

The Uses and Limits of Speculative Fiction

Three Novels about a US–China War

COL MARK D. JACOBSEN, USAF

In May, Australian Major General (ret.) Mick Ryan released *White Sun War: The Campaign for Taiwan*.¹ This is the third popular novel in recent years to envision a high-intensity war between the United States and China, following August Cole's and P.W. Singer's *Ghost Fleet: A Novel of the Next World War* (2015) and Admiral (ret.) James Stavridis' and Elliot Ackerman's *2034: A Novel of the Next World War* (2021).²

The publication of *White Sun War* provides an opportunity not just to review the book, but to reflect on all three novels and consider the uses and limits of fiction in educating strategists and shaping policy.

A high-intensity war between the world's two largest superpowers would be unprecedented, so the topic demands vision, creativity, and imagination. Speculative fiction can thus play an important supporting role in stimulating thought and action in the real world.

However, speculative fiction must be read with care. Such novels embody specific purposes, themes, and even theories of war, which are often implicit and require careful excavation. Although speculative fiction authors insist they are not making predictions, they are often deliberately seeking to shape high-stakes national security discourse, which means readers need to understand, analyze, and seriously grapple with their content. This is particularly true for self-educated strategists or educators incorporating these works into their curricula.

All three novels make valuable contributions to national security discourse about the United States and China. They all stretch the imagination, draw needed attention to risks in the Pacific, and offer expansive visions of how emerging technology and political, economic, and social trends might shape future war. Each book shines a spotlight on a different facet of US-Chinese rivalry at the expense

¹ Mick Ryan, *White Sun War: The Campaign for Taiwan* (Havertown, PA: Casemate Publishers, 2023).

² August Cole and P.W. Singer, *Ghost Fleet: A Novel of the Next World War* (New York: First Mariner Books, 2015); and James Stavridis and Elliot Ackerman, *2034: A Novel of the Next World War* (New York: Penguin Press, 2021).

of others, which illustrates the importance of applying multiple lenses to complex global challenges.

Despite their differences, all three books share some weaknesses, which are indicative of broader national security discourse about China. To some degree, all are deeply US-centric. Additionally, emerging tech has a magical quality—especially cyber and autonomy—which is deeply misleading.³ Most significantly, none of these books conceive of a sensible strategic logic for a war between the United States and China. This is not because the authors lack imagination; their difficulty stems from the blunt reality that a high-intensity war between the United States and China would be a strategic catastrophe that, like today's war in Ukraine, has no easy or clear end. Perhaps that is the most important lesson that strategists should take from these exercises of imagination.

Evaluating Military Speculative Fiction

Before evaluating these works, we might consider why it is worth reading military speculative fiction at all.

On the one hand, fiction, like all forms of art, should not be evaluated purely through a pragmatic lens. Art transports both the artist and observer to a realm of imagination, enjoyment, and meaning that transcends utilitarian concerns. Good fiction is enjoyable for its own sake and offers aesthetic pleasure, discovery, adventure, escape, and introspection. The best literature elevates us as human beings.

On the other hand, proponents of speculative fiction often argue that these stories are somehow *useful*. History is replete with political and military leaders who extol the value of incorporating fiction into one's life. August Cole and P.W. Singer, the authors of *Ghost Fleet*, coined the term FICINT (fictional intelligence) to describe the anticipatory value of fiction.⁴ They later formed a company called Useful Fiction, which helps clients use storytelling as a change agent.⁵

In this vein, many authors write military speculative fiction because they believe such novels can drive real-world change. Fiction grips audiences, stands out in a crowded marketplace of ideas, and allows readers to connect emotionally with subject material. Speculative fiction can also introduce controversial or new ideas

³ Benjamin Woodson, "Book Review: 2034: A Novel of the Next World War," *Journal of Indo-Pacific Affairs*, 2021, <https://www.airuniversity.af.edu/>.

⁴ August Cole and P.W. Singer, "Thinking the Unthinkable with Useful Fiction," *Journal of Future Conflict*, Fall 2020, <https://www.queensu.ca/>.

