

Prescription drones: On the techno-biopolitical underpinnings of contemporary ‘ethical killing’

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Abstract

As military technologies progress at a pace that challenges human cognitive and reasoning capacities, it is becoming ever more difficult to appraise the ethics of their use. In this article I argue that the contours of ethical killing are shaped and constrained by a medical discourse that has its basis in a deeper regime of techno-biopolitical expertise. Narratives and representations of drones as surgical, ethical, and wise instruments for counter-terrorism activities not only rely on the rendering neutral of both technology and practice, but also on a conflation of technology with practice as a biopolitical necessity. In this conflation, I argue, the practice of targeted killing is *adiaphorized*. Images and metaphors of the body politic turn drone strikes into a form of medicine that experts prescribe as a means of treating or preventing political cancers, diseases, and illnesses. Ethics, in turn, is treated as a primarily technical matter – something to be technologically clarified and administered from an expert space beyond the zone of ethical contestation. As long as this is the case, ethics will remain but a cog in our new killing machines.

Introduction

The pace at which unmanned and increasingly autonomous military technologies are incorporated into current arenas of conflict poses a challenge to existing legal and ethical frameworks for the conduct of war, leading to apparent ‘crises of intelligibility’ (Chamayou, 2015: 14) in which geographical, ethical, legal-political and strategic considerations become analytically confused, often at the expense of ethical investigations (see also Gregory, 2011b: 247). The need for debate on the ethics of drones has been emphasized since the Obama administration stepped up the CIA drone program in 2008, and a growing number of scholars and analysts are concerned with getting a grip on the implications of lethal drones.¹ However, the debates on the ethical standing of lethal drones seem to tread water.

A reason for this analytical congestion may well reside in the conceptual confusion Chamayou identifies as a crisis. In many discussions, the key question asked is whether drones – as a technology of air power – are an extension of existing capacities (Enemark, 2014: 4; Carvin, 2015: 128; Boyle, 2015: 106), and thereby can or should be considered within existing ethical frameworks. Stephanie Carvin (2015: 127-41) has argued that such debates ‘get drones wrong’ in three ways: by focusing on the novelty of the weapon, by misapplying the principles of just war traditions, and by drawing on inappropriate methods for research on the topic. Furthermore, debates over the ethics of drones are often suffused with questions relating to their effectiveness and legality. For many in the pro-drone camp, the argument is that they ‘work’ (Byman, 2013), and by virtue of their functionality, they become the ethical choice of weaponry, as they have the ostensible capacity to pinpoint targets with

greater precision, to limit damage, and to reduce casualties on both sides (Anderson, 2013; Brennan, 2012a, 2012b; Strawser, 2010). In this line of thought, functionality, legality, and effectiveness pose as morality. Critical scholars have highlighted that such accounts of ‘ethical warfare’ are nothing short of problematic. Maja Zehfuss (2011: 544), for example, has shown that the positing of military precision technology as ethical and the conflation of effectiveness with ethicality risks promoting warfare rather than limiting it, while Derek Gregory (2011b: 247) sees the ‘invocation of legality’ in targeting decisions as shifting both ethics and politics to the margins of the debate. Although issues of practicality, legality, and effectiveness are important considerations, they are an insufficient basis for engaging with the ethical implications of killing by drone.

Whether drone technology is itself new, or ‘merely the latest iteration of a process of technological change in warfare’ that has been underway for at least a century (Boyle, 2015: 106) is hotly contested. What is new, however, is the ethical language with which drones are patently styled as either ‘virtuous’ tools for humanitarian acts (Kennedy and Rogers, 2015), or otherwise as ‘legal, ethical and wise’ instruments for a more ethical approach to warfare as a whole (Brennan, 2012; Carney, 2013). As military expert Peter Lee opines in a 2013 interview in *The Guardian*: ‘if used correctly ... the MQ9 Reaper is the most potentially ethical use of airpower yet devised’ (Lee, 2013). Such narratives raise questions about what is at work in the relationship between the technology, its uses, and the ethical justifications given for political violence. They should also prompt us to look at the regime of political violence that is produced through the use of these apparently virtuous and ethical technologies. What enables the framing of an instrument for surveillance and killing as an inherently ethical instrument? What socio-political rationale underpins this? And what facilitates the emergence of a mechanism of political violence as a form of technologically enabled “ethical killing”?

