Thinking The Unthinkable With Useful Fiction

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Abstract

'FICINT' (Fictional Intelligence), also known as 'useful fiction', is an analytic tool that melds narrative and nonfiction. Its attributes are particularly attuned to aiding in visualizing new technology and trends - key issues at play in geopolitical change emergent great power competition. But it is not mere storytelling. There are rules to using this tool successfully, however. This article exams benefits and challenges of using FICINT for enabling planning for future interstate conflicts and highlights important rules in applying 'useful fiction' effectively.

Keywords

FICINT; useful fiction, future interstate conflict, new technology, emergent great power competition.

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Take a look at the professional reading lists that military officers utilize to advance their education and hone their craft and you will find a collection of the usual suspects. On one side are nonfiction books, ranging from classic martial tomes by Clausewitz, and histories such as *The Fighting Canadians*, to leadership lessons, such as *Innovator's Dilemma*. On the other side, are military-themed novels, that range from *Once an Eagle* to *Gates of Fire*. But a new breed of reading material has popped up that fits somewhere in between. Or, rather, just as in preparing for great power confrontations, this new type actually draws on classic themes of the past. Narrative is arguably our oldest tool of communication, and now it is being deployed to share insights into future conflicts in all their dimensions.

This new concept of 'useful fiction' is a blend of fiction and nonfiction. Sometimes called FICINT, short for Fictional Intelligence, it is a hybrid of narrative and research analysis, designed both to entertain and educate. It is not just popping up on reading lists. It is being put to work everywhere from the US Army exploring the post-Coronavirus world, to the Australian government's training to defend its next election.[ii] Nor is it just for governments - companies such as Cisco, Microsoft, Boeing and Nike, have also deployed the power of narrative to plan their next generation of products and services.[iii]

To be sure, there is a long history of fiction that has an influence on the real world. From Jules Verne's *20,000 Leagues Under the Sea* to Gene Rodenberry's *Star Trek* universe, imaginative science fiction writers have long inadvertently influenced everything from envisioning the possibilities of submarine warfare to spurring inventions like the flip phone and digital music.[iv] In turn, fictional stories set in the realm of war have long inspired real soldiers. Examples range from the ancient Romans reading Homer's *Iliad* for insight to the legions of fans that Cold War titles like Sir John Hackett's *The Third World War* and Tom Clancy's *Red Storm Rising* found among NATO forces that would actually fight those imagined battles.

Yet FICINT offers something distinct. It is a deliberate fusion of narrative's power with real-world research's utility. That it is being well received now may because our world feels as if it is advancing even faster than science fiction can portray it. We exist now in a time of machine-speed convergence of possibility that often leaves conventional forecasting or analysis out of step. So, just as Human Intelligence (HUMINT) was soon joined by Signals Intelligence (SIGINT) when communications technologies progressed, FICINT presents another tool to aid foresight. It melds communication and envisioning techniques honed by creative communities of writers or graphic novelists with the process and rigor of intelligence collection and analysis. In some circumstances, it can be an act of prediction, in others explanation. Just as any other intelligence tool, the very utility of useful fiction may not be just what it predicts or explains, but what it prevents. Helping to identify trends and problems in the world of tomorrow, packaged in a compelling way that is actually going to be read, may be intended to keep those imagined outcomes from ever coming true.

FORGING CONNECTIONS THROUGH STORY

Useful fiction exists in many forms. It might be a bestselling novel or it might be a commissioned short story. Or, it might be a format that is more visual, such as a graphic novel. While some dismiss these as mere 'comics', such a creative format might just aid the broader uptake of the ideas within (while book sales are in decline, graphic novels experienced a 16% growth last year), but also could be particularly apt for issues that are 'multimodal'.[v] For example, cyber and information warfare inherently blend the visual and the written, so it should not be shocking that the US Army has commissioned a series of graphic novellas to help explain it to its soldiers.[vi] *Silent Ruin*, for example, explores the 'what if' scenario of a NATO confrontation with a rival state that employs a mix of electronic and cyberwarfare to undermine NATO's conventional advantages - a scenario that is certainly top of mind for many planners focused on the Baltics and elsewhere in Europe.[vii]

Useful fiction can also be written by varied groups. It might be creative professionals commissioned to the task with a blank-slate or tightly focused mandate. Or, it might be assembled through a designed effort to pull in volunteer insights inside or outside an organization. Such 'crowdsourcing' has become increasingly popular, with writing contests hosted by groups that range from the US Marine Corps Warfighting Lab to The Atlantic Council.[viii] This design seeks a democratization of ideas, and thus is particularly valuable for drawing in new perspectives, as well as identifying promising talent.

