

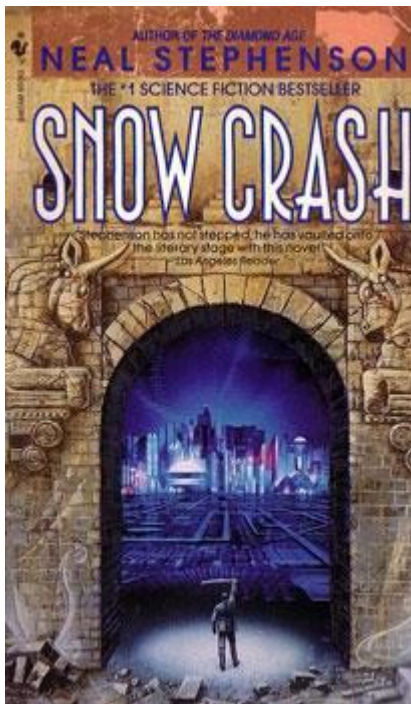
An Antidote to Symmetry: The Value of Reading Sci Fiction

The 9/11 Commission famously concluded that the intelligence agencies had suffered a failure of imagination, in failing to accurately assess the threat Al Qaeda posed, and the means of attack. However, to devoted readers of Tom Clancy's Jack Ryan novel series, the concept of using airliners as high-payload, precision-guided munitions should not have been surprising (no further spoilers).

Indeed, if we are to treat warfare as a race towards asymmetry, how then do we resist the urge to conceive of our adversaries as like-minded, symmetric counterparts to our military? Fighting symmetric foes is ingrained into our training systems and indelibly etched into our mindsets - why else would we choose to simulate our operations against 'near-peer' enemies? As intelligence professionals, it should be our task to imagine ways in which new and emerging technologies could be employed by hostile actors, or how existing technology could be used in novel ways. For example, the US Marine Corps has gone so far as to publish a 'Science Fiction Futures' paper in collaboration with notable authors.

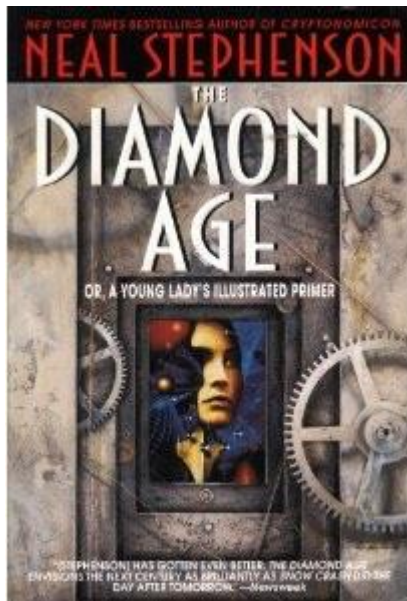
Reading good science fiction (including the sub-genre of 'technical fiction', pioneered by authors such as Tom Clancy) can thus be a good antidote to our tendency towards symmetry. This need not be exclusive to military science fiction, which can be too narrow, but the broader corpus of science fiction which imagines entire environments. For example, I generally enjoy reading dystopian fiction that is strongly grounded in the world we inhabit (sorry, no wizards and dragons here folks). A good author will take current trends and extrapolate them in ways that our institutionalised, military minds would struggle to grasp. Thus, when I read good quality science fiction I inhabit that created world in which I can project. My list of favourite science fiction books should illustrate this:

Snowcrash



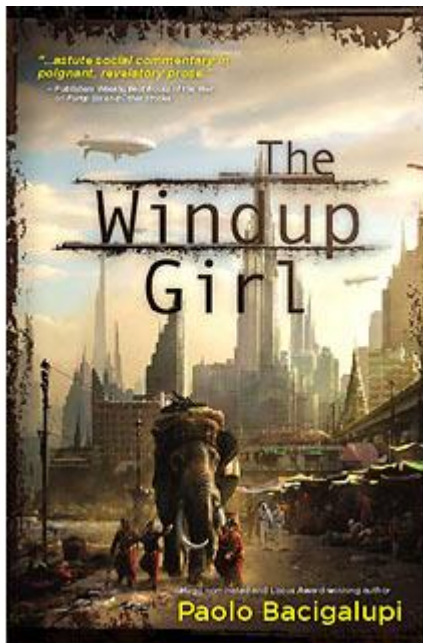
Neal Stephenson is revered in science fiction circles as one of the pioneers of the so-called 'cyberpunk' sub-genre. In his best-regarded book, Stephenson creates a hyper-globalist world in which free-market capitalism has overtaken the nation state - the affluent congregate in corporatised sovereign 'burbclaves' (suburban enclaves) guarded by private militaries. A virtual reality world consumes the lives of many (the 'Metaverse'), and a mysterious virus causes users to go brain-dead in real life. The plot then weaves in ancient Sumerian religious myths, the mafia underworld and dark, subversive humour. Snowcrash is a deeply funny introduction to a world replete with the disruptive technology of augmented and virtual reality, and non-state armed actors.