In order to address these questions, I put to one side the issue of whether the use of drones in war is ethical or unethical, asking instead how drone technology itself might shape our capacity to think ethically. In so doing I follow the path Anna Leander (2013: 815) carves out in suggesting that ‘technologies are not merely passive tools in the hands of those who use them, but have agency’. Put simply, *technology matters* (see also Walters, 2014). According to Leander (2013: 814), drone technology performs ‘an “actant” role’, moulding the legal expertise that underpins the US drone program. Drones themselves have the capacity to carve out a space for legal expertise, and this capacity stems from the unmanned technology as such (Leander, 2013: 823). What results is an assemblage of techno-legal expertise that both informs and justifies the US targeted killing program. In this article I suggest that the framing of lethal drone use as ‘ethical’ rests on a similar production of expertise through technology. But rather than a techno-legal assemblage of expertise it is a *techno-biopolitical* expertise, deeply infused with medical imagery and discourses, which serve to shape and ultimately limit the space for ethical contestability and discussion.

In his philosophical investigation of the drone and its uses, Chamayou (2015: 17) identifies this new ethical framing of a lethal weapon as the discursive production of a transition in morality and value. The type of ethics produced is for Chamayou (2015: 136) a ‘neco-ethics’, which suggests that killing can be done with care. This notion of killing with precision and doing so well is ‘paradoxically vitalist’, as it gives implicit priority to self-preservation. Chamayou’s analysis therefore intimates a biopolitically infused epistemology for the practice of targeted killing – this is a *life-*

preserving practice, predominantly for the lives of soldiers, who act as defence systems of the body politic (which of course must be safeguarded at all cost). Here I want to draw attention to the prevention and prophylaxis mandates that such a ‘necro-ethics’ entails. What is at work in these, I argue, is a deeper regime of techno-biopolitical expertise – an assemblage of discourses and technologies that produce and manage life on the basis of a specifically medical understanding of politics, treating the body politic as a *corpus organicus* in need of a cure.

This techno-biopolitical assemblage serves as both the mechanism and rationale for narrowing the possibility for ethical debate and contestation by *adiaphorizing* the use of drones, shifting ethics into a zone of neutrality. In making this argument I expand on the biopolitical logic implied in Chamayou’s account and, following Rosie Braidotti (2011: 329), take into consideration the role of technologies that emphasize ‘the mutual independence of material, biocultural and symbolic forces in the making of social and political practices’. This approach enables me to foreground the importance and performativity of the bio-medical narrative, linking it to the technological expertise of the drone and the framing of drones as ethical tools for expedient and life-preserving actions.

The article unfolds in four parts. I begin by mapping out a biopolitical rationale that considers the body politic as a *corpus organicus*, the health and progress of which can be ascertained through scientific and technological interventions. I then address the role of lethal drone technology, focusing on how it acquires properties of ethical expertise through its position within a broader techno-biopolitical assemblage. As I show in section three, this assemblage functions together with medical metaphors and narratives, which advance an anthropomorphic conception of the body politic as ill and in need of targeted, expert treatment. Finally, I argue that this framing serves to occlude ethical considerations by positing lethal drones as responsible, professional tools. The techno-biopolitical assemblage thus *adiaphorizes* the practice of targeted killing by drones, pushing this practice beyond the zone of ethical contestation.

Technologies of life

In analyses of political violence, biopolitics refers to institutionalized mechanisms and discourses of power over the body and biological functions at the individual and the population level, whereby political government and life government are folded in with one another for the administration of life politics (Grayson, 2012: 27). In the master and meta-mandate to secure the health, prosperity, survival, and progress of a population, biopolitics is inseparably entwined with concerns and practices of control, prediction, and prevention. It is also reliant on distinct technologies of security, which facilitate the norms and practices which come to govern societies. These technologies are deeply infused with a structure of scientific, and specifically medical, thought that enables the capture of that which poses a risk to life itself (Rose, 2006). In an accelerated technological reality, the deep entwinement of material technology and biopolitics should not be underestimated (Braidotti, 2011: 329), for this entwinement both produces subjectivities and enables the emergence of new modes of political violence.