BEING USEFUL

Whatever the form and source, three primary attributes make 'useful fiction' so useful, including to defense professionals seeking to understand and communicate about the issues of new trends and great power conflict.

First, creative content places research within a framework that enhances its impact and even draws out new insights. Understanding a groundbreaking social trend or emerging technology is already tough enough. It is all the more difficult when the targeted consumer of such research lacks deep background or a current frame of reference for that topic. Think about how many issues fit this case: of being important but also representing breakpoints with the past that policymakers have no understanding of, such as artificial intelligence or quantum computing to the coronavirus's impact on geopolitics. In such situations, we can be aided by guides in a sense, imagined characters who can lead us into simulated versions of our world. We can 'experience' what the research is actually telling us, as well as 'feel' its effects.

Indeed, studies from fields extending from cognitive science and psychology to national security policy research find that such 'synthetic experiences' are actually as, or even more, powerful influences than even 'canonical academic sources' on not just public understanding but policymaker actions.[ix] They engage both the left and right sides of the brain, enhancing understanding. In a certain way we can't help ourselves; our brains are wired to take in narrative, as we've been using it as a communication technology all the way back to when humans first gathered around their first fires. By contrast, our brains have had only 30 years of programming

with PowerPoint. FICINT narratives allow us to leverage that all-too-human inclination to set ourselves in imagined worlds and assume their identities and empathies, and then deploy it as a means for education and critical thinking.[x]

As an example, consider *Automated Valor*, a project commissioned by the British Army to explore land warfare and the operating environment 20 years from now.[xi] One of this paper's authors fused together trends in artificial intelligence and autonomy, robotics, demographics, geopolitics, and armored vehicles. Rather than opening with didactic paragraphs explaining these technologies and how assumptions about great power warfare might be wrong, the reader arrives mid-crisis into a conflict, seeing it from the point of view of a 24-year-old driving an infantry fighting vehicle under attack.

That is, the action serves as an on-ramp to resurfacing such complex elements as a radical revision to UK citizenship, belt-and-road conflict zones in Africa between China and European nations, and the potential demise of NATO - all the while exploring the very nature of tactical leadership in the AI era from a street-level perspective.

Indeed, this seemingly stylized approach is in fact a deliberate tool that illustrates the second value. In human behavior, whether in purchasing, voting, or even national strategy, it is not just understanding, but emotion that leads to action.

Narrative can be used not just for explaining, but for inducing emotional connection with a situation or issues. As an example, the US Cybersecurity Solarium Commission is an agency designed to do for US cybersecurity strategy what the original Eisenhower-era 'Solarium' group did in setting U.S. nuclear strategy for the Cold War.[xii] Bringing together a bipartisan group of leaders and experts, the Commission developed its 182-page report on the key changes the US needed to make in cybersecurity policy in order to secure the nation better from new threats. However, the Commission's more immediate worry than a debilitating cyberattack was that the massive report, after so much work had been put into it, would experience the same fate as all those other lengthy commission reports written on terrorism before 9-11- ignored or only listened to until it was too late. So, in lieu of a traditional preface, the report opened with a FICINT short story. [xiii] "A Warning From Tomorrow" was a change from the traditional executive summary - tailored to share the key threats the report identified - but do so in a way that primed the reader to act. Instead of bullet points and prosaic prose, it dropped the reader into the perspective of a Congressional staffer, tasked with writing legislation in the aftermath of a massive series of cyberattacks on Washington, DC. The vignette placed the Commission's target audience into a visceral exploration of what would be for them a personal 'nightmare scenario' - right before they read a series of policy solutions on how to avoid it.