⁵ *Useful Fiction* (website), <https://useful-fiction.com>.

in a nonthreatening way that, as C.S. Lewis once described it, might “steal past those watchful dragons” of the heart.⁶

Fiction offers an expansive canvas on which to explore complex ideas. In his book *Grand Strategies: Literature, Statecraft, and World Order*, Charles Hill writes, “Statesmen have looked at literature not only as another source of strategic insight but as a unique intellectual endeavor. Of all the arts and sciences, only literature is substantially and methodologically unbounded.” Its intricacy “brings it closest to the reality of ‘how the world works.’ . . . Literature lives in the realm strategy requires, beyond rational calculation, in acts of the imagination.”⁷

Literature’s ability to transcend reason might be its greatest offering. Maryanne Wolf, who studies the science of reading, writes that deep reading culminates with *insight*—a level of learning that exceeds mere knowledge acquisition and allows the reader to “go beyond the wisdom of the author to discover one’s own.” The education of the strategist is rightly aimed at using such insights to inform judgment. According to Carl von Clausewitz, what military genius “requires in the way of higher intellectual gifts is a sense of unity and a power of judgment raised to a marvelous pitch of vision, which easily grasps and dismisses a thousand remote possibilities which an ordinary mind would labor to identify and wear itself out in so doing.”⁸ Fiction, at its best, provides a laboratory to forge such a unity of elements. Good fiction enables the reader to viscerally experience an imagined world expressed with this “marvelous pitch of vision.”

Yet with great power comes great responsibility. If military speculative fiction authors wish to shape tomorrow’s military leaders and influence real-world policy discussions, the quality of their ideas matters.

Speculative fiction authors caution that their works are not predictions but rather thought experiments. Andrew Liptak writes, “what [speculative fiction] does achieve is provide . . . strategists with a framework for figuring out the next questions that need to be asked and keeps them comfortable with the idea that

⁶ C.S. Lewis, “Sometimes Fairy Stories May Say Best What’s to Be Said,” in *Of Other Worlds: Essays and Stories*, comp. and with Preface by Walter Hooper (New York: Harvest Book-Harcourt, 1996/1994), 37. The full quote is available online at <https://www.goodreads.com/>.

⁷ Charles Hill, *Grand Strategies: Literature, Statecraft, and World Order* (New Haven, CT: Yale University Press, 2011), 6.

⁸ Carl von Clausewitz, *On War*, edited by Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1989).

the future will bring some drastic changes.”⁹ A fiction writer who gets it badly wrong can shrug and say, “It’s just fiction.”

Even so, accountability seems warranted. Ideas matter, and in the realm of national security, the stakes are high. A speculative novel doesn’t have to get everything right; that is too high of a burden for any author. However, we should critically evaluate the theories implicit in works of speculative fiction. To paraphrase my old SAASS professor Hal Winton, we must understand what these theories do *for* us and what they do *to* us.¹⁰

In that spirit, it is helpful to consider how each of these three novels conceptualizes a war between the United States and China.

Ghost Fleet

Ghost Fleet grew alongside the Atlantic Council’s 2014 Art of Future Warfare Project, directed by August Cole, which aimed “to create a world in which artists—writers, illustrators, directors, videographers, and others—and creativity enjoy a valued place in the defense establishment’s planning and preparation for the future of warfare and conflict.”¹¹ Cole developed a relationship with then-Brookings Institute Fellow P.W. Singer. The two wrote *Ghost Fleet* to explore “what would happen if the brewing cold war with Russia and China ever were to turn hot.”¹²

When *Ghost Fleet* debuted in 2015, the US National Security Strategy still read, “The United States welcomes the rise of a stable, peaceful, and prosperous China.”¹³ President Obama had entered office as “the first Pacific President,” but his 2011 pivot to Asia had not yielded significant change.¹⁴

⁹ Andrew Liptak, “The U.S. Military is Turning to Science Fiction to Shape the Future of War,” *OneZero*, 29 July 2020, <https://onezero.medium.com/>.

¹⁰ SAASS is the US Air Force’s School of Advanced Air & Space Studies at Maxwell AFB, Alabama. Hal Winton lays out some of his ideas on theory in Hal Winton, “An Imperfect Jewel: Military Theory and the Military Profession,” *Journal of Strategic Studies* 34, no. 6 (2011): 853–77, <https://www.tandfonline.com/>.

¹¹ “Atlantic Council announces new Art of Future War project” (press release, Atlantic Council, 19 November 2014), <https://www.atlanticcouncil.org/>.

¹² August Cole and P.W. Singer, “Technology’s dilemmas: Are we wired to respond?,” *Ghost Fleet Book* (website), 11 May 2015, <https://www.ghostfleetbook.com/>.

¹³ *National Security Strategy* (Washington, DC: The White House, 2015), <https://obamawhitehouse.archives.gov/>.