The rationale for positing the use of drones as an ethical means of killing is deeply biopolitical. Drones enable the (de-) politicization of targets by abstracting human life into a techno-political entity that can be captured in clinical terms as data, typically through new visualization techniques. In such a context targeted killing practices come to reflect a logic of biopolitical power in which logistical decisions

and arithmetic calculations turn political violence into a form of risk management (Grayson, 2012: 28-29). As Dillon and Reid (2009: 57) note, such practices of biopolitical securitization rest on a rendering of 'life as a mechanism and mechanisms as life'. On one hand, 'life' appears as the target of necro-political practices *and* the terrain on which these practices play out; on the other, theories of organic life processes serve as the very basis for such practices. An expanded understanding of biopolitics thus takes into account the structure of scientific thought, seeing the practice of analysing the body politic as resting on an understanding of biological life processes. It also ties in another, ancillary, consequence of the scientific process of truth-finding in societies where biological life dominates the social realm – namely, the possibility for a naturalistic conception of political ends, represented by the anthropomorphization of a body politic as ill, or in mortal danger, and in need of professional intervention. Modern bio-medical epistemologies are crucial here, serving to shape the production of specific biopolitical and scientific-technological subjectivities.

Bio-medical epistemologies understand the human in predominantly somatic terms, approaching it as an entity made up of various ascertainable life processes and patterns. Informed by bio-medical logics and technologies, such conceptions of the self rest on the premise that the body is 'fully intelligible and hence [...] open to calculated interventions' (Rose, 2006: 4). According to Rose (2006: 5) this interpenetration of science and technology yields a range of 'somatic experts', whose possession of bio-medical expertise and advanced technologies enables them to pinpoint, single out, manipulate, and improve the mechanisms of life. Over time this techno-bio-medical assemblage has shaped everyday subjectivities, enjoining individuals to internalize a "will to health" through a range of institutions, from insurance companies to health providers and government ministries. Crucially, though, for Rose (2001: 7) this will or drive to health relies on 'calculations about probable futures in the present, followed by interventions into the present in order to control that potential future'. That which poses a risk to the *corpus organicus* must therefore be identified, as early as possible, and consequently isolated or eliminated to ensure continued health and development.

Governing life thus becomes a matter of governing risk – biopolitics becomes risk politics. The rise of risk thinking, however, gives rise to risk profiling via new 'technologies of life [that] not only seek to reveal these invisible pathologies, but intervene upon them' (Rose, 2006: 19). In order to prevent risks from materializing into actual threats, 'population-based calculations' are used to identify risk groups, who are then 'placed under continuing surveillance or treatment' – a form of prophylaxis that breaches, as Lorna Weir (1996: 382) points out, the 'distinction between disciplinary governance that acts on individual bodies and security governance that acts on populations' (see also Rose, 2006: 71). Risk thinking thus becomes a kind of security paradigm and biopolitics a politics of security (Dillon and Lobo-Guerro, 2008).

Rose's account of the bio-medical logics that underpin contemporary biopolitics is compelling as a lens through which to dissect the techno-biopolitical dimension of targeted killing with drones, not least as medicine more broadly 'has been central to the development of the arts of government' under modernity (Rose, 2006: 28). The thanato-political 'other' of biopolitics has been discussed widely, by Giorgio Agamben and others, as 'immanent within the ethos of biopolitics' (Rose, (2006: 57). What is most crucial in bio-medically infused modalities of governance, however, are not questions of sovereign control but rather the bio-medical assemblage

of expertise that shapes governance through risk and security thinking. Technology is paramount to this development. The somatic expertise instrumental for the politics of life itself is, for example, made possible entirely through new visualization techniques for the identification and targeting of pathologies that disturb the optimization of health. Ever-more pervasive technologies for the anticipatory analysis of life – or ‘Life-Mining’, as Braidotti (2013: 61-62) calls it – have as their main criteria ‘visibility, predictability and exportability’. This techno-bio-medical assemblage of experts and expertise shapes perspective on ethics in important ways.