The Diamond Age



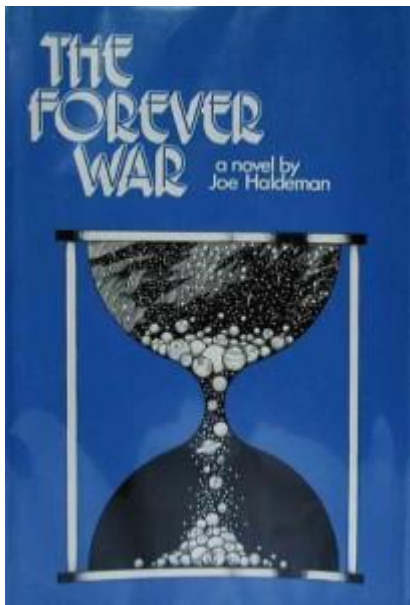
Following 'Snowcrash', Stephenson constructs another new world in which neo-Victorian values are blended with hyper-powerful companies that hold the monopoly on 'matter generators'. This is a world in which nanotechnology pervades everyday life, completely changing the concept of personal and public domain. Physical security, privacy, espionage are all upturned when nearly-undetectable substances can change physical states, store and transfer information, or be used as weapons. Nanotechnology has the potential to make humans take the next great leap, but none of us can predict its impacts, let alone its myriad military applications. Therefore, I found 'The Diamond Age's exploration of nanotechnology helps us envision this Brave New World.

The Wind-Up Girl

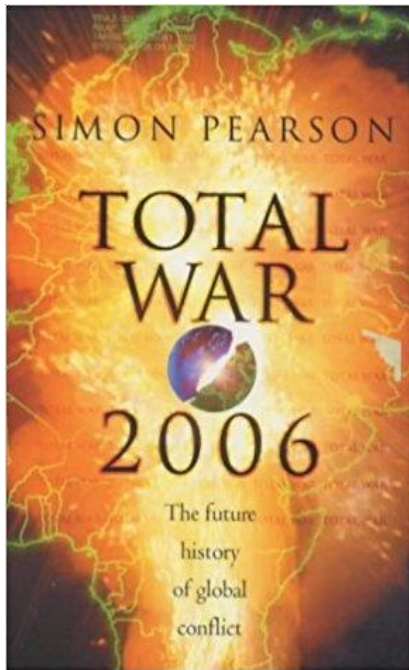


Closer to current-day events, the *Wind-Up Girl* is set in a world beset by climate change and near-exhausted fossil fuel supplies. The so-called 'Great Contraction' has led to less international travel, a smaller world population and a generally slower pace of life. The world has also been ravaged by natural and man-made pestilence that has depleted both the quantity and variety of food supplies. In a neo-Bangkok that is spared from high sea levels by massive levees, the *Wind-Up Girl* sees a covert corporate agent trying to discover the secret location of the Royal Thai seedbank. The plot is a chequerboard of inter-departmental rivalries, royal politics and industrial espionage. However, the book's backdrop of global warming and a contracted world is a sobering reminder of how present-day water and food scarcity will increasingly impact military operations.

The Forever War



This is the only 'must-read' on this list. I am still amazed at how Haldeman, a US veteran of the second Indochina War, combines physics, military tactics and heartfelt sentimentality in such efficient prose (the novel is barely 200 pages long). While the other books deal with disruptive technologies and asymmetric enemies, *The Forever War* also deals with the ultimate disruptive/asymmetric environment: space and relative time. Haldeman follows the combat career of William Mandela, a member of a new interstellar military cadre formed to fight a newly-encountered alien race. The book lays out in realistic detail how the recruits adapt to the hostile environment of space and new combat suits. Far more are killed from mishaps than enemy action, much like the costly lessons of early naval aviation. However, it is faster-than-light travel that complicates interstellar warfare - because of time dilation, a military campaign that lasts a few months in relative time equates to decades and even centuries in 'real' Earth time. The humans may fight an enemy that they only encountered a few months ago, but in fact has had centuries to adapt – Army's learning loops would be literally thrown out! The most poignant moments in the book are the episodes of Mandela's social dislocation when he returns to an Earth that he does not recognise. It is these moments that you appreciate that this is a book written by a veteran, for other veterans.



You may be still wondering at how the theoretical, high-minded concepts of science fiction could possibly relate to the intelligence profession. To bring us closer back to our time, I have drawn on lessons from two books: Tom Clancy's 'Red Storm Rising' and Simon Pearson's 'Total War 2006', to formulate enemy courses of actions during simulation and staff course exercises. In these books, the asymmetric tactics, used by an enemy with little regard for its own losses (the Soviet Union desperate for new energy sources, and a neo Islamic Caliphate respectively), devastate the vaunted technological superiority of western military forces. I adapted these ideas to formulate high-risk, high-payoff enemy courses of actions to destroy or disable the ADF's two LHDs and thus foil a simulated expeditionary force deployment.

As intelligence professionals, we must not only draw on current trends and contemporary information, but also our imagination and cunning when discerning threats to our nation. When placing ourselves in the shoes of our adversaries, we must combine elements of deception, a higher risk appetite, use of emerging technology and innovation to genuinely test our own military planning. In other words, it is simply not good enough to present a 'near-peer' adversary. Good sci/tech fiction can help expand our minds and break out of our institutional moulds. And one day, perhaps avoid a failure of imagination.