¹⁴ Mike Allen, “America’s first Pacific president,” *Politico*, 13 November 2009, <https://www.politico.com/>; and Kenneth G. Lieberthal, “The American Pivot to Asia,” *Brookings*, 21 December 2011, <https://www.brookings.edu/>.

Ghost Fleet served as a wake-up call. The novel opens when China, flush with resources from newly discovered energy reserves, launches a sneak attack on the United States, seizes the high ground of space, unleashes cyberattacks on F-35s and Department of Defense (DoD) networks, sinks much of the US Navy's Pacific fleet, and occupies Hawaii. An embattled and humiliated United States survives, regroups, and fights back. One plotline follows US Marines launching an insurgency in Hawaii, while another follows the retrofitting of the USS *Zumwalt*—and its high-tech electromagnetic railgun—to lead a naval task force back to Hawaii and clear the way for an amphibious landing by the US Marines.

The novel sold widely and had an outsized impact in the defense world. Admiral (ret.) James Stavridis, former NATO Supreme Allied Commander, wrote that it was “A startling blueprint for the wars of the future” and “the best source of high-tech geopolitical visioning” since Tom Clancy and Sir John Hackett.¹⁵ Numerous commanders asked their subordinates to read the book, and Cole and Singer became sought-after speakers in the defense world.

Ghost Fleet's greatest contribution might have been popularizing the notion that a US-China war is possible and requires focused preparation. The novel complemented a significant push within the Beltway to finally execute the long-awaited pivot to the Pacific. It also presented a smorgasbord of emerging technologies and concepts, imagining how these might transform future warfare. These include drone swarms, radiological dirty bombs, performance-enhancing drugs, weaponized booster rockets, unmanned underwater systems, nuclear submarine detection, AR/VR glasses, the weaponization of commercial supply chains, and military actions by private space companies. This kind of freewheeling imagination is where speculative fiction excels.

However, the novel has significant shortcomings. *Ghost Fleet* is starkly astrategic. The pathway to war is contrived and unrealistic. The Chinese Communist Party has been swept away, and a nebulous “Directorate” now calls the shots, which liberates the authors from serious engagement with the CCP's goals, aspirations, and limits. The idea of China preemptively invading and occupying Hawaii is outlandish. Once the shooting starts, there is little sense of a larger strategic environment. Economic interdependencies are swept aside, and the risk of nuclear escalation—which would overshadow any real war—is nearly absent. In a particularly harsh review, Air Force strategist Eric M. Murphy argues that the book wildly misrepresents risk.¹⁶

¹⁵ James Stavridis, quoted on *Ghost Fleet Book* website, <http://www.ghostfleetbook.com/>.

¹⁶ Eric M. Murphy, “#Reviewing Ghost Fleet: Go Back! It's a Trap!,” *Strategy Bridge*, 29 July 2015, <https://thestategybridge.org/>.

Although the authors portray war as a contest of human wills, this is fundamentally a book about gadgets on the battlefield. Most characters serve primarily to enable concepts and technologies. Midway through the book, an Admiral inspecting the *USS Zumwalt* states, “A working electromagnetic railgun will be a game-changer for the fleet; maybe for the entire war.” Indeed, the novel climaxes with said railgun blasting Chinese targets onshore, turning the tide of a key battle. The story literally ends with a railgun round penetrating a decisive target, implying the war is effectively over.

This is a textbook portrayal of the American way of war: using grit and superior technology to win tactical victories, expecting that this will amount to strategic success. Time and again, Americans have needed to re-learn that strategic incoherence rarely ends well.

Ghost Fleet fires the imagination and envisions a range of new technologies and concepts but is not particularly suited for serious thinking about the operational and strategic levels of war.

2034

When Admiral (ret.) James Stavridis and Elliot Ackerman released *2034*, they gave it the same subtitle as *Ghost Fleet*: “A Novel of the Next World War.” It is unclear if this was an editorial oversight or deliberate. Either way, *2034* feels like a strategic corrective to *Ghost Fleet*’s “can-do” American triumphalism.

Stavridis and Ackerman bring impressive credentials. The former spent 37 years in the US Navy and served as the Supreme Allied Commander at NATO before transitioning into an impressive academic and writing career. Ackerman is a decorated Marine veteran and author of multiple literary novels.

2034 opens with two simultaneous blows to American hegemony: a cyberattack on US naval vessels in the South China Sea, and the cyber-hijacking of an American F-35 in Iran. These events set a military crisis in motion, which rapidly escalates beyond anyone’s ability to control. American and Chinese leaders repeatedly miscalculate, and in doing so climb a perilous escalation ladder. The specter of global thermonuclear war hangs over every page.