While Rose contains his analysis largely within the medical field of bioethics, it finds striking resonance in contemporary military discourse. Most visibly, the medical metaphor is often employed in the justification of drone strikes. But beyond this principles of risk profiling in the medical field are mirrored in military strategies for identifying risk in the context of target killings through drone strikes. What is crucial here is how the techno-biopolitical assemblage provides an ecology through which the production of ethical subjectivities is shaped. The human in a technologically-driven age of biopolitics is not only determined by rationality, but first and foremost captured in scientific terms and rendered ‘predictable [and] knowable’ (Berkowitz, 2012). Based on probabilistic factors, identifiable characteristics, and physiological or psychological knowledge linked to higher risk categories, algorithms are conceived to identify high-risk groups and individuals. For Rose this results in a hierarchical relationship that underwrites the ethics of such practices and he harks back to Foucault’s thoughts on pastoralism in linking the ‘will-to-health’ subjectivity of modern man to a pastoral power that administers the essence of risk politics. In the contemporary context, this is not a pastoralism by the state but rather ‘a plural and contested field traversed by the codes pronounced by ethics committees and professional associations’ (Rose, 2001: 9). In short, the “will-to-health” mandate and the resulting risk politics produces a form of ethics that is determined by the intrinsic moral ‘good’ implicit in health and life, and safeguarded by the various codes and law-like regulations of those that claim the scientific and technological expertise to minimize risk through effective treatments.

Enter the drone – as a visual technology to enable diagnosis, as an expansionary technology to help overcome human limits, and as an instrumental technology to treat and protect the body politic – in short, as the lynchpin in a new bio-technological assemblage of expertise.

Machines of death

Drones are currently traded as the hottest asset in military equipment and have proliferated significantly in recently years. At the time of writing, the United States’ military alone possesses at least 7,494 unmanned aircrafts (Gertler, 2012; Ackerman and Shachtman, 2012) and, according to the Congressional Budget Office report 2011, is planning on purchasing an additional 730 new medium-sized and large UAV systems, spending a minimum of US\$ 37 billion on unmanned systems over the next ten years (COB, 2011: 9). While the majority of the US\$45.5 billion spending on aircrafts for 2014 continues to be for traditional, manned aircrafts,² almost one in three military planes is now unmanned and automated (Gertler, 2012; Ackerman and Shachtman, 2012). Over 50 countries possess drones with various capacities. The majority of these drones are used primarily for surveillance purposes, however, the race for countries to produce their own armed drones with combat capacity is, according to widely-held expert opinion, well and truly on.³ The US administration

currently uses lethal drones in two areas of engagement – in military programs, operating in Afghanistan and Iraq as ‘an extension of conventional warfare’ (Mayer, 2009), and within the CIA counter-terrorism program, which, among other activities, targets terror suspects in a number of countries with which the US is not officially at war. Presently this includes Pakistan, Somalia, and Yemen (Asaro, 2012; Miller, 2012)

In all arenas where lethal drones are employed, it is difficult to separate the technology from the practice of targeted killing (McMahan, 2013: xi). Since 2004, US-initiated drone strikes are reported to have killed between approximately 2,700 and 4,000 individuals, including American citizens, with some analysts estimating the civilian casualty rate among these statistics to be as high as 25% (Asaro, 2013; New America Foundation, 2012; Woods and Yusufzai, 2013). The majority of the deaths resulting from drone strikes occurred in 2010. The policy originated as a program to “capture and kill” a small number of high value terrorist leaders in the G.W. Bush years, however, it has expanded its remit considerably since. Drone strikes in targeted killing missions fall typically within one of two categories: so called “personality strikes”, where the target is known by name and deemed to be a high-value or particularly dangerous individual, and “signature strikes”, which target unknown persons based on an algorithmic identification of life patterns. Initially, the drone program focused on personality strikes of targets that were well-known to the intelligence community and deemed to pose a terrorist threat. However, target selection by “signature” is becoming an increasingly common practice whereby ‘individuals are targeted when their identities are not known but whose behaviour suggests that they are legitimate targets’ (Becker and Shane, 2012, Nolin, 2012).

