The Study of Drones as Objects of Security: Targeted Killing as Military Strategy

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Over the past few years, there has been some noise over "drone"[1] attacks in Afghanistan and Pakistan. While it remains true that the vast majority of drones in service are still used for reconnaissance and surveillance missions,[2] new prototypes (exemplified by the MQ-9 Reaper – more or less an "armed" Predator drone) are designed for combat missions and have become weapon systems specifically made to kill people, being able to take out targets with advanced guided weaponry.

This chapter addresses my work on drones as "objects of security". The research presented here stems from previous work on air power and space (Grondin 2009) and from my ongoing research project on the transformation of the American way of war (Grondin and Racine-Sibulka 2011). I first present how I chose to study drones as objects of security (i.e., the research question), then I expose how I framed the research process, how it was theoretically and empirically informed, and how I actually did it (i.e., the research design), and, finally, I discuss the results and challenges encountered while doing the research.

As material culture artefacts (Miller 2005), drones can be studied in multiple ways. They are simultaneously media objects, artefacts, weapons AND aircrafts, weapon systems, discursive items, and policy options. In our current era, drones have become a highly mediatized topic as a result of their use in the US fight against Al Qaeda operatives abroad. Because of what they also represent (high-tech weaponry but also politically reprehensible, if not, illegal practices of warfare), drones can be studied as "objects" in themselves, but also as "discourses", when we reinsert them in the transformation of the American way of war and its claim to "virtuousness" and cleanliness (Der Derian 2009: xx). Finally, as "defense policy options" (Shore & Wright 2011), they are also part of military and security strategies of irregular warfare and have in fact become inseparable from the targeted killing policy pursued consequently by the Bush and Obama administration in the war on terror.

It is however in conceiving them as objects of security that my research has allowed to take them head on as objects in themselves and as objects of discourses and of military strategies. More importantly, this research on drones provides an excellent platform for further research on the increased blurring of the boundaries between spaces of war and non-war – or between liberal and illiberal practices of liberal states (Bigo & Tsoukala 2008; Guild, Groenendijk, and Carrera 2009) – that the "Revolution in Military Affairs" (RMA) has enacted with the global circulation of technologies of war and surveillance.

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[1] Armed drones are Unmanned Combat Aerial Vehicles (UCAVs) and the surveillance drones are referred to as UAVs (unmanned aerial vehicles).

[2] Unmanned aerial drones are also increasingly being deployed for civil surveillance and policing in urban spaces (in the UK, France, and Germany notably) and borderland contexts (in the US especially), for visual mapping and reconnaissance in disaster and trauma relief (such as the tsunami in Japan in 2011), as well as for image collection for the scientific study of birds and other natural processes, among other things.

The Research Question

Most of the scholarship on drones has so far focused on the legality of their use (Melzer 2008), while the remainder consists of journalistic accounts of drone attacks in Pakistan and Afghanistan. However, I was more interested in understanding how drones are made to operate as part of aerial unmanned warfare in a military strategy of targeted killing. I wanted to find out how drones were made available as offensive weapons and came to be the "eyes" or "snipers in the sky" of the US military. My research on drones thus aimed to undertake the careful genealogical study of this object of security that is the drone.

The Research Design

The question of the objects of security has either been assumed or dismissed altogether in the fields of International Relations, critical security studies, and critical geopolitics. My genealogical work on drones taps into this recent turn toward objects of security (Collier & Lakoff 2008; Grondin 2010). In this work, genealogy is methodologically understood as the process – that interpellates both discursive and material actors, objects, and institutions (as Shah also does in this section in her study of the Internet) – by which drones came to be conceived as part of a military strategy of targeted killing. Instead of restricting itself to semiotic analysis (see Vuhori's chapter in this section), this study on drones follows the "material-semiotic turn" in security studies alluded to by William Walters in his study of migration, where the study of security discourses does not stop at language and symbols and aims to look at both "the ideal *and* the material, discourses *and* institutions" to analyze assemblages and configurations of power, mappings of territory and space, social arrangements, regimes, bureaucracies, and networks of actors, etc. (Walters, 2010: 220-221; my emphasis).

Hence, it is in thinking about how it made possible killing at a distance – through "abstraction" as a "materially lived relation" (Cooper 2002: 5) – that I was able to figure out how drones came to be part of aerial unmanned warfare. Although this somewhat follows Derek Gregory's work on the history of bombing through which his work on drones is based (2011), my aim is more focused on the further integration of information technology in military technology (Boot 2006) and takes into account how drones are part of the ongoing robotic RMA (Singer 2009a) as weapons and weapon systems that may be construed as weaponized robotized technologies (even if they are still remotely flown by pilots).

