible.”**

-- Andrew F. Krepinevich

*7 Deadly Scenarios: A Military Futurist Explores War in the Twenty-First Century*

As the United States shifts to focus on [strategic competition](#), it cannot afford to remain complacent, assuming the [future](#) will be “whatever is happening now, extended and perhaps amplified.” Today’s threat environment is shaped by the complexities of irregular warfare as state and non-state actors, contending with the U.S.’s conventional and nuclear deterrent, compete below the threshold of major military conflict. Irregular campaigns are opaque and designed to make outright attribution of nefarious intent difficult. Innovation to counter such threats is often even harder. These challenges warrant increased investment in the practices of futurism and wargaming to build agile thinkers and decision-makers who are equipped to respond to a wide range of threats.

The 2020 [Irregular Warfare Annex](#) to the National Defense Strategy articulates a fundamental problem with the United States approach to irregular competition: while adversaries use irregular methods “to negate our advantages and exploit our disadvantages,” the United States has “neglected the fact that [irregular warfare]...can proactively shape conditions to the United States’ advantage in great power competition.” A reactive approach to competition puts the United States at a disadvantage when jockeying for influence and legitimacy, a primary goal of irregular warfare. In order to prepare for competition and wage it proactively, the United States must develop a clear understanding of

*IWC MISSION: The IWC serves as the central mechanism for developing the Department of Defense’s (DOD) irregular warfare knowledge and advancing the Department’s understanding of irregular warfare concepts and doctrine in collaboration with key allies and partners.*

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its weaknesses and assumptions through honest and critical examination. Furthermore, proactivity requires the ability to think beyond the immediate future and examine multiple plausible futures. When assumptions are uncovered and the realm of the possible is explored, then proactive measures can be developed to mitigate disadvantages and shape conditions favorably. In a world of uncertainty and accelerating trends, futures thinking is difficult to do, yet will be an essential skill set for the 21st century and beyond.

A forthcoming report from the Irregular Warfare Center, *Utopia or Oblivion? An Examination of Wargames, Irregular Warfare & Futurism—How Games Can Contribute & Best Practices for Doing So*, shows how futurism and wargaming can help build the requisite agility and creative thinking skills necessary for successfully navigating this threat environment. The study defines futurism as “the exploration of what could be, undertaken for the purpose of shaping what will be.” Based on the premise that the future is not predetermined and that humans have the agency to shape what will be, futures exercises aim to forecast multiple potential futures without making grand definitive predictions about what will happen. To guard against narrow predictions and emphasize the possibility of change, futures practitioners often speak of the future in the plural, as futures.

In order to forecast, futures practitioners focus on trend analysis. Some trends shape society at the most basic levels, like the six “[supertrends](#)” futurist Edward Cornish identifies: technological progress, economic growth, improving human health, increasing mobility, environmental decline, and increasing deculturation. Others look to identify trends that are in their infancy but have the potential to fundamentally shift the strategic environment. For example, Lt Col Jake Sotiriadis, the chief of the U.S. Air Force’s Strategic Foresight and Futures Branch, and futurist Jarius Grove [identify](#) “clustered regularly interspaced short palindromic repeats (CRISPR) (which potentially allow malign actors to develop a new generation of bioweapons), nationalism and state malfunction in well-established countries, new diseases, new forms of intelligence, the failure of things we depend on like antibiotics” as examples of trends that “appeared weak sometimes only a few years ago and are now squarely in the realm of the possible.” Futurists tend to focus on analyzing trends rather than the impact of specific events, given that trends tend to have longer-lasting effects than a single event, and events are often the products of a trend or the interaction of multiple trends.

To illustrate this phenomenon, consider the role of Starlink in the Russian-Ukrainian war. Elon Musk gave the Ukrainians internet access via the Starlink satellite system, which enabled Ukrainian military [communication](#) after Russian attacks devastated the country’s telecommunications infrastructure. After reports emerged that Starlink was used to control military drones, Musk [curbed access](#), tweeting “we will not enable escalation of conflict that may lead to WW3.” The ability of a private company to effectively shut down a military operation might have once appeared absurd but is now entirely possible. This event showcases the broader, and very salient, trend of [corporations](#) playing a prominent role in geopolitics, to great impact. The proliferation of [private military companies](#), [private space companies](#), and [private digital currencies](#) underscores a shift in the strategic environment as private entities take on activities traditionally held by governments. The implications go beyond communication or the war in Ukraine. The trend will ultimately drive changes in the strategic environment.

Undertaking futures exercises to examine the possible implications of this trend could, for instance, uncover assumptions about future warfare logistics or communications that might prove to be more complex or unfounded. Furthermore, a futures exercise could be critical in developing strategies to mitigate the risks and capitalize on the benefits of private corporations playing an increased role in conflict and competition.