This points to the third value of useful fiction. One of the biggest challenges figuring out what lies ahead in the future is how much is competing for our attention towards it. To put it bluntly, people are more likely to read an engrossing novel or thought-provoking short story than an academic white paper or an article in the "Journal of The Association of Obscure Studies". In turn, they rarely share with others a recommendation of a gripping PowerPoint or Excel to read by the pool. Humans connect over story.

We first experienced this phenomenon with our own book, *Ghost Fleet: A Novel of the Next World War*. [xiv] When we started the project in 2013, much of the national security discourse was focused on terrorism and counterinsurgency, as indeed was much of the fictional plotlines. We wanted to bring to the surface, however, the issues of a world to come, in which there was not just a resurgence of great power rivalry and a risk of war, but also a future in which traditional US military advantages through new technologies such as space-based communications or fifth-generation jets might give way to new vulnerabilities, such as supply chain security and weaponized satellites. Just a few years later, this seems like conventional wisdom, but it was a different take at that point in time. Doubling down, we went the route of a new kind of novel with research endnotes.

Despite writing front-page newspaper stories read around the world and multiple bestselling nonfiction books on all those military reading lists mentioned earlier, it was this novel that had the most policy impact out of all of our work. We have been invited to brief the book's lessons for the real world at over 75 military and governmental organizations, including the White House, the Australian Parliament, the Canadian Security Intelligence Service, CIA, NSA, NATO, et cetera. In turn, we have briefed military units that ranged from the Royal Air Force to the US Joint Special Operations Command.

The resultant impact happened through these official briefings, but also in informal ways as the narrative went viral. The head of the US Navy read an early copy, then shared it with his fellow admirals, not just because he enjoyed it, but he wanted to talk to his peers about what they would do in the story's scenarios. In turn, at a session in the 'Tank', the highly secure subterranean room used by the Joint Chiefs of Staff, another admiral yawned. The admiral sitting beside him asked why. He responded that he had been kept up late at night reading *Ghost Fleet*, and it scared the hell out of him, not just because of the story, but that one of the nightmare scenarios that touched his program had an accompanying endnote to show it was not just the authors' imagination. The other then said they would check it out, which eventually led to an investigation to fix one of the strategic vulnerabilities that was a cornerstone of our futuristic story.

Soon, the book was being woven into policy shifts that ranged from sparking multiple investigations of topics we had surfaced like supply chain security to the US Navy even named a $3.6 billion unmanned ship program, "Ghost Fleet".[xv] Perhaps the most amusing validation, though, came when Chinese intelligence agents (with not so great tradecraft) started showing up at our book signing events.

It was not just us who saw this. As an *International Studies Quarterly* discussion of the project and other 'synthetic experience' literature found, *Ghost Fleet's* reception suggests something about assumptions within the military establishment that would be hard to discern from white papers alone...the novel may be more effective at converting readers than conventionally presented arguments".[xvi]

To sum all this up in a different way, which also again illustrates the value of framing, consider FICINT as akin to how parents will sometimes blend spinach or other vegetables into a sweet fruit smoothie. Just instead of nutritious content for children, it is sneaking in a diet of research and ideas to policymakers used to shrugging off their PowerPoints and white papers.

And just like this sleight of hand, there is a recipe to follow to make sure it is both tasty and good for you.

THE RULES OF THE REAL

Before laying out what FICINT is, it is important to understand what it is not. It is not the equivalent of when the CIA invited a group of Hollywood writers after 9-11 to advise it. With no background in terrorism or al-Qaeda, they promptly dreamed up new movie plots, but little useful insight into actual terrorist plots.