This is a very different book from *Ghost Fleet*. It contains a few action scenes. Much of the novel plays out in conference rooms and embassies, as the principal characters brood over the weight of their responsibilities. These include a tough naval captain tasked with unleashing the first atomic weapon since 1945, a hot-shot naval pilot who dreams of living up to his forefathers’ legacy, a deputy national security advisor seeking to outmaneuver a dangerously hawkish boss, and a disgraced Iranian military officer navigating a murky no-man’s land between competing superpowers. These characters are mostly not stock action heroes; they

are cogs in a giant political-military machine, tasked with doing their duty. Some do have agency over world events, but they struggle mightily to find it. The reader senses the personal strain involved in trying to wrangle geopolitical chaos.

This is a book with a not-so-subtle message; it is a warning about hubris, the risks of miscalculation, and the danger of a catastrophe that could cost the United States its soul. Near the novel's conclusion, a remorseful character considers that the deepest wound of the war "wasn't the loss of life, as tragic as it had been, but rather the sacrifice of America itself, the idea of it." Just in case the message isn't heard, the book's final page includes the following quote from William Faulkner: "Because no battle is ever won. . . . They are not even fought. The field only reveals to man his own folly and despair, and victory is an illusion of philosophers and fools."

The book does have shortcomings. If *Ghost Fleet* relies on a simplified sketch of the strategic landscape, *2034* suffers similar problems at the tactical and operational levels. As Benjamin Woodson notes in his review, the plot relies on "cyber magic" at key points (a problem admittedly shared by all three books).¹⁷ The intricate, globe-spanning Chinese plan that sets the story in motion is problematic and curiously free of friction. The US Air Force is nowhere to be seen. The book's thematic focus can feel like brow-beating at times, with the plot and characters contrived to serve the message; for example, the book's only real villain is the "chicken hawk" National Security Advisor. I suggest the book is best read not as a realistic scenario, but rather a parable about hubris and miscalculation.

2034 ultimately finds itself in the same bind as *Ghost Fleet*: unable to terminate the conflict without resorting to a *deus ex machina*, which takes the form of a creative (although arguably unconvincing) intervention by a powerful third-party country. The climax reminds readers that the United States and China are not the only world powers, and that these other powers have their own national interests at stake. Although these messages are helpful, one feels that the authors got themselves into a bind and struggled to find an offramp from nuclear annihilation. Then again, that might be precisely their message.

White Sun War

The most recent addition to this genre is Major General (ret.) Mick Ryan's May 2023 book *White Sun War: The Campaign for Taiwan*.

Like Admiral Stavridis, Mick Ryan has a distinguished career as both a military officer and a scholar. He retired from the Australian Army after 35 years of

¹⁷ Woodson, "Book Review: 2034: A Novel of the Next World War."

service culminating as a Major General, which included time attending Johns Hopkins University School of Advanced International Studies and later commanding the Australian Defence College. Ryan is a deep thinker and writer about the future. His 2022 book *War Transformed* surveys a range of trends influencing the character of war and driving an urgent need for adaptation.¹⁸ He is also a long-time advocate of military leaders reading science fiction.¹⁹

The book opens with a clever forward, written by a future Mick Ryan in 2038. He explains that he chose to write a historical novel instead of a history because of its accessibility. His explicit model is Michael Shaara's Pulitzer prize-winning novel *The Killer Angels*, about the Battle of Gettysburg.²⁰ Ryan suggests that fiction is a superior tool for passing on knowledge and driving both learning and adaptation.

Future-Ryan directly states the lessons he hopes his readers will take from this "historical novel." It is people and not machines who fight war, and "humans are still immensely flawed beings." War is a disastrous human invention that entails "miscalculation, fear and ambiguity." Humans are still capable of "the most terrible of atrocities against those who do not think like us." The character of war is constantly changing, so military services must continually adapt. Finally, Ryan offers the book as a wake-up call to those who believe great power war can no longer happen. Vladimir Putin invaded Ukraine, despite assurances that such an act would be delusional. In Ryan's future telling, politicians and academics who assumed that economic integration between the United States and China would prevent war over Taiwan were dangerously wrong.