To undertake this research, I relied on the work of science studies scholar Bruno Latour (2004), known for his material-semiotic approach to sociological research and the actor-network theory, and on historical and sociological works on military revolutions and technologies (Singer 2009a, 2009b; Boot 2006; Blackmore 2005). As Bruno Latour explained, "The observer of technologies has to be very careful not to differentiate too hastily between signs and things, between projects and objects, between fiction and reality, between a novel about feelings and what is inscribed in the nature of things. […] The R-312 [a bus built by Renault] was a text; now it's a thing" (Latour 1996: 24). But to understand how drones came to operate as part of a targeted killing military strategy, I had to revert to a discourse analysis of drones as weapons of choice for irregular warfare, which required delving into the military-industrial complex involved in the conception and production of drones (as drones were developed by research supervised by DARPA, the

Pentagon's research and development arm) and into the US defense policy process of the war on terror.

As drones involve matters of national security and defense, research areas, such as weapons development, that are heavily militarized are usually kept under the veil of secrecy, like Anaïs emphasizes in her chapter on non-lethal weapons (in this section). This also means that there is obviously a great part of the data gathering that can only be derivative. Hence, for the data collection of my research, I had to rely, for primary sources material, on several and spread out loci: on the work of investigative journalists' covering national security and defense affairs (e.g., the work of Nick Turse) and on data accumulated from the steady watch of specialized blogs or websites like Noah Shachtman's national security blog *Danger Room: What's next for national security?* on *Wired.com*, now ran by Spencer Ackerman; on technical accounts found in popular science magazines (e.g., *Popular Mechanics*); on first-hand accounts of weapons used reported and on promotional material found in defense journals and professional defense magazines (e.g., *Air and Space Power Journal*); on defense industry magazines (e.g., *airforce-technology.com*); on the work of people who were once insiders and who have had privileged accesses afterwards (like Brooking Institute fellow Peter W. Singer, who used to be in the US Office of the Secretary of Defense under George W. Bush and is now a leading expert on robotic warfare); on information found on websites of think tanks and independent research facilities (e.g., Center for Defense Information, globalsecurity.org); on data assessed from written testimonies (in Congress) or from published works by people who worked with drones (such as a drone pilot for instance (Martin and Sasser 2010)); and, interestingly enough, a significant amount of data came from the weapon designers' webpages (e.g., General Atomics for Predators and Reapers and Lockheed Martin for the Global Hawk. This is how I was able to familiarize myself with the different technical specificities of a MQ-1 Reaper in comparison to the forthcoming Boeing's X-45A or Northrop Grumman's X-47. Through a first-hand account of drone pilots (Martin and Sasser 2010), I got to know the actual routine and systemic operation involved in a kill using a Predator drone. Doing research on sensitive ongoing weapons development and weapon systems used as to orchestrate targeted killings like drones leads to the conclusion that just getting to know where to look for data is, in and of itself, part of the challenge. There is, sadly, no other way to access the data, other than that which is made publicly available and not classified, especially if you are an outsider of the defense community and industry, such as I were as an academic.

Results

My research on drones as objects of security has made clear how they have become indispensable instruments of warfare to which we had to accustom ourselves to when thinking about the new American ways of war (Coker 2007, 2008). In conceiving drones as weapons and weapon systems, I had to look at the technological path development of drones. I traced the evolution of drones by looking at the first armed drone (although drones have a longer history, if we think of them as unmanned aircrafts waging war at a remote distance[3]). However, with the armed Predator

[3] There were pilotless aircrafts that could be condidered the forerunners of drones and cruise missiles built during World War I that were tested in the US, though not used in combats. One was the Kettering Bug, which was more or less an "aerial torpedo". Another was the Ruston Proctor Aerial Target, which would have been used to counter Zeppelin and which was radio controlled. Later, in the 1950s, you find the McDonnell Douglas "ADM-20 Quail",

drone in Afghanistan in 2002, it seemed that we had reached a new stage: killing at a remote distance without risk. We ought to be reminded that the first test of any weapon system or military strategy is the *battle*, where the battlefield serves as laboratory. Obviously, the Iraq War and the war in Afghanistan, as well as the fight against Al Qaeda in Pakistan have proven their worth as laboratories for unmanned systems in combat operations, for reconnaissance mission mainly, but also for intelligence collection and targeted killings.

