War 2.0: 
Drones, Distance and Death

Jai Galliott, The University of New South Wales, Sydney, Australia

ABSTRACT
Technology has always allowed agents of war to separate themselves from the harm that they or their armed forces inflict, with spears, bows and arrows, trebuchets, cannons, firearms and other modern weaponry, all serving as examples of technologies that have increased the distance between belligerents and supposedly made warfare less sickening than the close-quarters combat of the past. However, this paper calls into question the extent to which new military technologies actually mitigate the savagery of war. It contends that with the introduction of technologies that eliminate the need for a human presence on the battlefield, we are the cusp of a major revolution in warfare that presents new challenges and questions for military technoethics, namely as to how soldiers should conduct themselves and fight justly, if they are to do so at all. Ultimately, it argues that only way to address these issues is through the design of the mediating technologies themselves, which is by no means an easy task.

KEYWORDS
Drones, Emotion, Ethical Governor, Just War Theory, Killer Robots, Military Ethics, PTSD, Targeted Killing, Unmanned Systems

INTRODUCTION
War is an all-too-human affair and will probably require the endangerment of human lives in some shape or form, but military robots known as ‘drones’ or ‘unmanned systems’ promise to significantly offset the human cost of war by removing warfighters from the physical dangers of the battle zone and facilitating the conduct of what is purported to be more precise killing. However, the use of these systems toward such ends is not without other implications for thinking at the intersection of military technoethics and just warfare. In this paper, I examine the efficacy of unmanned systems with a particular focus on the mindset-altering dimensions of unmanned warfare and their impact on principal warmaking agents, namely unmanned systems operators. This is because many of the unintended effects of this technology cannot be attributed to the machine, but to human psychology. I first examine some problems associated with technologically mediated fighting and suggest that through a process of moral disengagement and desensitisation, the barriers to immoral conduct in war may be reduced. Having considered the impact on the long distance warrior’s capacity or willingness to adhere to the rules/laws of war, the next section examines the impact on the personal wellbeing of the operators themselves. Here, among other things, the impact of being simultaneously present in contrasting environments is considered in arguing that this, if nothing else, may lead to serious transgressions of just war principles. Toward the end of the paper, I consider whether we can eliminate or relieve some of these technologically mediated but distinctly human moral problems by automating elements of the decision making process. It is concluded that while greater automation...
certainly has the potential to alleviate some moral concerns generated by these systems, there is a strong case for keeping humans in the decision making chain, even if it involves having to make a delicate moral tradeoff between maintaining and/or improving warfighting capability and limiting harm to noncombatants.

**THE ROLE OF THE INDIVIDUAL SOLDIER**

While many of the campaigns to halt the development of ‘killer robots’ focus on high-level decision makers, as they are central to the initial decision to develop said systems and engage them in warfare, it is the individual soldier who defends his state and society that must be most unconditional in exercising moral restraint and adhering to just war theory. Michael Ignatieff (1998) writes that more than any other of war-making agential group, it is the soldiers who actually conduct war that have the most influence on its outcomes and the ability to introduce the moral component. In his words, ‘the decisive restraint on inhuman practice on the battlefield lies within the warrior himself – in his conception of what is honourable or dishonourable for a man to do with weapons’ (Ignatieff, 1998, p. 118). Ironically, soldiers are the primary agents of both physical violence and compassion and moral arbitrage in war. As Darren Bowyer (1998) remarks, they deliver ‘death and destruction one moment ... [and deal] out succour to the wounded (of both sides) and assistance to the unwittingly involved civilian population, the next’ (p. 276). The specific concern examined here is whether by removing soldiers from the battlefield and training them to fight via a technologically mediated proxy we may, through a process of psycho-moral disengagement and emotional desensitisation, lower their ability or willingness to exercise restraint and compassion in warfare and adhere to the moral laws of war, namely the principles of discrimination and proportionality enshrined within just war theory, which respectively require that war be directly only at legitimate targets and involve a morally appropriate level of force. It will be argued that the employment of unmanned systems tracks unethical decision-making and/or lowers barriers to killing, endangering the moral conduct of warfare and counteracting much of the benefit of using these systems.

Most human beings are born with what can only be described as a primitive survival instinct that, without unchecked force, would lead to a degree of violence and savagery. But in most societies, people are raised and socialised in such a way that typically leads them to hold an aversion to harming other human beings. In a military context, this socialised reluctance to kill is evidenced by recounts and statistics from earlier wars. David Grossman (1995), a self-proclaimed ‘killogist’ or military psychologist, writes of two World War veterans. The first confirms that many WWI infantrymen never fired their weapons and relied instead on artillery, while the second says that platoon sergeants in WWII had to move up and down the firing line kicking men to get them to fire and that they felt they were doing good if they could ‘get two or three men out of a squad to fire’ (Grossman, 1995, p. xiv). While some have criticised his methodology, S. L. A. Marshall gave further supporting evidence in arguing from personal experience and studies conducted on firing ratios, which revealed that ‘on average not more than 15 per cent of the men had actually fired at the enemy’ (Marshall, 2000, p. 54). He attributed this startling inhibition to kill to an ‘ingrained fear of aggression’ that was based on society’s teaching that killing is fundamentally wrong (Marshall, 2000, p. 71). For Marshall, success in combat and the welfare of the state and its people demanded that action be taken to correct or overcome this problem.

In the years following publication of the first edition of Marshall’s book – that is, in those following WWII – there is evidence that Marshall’s calls for corrective action were answered. The claims of very low firing rates had been replaced by very high and morally concerning firing rates. By the time of the Korean War, the American firing rate was said to be up to fifty-five percent and, in Vietnam, it was reported to be up to ninety or ninety-five percent (Meagher, 2006). Some expressed doubts about these firing rates too, with some finding troops with unspent ammunition in the rear of troop formations, but they were generally satisfied that among those who actually sighted