

Chapter 22

Robots in Warfare and the Occultation of the Existential Nature of Violence

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ABSTRACT

We are at the cusp of a revolution in the development of autonomous weapons, yet current arguments both for and against such weapons are insufficient to the task at hand. In the context of Just war theory, arguments for and against the use of autonomous weapons focus on Jus in bello and in doing so miss addressing the implications of these weapons for the two other aspects of that theory- Jus ad bellum and Jus post bellum. This paper argues that fully autonomous weapons would likely undermine adherence to the Jus ad bellum and Jus post bellum prescriptions of Just war theory, but remote controlled weapons, if designed with ethical concerns in mind, might improve adherence to all of the theory's prescriptions compared to war as currently waged from a distance, as well as help to undo the occlusion of violence which has been a fundamental characteristic of all forms of modern war.

It is interesting... how weapons reflect the soul of their maker. – Don Delillo, The Underworld

INTRODUCTION

If current trends continue, sometime in the next few decades, or sooner, a machine will deliberately kill a human being. The idea that an autonomous weapon will be capable of making a decision to kill may seem like science-fiction, but it is a goal being pursued right now by the world's major militaries. The arrival of what the media has dubbed “killer robots” appears to be only a matter of time. (Markoff, 2014)

The following essay attempts to discern the possible implications of the rise of autonomous weapons for the waging of just wars. It is divided into four sections. The first section lays out the rise of remote controlled weapons over the past decade, and the evolutionary pressures pushing these weapons towards

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greater levels of autonomy. The second section raises objections to the use of autonomous weapons on the basis of the *Jus ad bellum* and *Jus post bellum* prescriptions of Just war theory. The third section looks at two types of objections to both autonomous and remote controlled weapons (drones), and argues that both autonomous weapons and remote controlled weapons are merely a continuation of trends found in warfare in all advanced countries, which seeks to occlude the violent nature of war. The fourth and concluding section argues that remote controlled, though not autonomous weapons, may actually offer us a path away from this occlusion if they are designed and operated with this goal in mind.

THE RISE OF THE ROBOT WARRIORS: CRITICS AND DEFENDERS

The move towards autonomous weapons began with remotely operated armaments and in the US military. Since 2005 there has been a 1,200 percent increase of air combat patrols by drones. The US now has a fleet of 7,500 drones making up 31 percent of the Pentagon's air fleet. Its numbers are to be doubled by 2020. (Dowd, 2013) As of June 2012 the US had as many as 3,500 robots in landlocked Afghanistan doing everything from bomb removal to demolition (Hodge, 2012). Based on advanced robotics projects funded by the US military's advanced research arm, DARPA, the US is already experimenting with humanoid "infantrymen". Facing increasing budgetary constraints, the US army has plans under discussion to reduce the size of a brigade from 4,000 to 3,000 men with much of the difference to be made up by robots. (Ackerman, 2014)

The US may have begun the revolution in remote controlled and robotic warfare, but it is unlikely to end there. Innovation appears to be shifting to other countries that see in the new methods of war a way to overcome the asymmetric superiority of the American military in other forms of advanced weaponry. (Scharre, 2014) 75 countries now possess drone programs of their own with China to build 11 drone bases down its coast through 2015. Dowd (2013)

Given the superiority of US advanced weapons and its overwhelming military footprint, which comes at the cost of spending more on defense than the next ten countries combined, it is very likely that rival countries and groups will turn to much cheaper drones and eventually autonomous weapons to redress this asymmetry. (Fallows, 2014)

Drones and other remotely piloted vehicles may appear to be distinct from truly autonomous weapons, but the requirements of military competition are rapidly pushing the development of the former into the latter. Drones suffer vulnerabilities to jamming and problems with latency that truly autonomous weapons are seen to overcome. Piloting by individual human beings might be impossible should autonomous weapons in the form of "swarms" move from the drawing board to the battlefield. (Wong, 2013)

The specter of "killer robots" has led to international calls for a moratorium on the further development of such weapons, most notably in a 2012 paper issued by Human Rights Watch entitled "Losing Our Humanity". In that paper HRW drew a sharp line between remote controlled weapons, which believes are permissible, and autonomous weapons whose development it believes should be banned. (HRW, 2012)

HRW is not alone in its critique of autonomous weapons. The nascent rise of such systems has been met with a kind of widespread criticism that did not meet the growth of drone warfare. (Carpenter, 2014) These criticisms have in large part been based on the argument of the technology's prematurity.

The ethical superiority of remote controlled over autonomous weapons, it is argued, lies in the ability of human pilots and controllers to exercise discrimination on the battlefield aligned with the laws

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