As readers, we love science fiction and fantasy stories set in other world or galaxies far, far away. Even this too has a place in education.[xvii] But in the sense that FICINT has to be useful fiction, it is set in the real world. It is not just that the locales are here on planet Earth (and, often most usefully and interestingly in places that people recognize, be it a bar in Hawaii or Union Station in DC), but that the fictional stories set there also reflect the real world. Even if the scenario played out is designed to push the boundaries of thought, the characters in it should reflect who realistically might be there and how real people would act under those circumstances. This also means that what Clausewitz called 'fog' and 'friction' should also be ever-present.[xviii] In both the real world and realistic lessons from FICINT, a good and useful story is not, "Everything goes according to plan. Good guys win. The End".

An article in the August 2020 issue of *Proceedings,* the US Naval Institute's primary professional journal, shows the alternative approach applied to the challenge of great power conflict, which might just take place in forms different than planned. In *The War That Never Was?*, narrative is used to explain not just how a future crisis with China over Taiwan might play out, but with the twist that US military plans and domestic politics may not actually be ready to deter conflict in the manner assumed for the last decades.[xix] It explores how a changed China, changed technology, and changed global and domestic US political environment, is leading to a far greater risk of a fait accompli without outright fighting than generally thought. What was notable was not just the argument, nor that it was raised within a fictionalized frame of story, but the writers who created it: Admiral James A. Winnefeld, the former commander of NORAD, and Michael Morrell, who once headed the CIA.

What these two former officials have done so ably is to create a credible and factually faithful rendition of how an adversary, China, might be able to achieve one of President Xi Jinping's most sought-after strategic goals for nearly a decade by not following the assumed 'rules' of great power conflict that the US wanted to play by.

The rule of the real also means that there is no 'vaporware' in FICINT. Unlike in science fiction or frankly many military wargames and program plans, any technology or system in the story must already exist or be in development. This is not as hard as it might seem. As science-fiction legend William Gibson has said, "The future is here - it's just not evenly distributed".[xx] So, usually, even the most seemingly futuristic science fiction is already deployed somewhere or sitting in a lab.

But the Gibson who created cyberpunk science-fiction and the world of *Blade Runner* is also a good guide in another way. The uneven distribution of humankind's innovations means that the world of FICINT should reflect that real-world dynamic, one of inequality and all that portends for politics, economics, and society.

Our recent novel, *Burn In: A Novel of the Real Robotic Revolution*, for example, is set in a coming world where today's AI and robotics have become more advanced and commonplace.[xxi] We are confident in that projection, as every mention of them has a citation to the real technology and plans for it. But even in this future, we are equally confident in the projection that there will still be traffic, crime, and homeless people sleeping in parks. Whatever the speed of Moore's Law, government bureaucracy will survive it. So, in our story, an FBI agent may have augmented reality glasses that pull data from ubiquitous face recognition cameras, but differing government budgets and acquisition systems means that their data network still does not connect well with the older gear used by the Washington DC police department.

Aside from these nitty gritty technical realities that will be familiar to those who have to count on emergent systems during life-or-death situations, the story also says something bigger about America, and by extension, the West's position in a strategic environment where great power conflict is core to the national defense strategy. It is well past due to reckon with the present political, economic, and social inequalities and fault lines, all the more as new tech like AI and robotics risks widening them through everything from job displacement to issues of algorithmic bias. That is, a nation's great power competition strategies will fail if its domestic foundations are weak or crumbling.

Finding this balance between technological ambition and overall plausibility is also reached by another rule of useful fiction, following a realistic timeline. To paraphrase Arthur C. Clarke, the great scientist and even greater science fiction author, once you move more than a generation or two ahead, the forces of change go off in so many different directions that you start to move from the realm of science and into the realm of magic. One thinks of the weapons acquisition programs and war games that confidently plan into the 2080s and one is reminded of how off and useless any prediction of technology or geopolitics would have been in 1980 compared with today.

Most of all, FICINT means the rule of research. It requires the same disciplined approach to gathering data that should guide any nonfiction project. Diving into archives or conducting surveys of subject matter experts are just some of the tools used to ensure that a story is not just believable, but grounded. Interviews are particularly useful for the fiction part too, for getting the tiny cultural details or dialogue right that sell a scene.