The hype toward the promise of drones is also linked to the fact that it saves both money and lives in the conduct of warfare (Engelhardt 2010). If countries cannot afford high-end and expensive weapon systems like the Joint Strike Fighter (also known as the F-35), which should cost more than 100 million dollars per unit, they can lay out the necessary money for a few drones. Their relative cheap cost has made them an affordable aerial weapon system and a commitment was taken by the Pentagon from a congressional mandate to increase the unmanned aerial fleet and ground vehicles respectively to one-third by 2010 in the former and by 2015 for the latter (Krishnan 2009: 11). Because drones are able to fly for various amounts of time, require differing amounts of instruction from the ground and can carry different types of payloads, ranging from surveillance gear to guided missiles (Blackmore 2005: 130), they have become instrumental to the adaptation of the US armed forces to new military terrains, and drone and robotic warfare owe much to the new practices of urban warfare (see Stephen Graham's work on this new military urbanism (2010)).

My analysis has indeed led me on a path that explains how the drones had been made part of the new American way of war and why they have been used as asymmetrical/irregular warfare strategies by both the administrations of George W. Bush and Barack Obama. Over the course of my inquiry, I was able to highlight how drones revealed themselves as a flexible, capable, and adaptable solution to an extended and mobile battlespace that is anything but secured. Drones deployed in US military operations in Iraq and Afghanistan represent the smooth, nomadic, fluid, virtual, and global character of the new American way of war (Coward 2009).

But what is especially crucial about targeted killing achieved through drone warfare is that it is achieved through the network-centric framework that allows a global information grid rendering the networking of people and machines possible and making the waging of war with precision, from a remote distance, if not, from anywhere in the world. This is what led national security journalist Jeremy Scahill to state that the doctrine of "targeted killing" stemmed from a logic where "the world is a battlefield" (Jerving 2011; Gosztola 2011; Rogers 2006). In effect, a sense of shared humanity is lost to the technologies of seeing and targeting offered by the drone gaze that visually frames the screening of a world that is both at a remote distance and virtual. In so doing, drones enabled the United States to do pre-emptive and extra-judicial remote killings outside the frontiers of the United States. Future research should inquire further the legal and extra-legal bases of drone warfare, as drones are here to stay, especially as they are affordable and may prevent the loss of soldiers' lives, making them popular objects of security for state leaders and governmental powers of the world. One major challenge this research faces thus lies in the legal groundings and debates that will delimit the use of drones in the increasingly blurred

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used as operational decoys and deployed on B-52s. U2 spy planes developed during during the Vietnam War came after, but it would take a while before seeing UCAVs (Guilbert and Zechhini 2011: 82-83).

spaces of war and non-war. More scholarship done in other disciplines like geography and international law will help us expand our grasp of drones as objects of security.

(Word count: 2,387 words)

Suggested Readings

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In particular, the paper studies virtual military technologies, such as unmanned aerial vehicles, and how â€œvirtual distanceâ€ is changing warfare while simultaneously influencing operations and military culture.Â Security Studies, vol. 21: no. 3, pp. 529-555, 2012. http://cips.uottawa.ca/wp-content/uploads/2012/04/SCarvin_The-Trouble-with-Targeted-Killing_2012.pdf Carvinâ€™s paper examines the effectiveness of targeted killing as a tool in counterterrorism operations and strategy.Â They also find that the use of drones outside of full-scale military operations could undermine U.S. commitment to protecting civilians.Â Counterterrorism Strategy Initiative. (2012, June 1). â€œThe Year of the Drone.â€ New America Foundation. While it is true that the vast majority of drones in service are used for reconnaissance and surveillance missions,2 new prototypes such as the MQ-9 Reaper are designed for combat missions and have become remote-controlled weapon systems specifically made to kill people and take out targets with advanced guided weaponry. T&F logo. Policies. Privacy Policy. Terms & Conditions. Cookie Policy. Policies. , studied Graduate Studies in Environmental and Waste Management at Stony Brook University. Answered 10 months ago Â· Author has 6.2K answers and 2.9M answer views. It depends on what you mean by â€œtotallyâ€.Â I consider the strategy of using drone strikes more efficient and more responsible than other options. With that said, nothing is perfect and a lot comes down to execution. 118 views Â·.Â "Sources in the security establishment say the February 9 drone strike [killing Badar] was carried out on a tip off provided by the Pakistani intelligence community, as had been the case with the January 10 drone attack in Miramshah". Some "drone strikes" that are reported are latter demonstrated to be manned air strikes by Pakistani forces. The droneâ€™s range puts Israelâ€™s most populated city of Tel Aviv within operating range. Iran also showed off its new, indigenously developed â€˜9-Dayâ€™ surface-to-air missile system, which is reportedly capable of intercepting close-range threats such as cruise missiles, aircraft bombs, and UAVs. Also on rt.com Iranâ€™s Navy unveils 340 new missile firing speedboats as Tehran looks to increase influence in the Persian Gulf. Salami was also present for the unveiling of the â€˜Qudsâ€™ radar system, which has been produced for fast deployment and can be moved quickly. Iran prides itself on its indigenousl