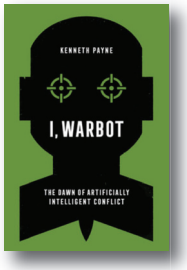
BOOK REVIEW:

I, Warbot – The Dawn of Artificially Intelligent Conflict



by Kenneth Payne

C. Hurst and Company, London; 2021; 336 pp.; ISBN 9781787 384620 (hardcover); RRP $39.99

The term Artificial Intelligence (AI) means very different things to different people. At its core it relates to 'smart' machines (computers) capable of 'learning' and performing functions like humans - or like humans but faster. AI is the enabling 'brains' that directs machines/platforms/robots but should not be conflated with the machine/platform/robot itself. AI makes decisions without human approval or suggestions for human approval. While the focus to now has been on the machine/platform/robot, Kenneth Payne argues that new thinking is required for a new era of AI. He does this with a focus on war – that sadly enduring feature of human existence.

For anyone not professionally versed in the field of AI the topic can be daunting. Payne does an excellent job of 'walking' a novice through the topic. He unpacks complex concepts such as 'intelligence' and 'logic'. The greatest mental hurdle to overcome is separating the capability of AI with the machine/robot/weapon (what Payne terms 'warbots') that to now it has been applied. He explores how the human/AI interrelationship for decision making might develop given the inherent strengths and weaknesses of both parties. This will occur at the tactical level (human-machine teaming) or at the strategic decision-making level.

Payne also explores how the character of war might evolve given the anticipated development and proliferation of AI. Intelligent military systems are already reshaping conflict from the chaos of battle, with pilotless drones and robot tanks, to the headquarters far from the action, where generals and politicians use technology to weigh up what to do. AI changes how we fight, and even how likely it is that we will.

Warbots will be faster, more agile and more deadly than today's crewed weapons. New tactics are already emerging, but much deeper thinking is needed. When will an intelligent machine escalate, and how might you deter it? Can robots predict the future? And what happens to the 'art of war' as machines become more creative?

All this is heady stuff and Payne wrestles with all the implications. From Payne's analysis, three main conclusions emerge. First, profound ethical issues arise once machines can decide which humans to kill, but the technology is now too varied and too far advanced to be banned. Second, AI favours the offence, owing mainly to the ability of AI-enabled weapons to swarm. Third, and perhaps most important, if AI receives a lot of data and a narrow goal, it will be tactically brilliant in ways that human commanders could never match - but AI will never be a true strategist. Payne also proposes a rewrite of Asimov's Three Laws of Robotics that might be usefully applied to warbots.

Payne also touches on the international campaign to ban 'killer robots' but argues that autonomous weapons are already too prolific and too useful for states to outlaw. Ultimately, states will seek advantage over other states and the development of AI-enabled warbots is practically inevitable.

Payne is a reader in International Relations at King's College London. A former BBC journalist, he is the author of many articles and books, including *The Psychology of Strategy: Exploring Rationality in the Vietnam War*.

I, Warbot is a thought-provoking reflection on how AI might change conflict and is tremendously relevant to capability development staff and strategic planners. Almost every page in *I, Warbot* has the potential to stimulate reflection, discussion and debate amongst military professionals.

Marcus Fielding