The novel's opening will look familiar to any INDOPACOM military planner: a Chinese cross-channel amphibious assault on Taiwan, masked by a major military exercise, at a time when the United States is consumed with domestic turmoil. Ryan layers in imaginative new technologies à la *Ghost Fleet*, including Chinese robots called "beetles," autonomous wingmen, and quantum encryption. These feel out of place temporally, given that the book is set in 2028, but the reader can forgive Ryan for seizing the opportunity to explore futuristic technologies. Ryan repeatedly emphasizes that, contrary to popular belief, a war for Taiwan will be won or lost on the ground. He demonstrates this by placing US Marines and soldiers in Taiwan on the eve of the invasion, allowing him to recount much of the fighting through their eyes.

¹⁸ Mick Ryan, *War Transformed* (Annapolis, MD: Naval Institute Press, 2022).

¹⁹ Mick Ryan and Nathan K. Finney, "Science Fiction and the Strategist 2.0," *Strategy Bridge*, 27 August 2018, <https://thestrategybridge.org/>.

²⁰ Michael Shaara, *The Killer Angels* (New York: Random House, 1974).

This novel feels like the most realistic of the three, with detail paid to strategic, operational, and tactical considerations. Allies and partners behave as one might expect, and both American and Chinese characters are mindful of their domestic constituencies and political clocks. With that said, the book does stretch belief in key ways. Like its predecessors, *White Sun War* relies heavily on “cyber magic” (and “autonomy magic”). These systems deliver exquisite effects far surpassing what real cyber and autonomous systems will be capable of in the near future. The risk of nuclear escalation is carefully sidestepped in the book’s final chapters.

Like the other two novels, *White Sun War* relies on a *deus ex machina* (and some narrative sleight-of-hand) to conclude the war. At the climax the United States leverages extraordinary technological capabilities, held in reserve until this point, to support a decisive battle against Chinese forces. The novel ends with an apparent victory for US and allied forces, which raises questions about whether the Chinese Communist Party could ever really concede after gambling so much on reclaiming Taiwan. In an epilogue, Ryan explains that Taiwan was only the opening campaign of a much broader world war, which is a story for another day. While Ryan’s need to wrap up the novel is understandable, he dodges the question that should haunt anyone concerned about a US-China war: *how does this end?* Ryan implicitly suggests a disturbing answer: *it is almost impossible to imagine.*

This makes the warning in Ryan’s introduction especially pertinent: “Our best hope is to minimize these wars and ensure that they do not spill over into a nuclear—or even biological—conflict that could spell the end of humans on this planet. We must study and understand such things if we are to have any chance of preventing such destructive conflagrations in the future.”

Deterrence is thus paramount. On that note, perhaps strengthening deterrence is one of Ryan’s goals. The book offers a strong warning to the CCP: a military invasion of Taiwan will be far harder than they think. One hopes China’s leaders are reading.

Conclusion

Speculative fiction can play an important supporting role in driving thinking about real-world problems. At its best, it is enjoyable and compelling in a way that nonfiction often is not. It stretches the imagination, opens new lines of inquiry, and provides simulated experiences that educate judgment. At the same time, fiction smuggles in assumptions and theories that merit the same critical scrutiny as nonfiction, particularly when aimed at shaping policy.

All three recent novels—*Ghost Fleet, 2034*, and *White Sun War*—have made important contributions to collective thinking about the possibility of a war between the United States and China. However, each provides only a single lens for

thinking about such a war. *Ghost Fleet* is a fun attention-getter and experimental tactical laboratory, *2034* is a parable about miscalculation and the risk of nuclear escalation, and *White Sun War* is a sketch of what a battle over Taiwan might look like.

Yet none of these novels are quite adequate for thinking through the strategic implications of a US-China war. All three novels end at an event horizon, beyond which the future is impossible to predict. *Ghost Fleet* and *White Sun War* both end with operational victories, enabled by a gritty American can-do spirit and technological marvels—which make for exciting fiction, but should provoke wariness given the post-World War II track record of looking for quick victories enabled by technology. Neither work fully grapples with the long-term strategic trajectory of such a war. *2034* takes a different approach; the authors peer into this future and see a nuclear cataclysm.

All three novels, then, lead readers to a similar conclusion: we must think and act carefully to deter a war that we hope never to fight. 📖

Col Mark D. Jacobsen, USAF

Colonel Jacobsen is the Deputy Director of Blue Horizons at the US Air Force's Air University. You can find more of his writing at <https://markdjacobsen.com/>. The views expressed are those of the author and do not necessarily reflect the official policy or position of the Air Force, the Department of Defense, or the US Government.