This also means that in FICINT, as in nonfiction, you should show your work. Providing the research sources that backstop the fiction serves the very same functions it would in conventional nonfiction. It credits those whose work you benefited from, as well as steers the reader to where they can learn more if they want to dive deeper. References can even serve the story itself, by showing the reader that what plays out in the fiction truly is drawn from the real world. This does not just establish credibility, but can heighten the experience.

It is certainly harder to follow such rules. In FICINT, the hero cannot put on a magic gauntlet or fly an invisible jet that miraculously defeats all foes[xxii]. Nor (as is the flaw of almost every movie and war game with a cybersecurity theme), can they just hack a system by going 'clickety clack' with their keyboard. Instead, they have to use a weapon that is already out there in the world or hack a vulnerability that has already been exposed by researchers.

This difficulty, though, is exactly what makes FICINT more valuable for readers looking to tackle real-world problems.

DO NOT FORGET THE STORY

FICINT, though, requires also paying your creative dues to Cadmus, the Greek god of writing, and his accompanying Muses. If there is a cardinal rule of this aspect, it is to get the reader to the end of the story. To do that, a writer has weight do the 'fiction' part of FICINT as much as the insights they want to share. We were once approached by someone who said they had ambitions to write a *Ghost Fleet*, but for US health care policy. A noble goal, and so we asked what was their story? Who were the characters? They did not know. Unsurprisingly, the project never went any further.

Melding imagination with credibility requires identifying a macro trend or theme, just as any novel or movie would. But that trend or topic only comes to life through the characters and their journey. A measure of good fiction is it has characters of depth, who we want to follow through both ordinary and extraordinary circumstances (Call this the 'Jack Ryan Rule'. That is, the difference between early and later Tom Clancy).

In crafting these characters, FICINT also benefits from diverse views or voices, an issue that is often problematic in both real world defense/security studies and fictionalized treatments of the realm. This is not just for the sake of the story (it would be a poor story, indeed, where all the characters looked and thought the same), but seeing a trend of scenario through multiple and diverse perspectives can guard against risks of systemic bias, as well yield insights more likely to be disruptive or revelatory to a reader from a different point of view. This attribute also goes back to the rule of the "real". We live in a world of people made up of different races, ethnicities, genders, sexual orientations, beliefs, etc., so any realistic portrayal of it should reflect that.

In crafting the fiction, that character (and the resultant story) must travel through a series of elements that any good narrative has. These include a worthy adversary (for example, the best villains do not tug at their mustache and get beaten with one punch), moments of change and character development and an arc of events that deliver some kind of emotional or intellectual payoff to the consumer.

It is notable that in the building of characters and settings, that frequently, it is the tiniest details that do the most work. Think of the spymaster George Smiley in John Le Carré's Cold War novels, and how, in a world of dapper friends and foes, so much is told through his perpetually rumpled clothing. This economy of description can even be deployed to share macro insights that are still secondary to the story. To continue that example of characters and their clothes, *Burn-In* sought to

explain a plausible future for America with AI, but a character wearing short sleeves on a sweltering March day points to where climate change is headed soon.

CONCLUSION

Just as good intelligence analysts do not rely solely on SIGINT or HUMINT, FICINT is not the only way to explain tough topics and explore the future. It is only one tool, and it is best used in combination with others.

Yet, it remains ideally suited to a world not just of technologies evolving at machine speed and geopolitics undergoing systemic changes, but also in the midst of a historical crisis that tests the limits of our comprehension. It can spread research in a manner that is understandable, and more shareable, as well as foster emotional connections that make readers, in turn, more likely to drive change. FICINT can aid in answering the question of 'what do we do next' as timelines move forward at an unpredictable pace which every organization has to contend with, whether it is planning for war or justifying the next budget. Or, FICINT can explore 'what ifs', changes that might set the real world on an altogether new course, as well as provide alternative perspectives to debunk conventional wisdom.

Indeed, the greatest power of this combination of fiction and nonfiction may be not in predicting any single breakthrough, trend, or advance. Rather, it is in the ability to spotlight the problems or systemic issues that are too easily ignored by clinging to old narratives about the world that once was. In sum, a story well told can be a useful story indeed.

NOTES

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