While several different approaches to trend analysis exist, there is broad agreement that trends should be mapped in multiple directions and each potential future considered in order to counter the dangerous expectation of relative stativity or progress. The need for multi-directional analysis is particularly vital when subverting norms and trends is in the strategic interest of adversaries. While [Chinese](#) and [Russian](#) foreign policy during the late 1990s and early 2000s was more amenable to following international norms, Beijing and Moscow ultimately shifted towards a [revisionist](#) approach to foreign policy and a focus on irregular activities, which upset linear trend projections as it is these countries' goal to subvert trends and the status quo. As revisionist adversaries grow increasingly active, policymakers and analysts must undertake thoughtful consideration of a variety of potential futures regularly, and repeatedly, in order to both anticipate adversarial activities and build out the U.S.'s own campaigns.

Futurism explores the complexity of multiple possible futures to equip decision-makers with a greater understanding of what could be in order to better enable them to make an informed decision about what future to move toward or away from. Given that proactivity is one of the central [goals](#) of the United States in conducting irregular warfare, examining the realm of the possible and building an image of the future to work toward is critical. Indeed, a central limitation on decision-making is an individual's understanding of the realm of the possible. If a person cannot imagine a certain future, they cannot intentionally take steps toward it. For the United States to be proactive in irregular campaigns, it should first develop an image of the future to move toward and then explore the implications of such a future. The economist Kenneth Boulding described the connection between foresight and decision-making [saying](#) that “whereas all experiences are of the past, all decisions are about the future. The image of the future, therefore, is the key to all choice-oriented behavior.” Then, as the situation develops and trends play out in different ways, the image can be reimagined and adjusted. In this way, futurism is fundamentally best understood as a habit, an effort to continually deepen understanding of the realm of the possible and explore its various implications.

For military planners who need to make decisions about doctrine, capabilities development, resource allocation, or educational priorities years or decades in advance of the crisis these decisions will ultimately be used in, the fluidity of the future can be immensely frustrating. However, the act of exploring multiple future images can also be empowering, as futures also sees virtue in uncertainty, seeing it as an opportunity for change. If the future cannot be predicted because it is not already set in stone and humans have agency, then the United States actually has the ability to shape the future. In the pursuit of shaping the future and testing interventions, alternative analytic techniques such as wargames have great utility.

The use of wargames and simulations to prepare for an array of threats is nothing new. Modern military wargaming stems from [Kriegspiel](#), the Prussian tabletop exercise designed for training military officers in the 19<sup>th</sup> century. Since then, [military wargames](#) have been used to prepare for possible attack scenarios, assist in campaign design, and educate the force. Games are used outside of the military, for instance, in [planning pandemic response](#) or to [test business strategies](#). Simulations can also [serve](#) as important mechanisms for bringing together a diverse group of interagency and international stakeholders to build relationships and work together to craft solutions in a game environment. The ultimate value of the game could come from multiple avenues, including from the development of a solution that is later implemented in real life; from the relationships that have been made; from gaining a deeper understanding of another department's limits or capabilities that were revealed in the game; from being confronted with a scenario that challenges assumptions; or simply from the exposure to a new way of thinking about the future.

One of the most powerful aspects of wargames is that they create a synthetic experience, a “lived” experience that can powerfully shape actions taken in real life. Historically, movies have occasionally functioned in a similar role. Perhaps most notably, watching the movie [WarGames](#) prompted President Ronald Reagan to pursue upgrades to the Department of Defense’s cybersecurity infrastructure. The image of a future presented in the movie, where a person could hack into a computer and compromise sensitive material, prompted questions and incited emotion that then motivated policy.

Wargames can [suspend disbelief](#) better than even the best movie ever could, which is critical for the creation of a synthetic experience and for unlocking deeper learning. For example, the [brain processes](#) science textbooks, movies, and life differently. A textbook usually only contains facts and is less likely to elicit a deep emotional response than a movie, through the power of narrative and engagement of multiple senses. But even with the most compelling movie or book, the brain does not register it as real life because there is an element of passivity. An audience member cannot act to change the plot of the movie. However, a wargame can create a narrative that a participant is invested in and give the participant the ability to engage in the story, which enables the suspension of disbelief. In this context, the information, risks, consequences, and decisions can be processed as if it is the real world.

The creation of a synthetic environment where stakeholders can explore an issue and see the potential consequences of their actions in a way that feels real can be vital in uncovering assumptions, testing solutions, and promoting education. The value of a wargame is not necessarily in “victory” but in the act of working through an alternative future and uncovering problems and blind spots. Because of the ability to engage deeper learning systems, Peter P. Perla and ED McGrady argue in their *Naval War College Review* article that games should be prioritized as a [mechanism](#) for “prepar[ing] our human decision-making apparatus for the physical, intellectual, and emotional environments—full of complexity and uncertainty as they will be—in which our leaders will have to decide, whatever specific events they confront.” Whether conducted in secure rooms for senior policymakers or in classrooms for young foreign service officers or cadets, gaming offers the chance to build critical and creative thinking skills, test assumptions, and “experience” the complexities of the coming world.

The upcoming report *Utopia or Oblivion?* further details the practice of futurism and the science behind simulations and wargaming, provides an example of a futurism-based wargame, and outlines a series of best practices for running games that enhance the practice of futurism. In order for the United States to be proactive in irregular competition, it is important to cultivate in future decision-makers a creative mindset that can see the realm of the possible and is equipped to explore its implications. Proactivity cannot be passively attained: it must be intentionally pursued.