Signature strikes echo the bio-medical practice of risk profiling and surveillance with a view to prophylactic intervention. That which might pose a risk is identified and selected as a justified target merely by identifiable markers, patterns, and algorithmic calculations, and in most cases the exact factors that contribute to the algorithmic determination of targets remain opaque. What enters into the picture here, by means of surveillance and data capture technology, is the capture of life and the potential threat to life, as a calculable and ascertainable factor. The technology itself, understood as offering greater visual accuracy and scope of information, invokes the supposition that clear patterns of abnormality can be detected, which then serve to justify and legitimize a specific target selection.

This practice typifies an important techno-biopolitical dimension of drone warfare, for the ‘patterns of life’ analysis employed in selecting signature strike targets is not only a modality of cultural and spatial mapping but also a biopolitically informed one. Joseph Pugliese explains this entwinement of algorithmic and biological knowledge in the following terms:

The military term ‘pattern of life’ is inscribed with two intertwined systems of scientific conceptuality: algorithmic and biological. The human subject detected by drone's surveillance cameras is, in the first scientific schema, transmuted algorithmically into a patterned sequence of numerals: the digital code of ones and zeros. Converted into digital data coded as a ‘pattern of life’, the targeted human subject is reduced to an anonymous simulacrum that flickers across the screen and that can effectively be liquidated into a ‘pattern of death’ with the swivel of a joystick. Viewed through the scientific gaze of clinical biology, ‘pattern of life’ connects the drone’s scanning technologies to the discourse of an

instrumentalist science, its constitutive gaze of objectifying detachment and its production of exterminatory violence. (Pugliese, 2011: 943)

Basic biological data, such as age and gender, factor into the distinction as to whether a suspect is assigned to a risk group. As Becker and Shane (2012) have revealed, all military-age male persons count as potential combatants, and therefore legitimate targets, in a US targeted killing strike-zone, and their actual status is often not confirmed until after a strike has already occurred. Life here is abstracted as data, to be fed into a risk-matrix and used in a pathological assessment of the body politic.

The epistemological entwinement of biology and technology runs deep and is by no means new. Heisenberg's (1958) vision of technology as the result of 'a large-scale biological process' calls attention to this close enmeshment. In the present context, roboticists tasked with the development of military machinery – including drone technology – confirm that biological mechanisms provide a 'pervasive influence' on the design and functionality of automated and autonomous systems (Ronald Arkin, cited in Singer, 2009: 90). Our contemporary technological subjectivity is thus biopolitically informed. We conceive of computers, machines, and technology more broadly as logical extensions of (limited) human sensory and physical capacities, seeking out ever-wider realms for their application. Yet the all-pervasiveness of our technological environment, although modelled on and within the human logic, comes back to shape and condition this very logic. The human itself is framed in bio-technological terms – 'the brain as software and the body as hardware' (Coker, 2013: xvi) – installing a machine logos as a new, de-personalized ideal for human bodies. Meanwhile, collectives of people are conceived in abstracted terms, through symbol orders and as repositories of information, parts in a larger cybernetic whole (see Evans, 2013: 72). Contemporary biopolitical subjectivities are thus technologically informed too.

This strange loop between the biopolitical and the technological can be discerned in the bio-logos of the lethal drone. In target selection, the visual capacity of the drone serves as the extended, enhanced, improved, sober, and neutral eye and sight of the human – a macroscopic device affording a clinical gaze upon potentially problematic populations, enabling the human operator him or herself to become an ostensibly more sober and ethical agent (Nolin, 2012). It is therefore no longer the drone that must fit into the limited and limiting visual and computational logics of the human – rather, it is the human that must fit into the logic of the machine by, for example, rotating crews to accommodate the 24 hour gaze of the drone, or by having to develop new ways of seeing (Williams, 2011: 385) This is a new mapping of human and machine – a 'cyborg assemblage', as Alison Williams (2011: 384) puts it. But this assemblage is not without its hierarchies – the drone is more than a traditional prosthesis, it is indeed the *better human*. Furthermore, in targeted killing, the precision capacity of the drone serves as a surgical instrument, offering an ethically superior modality of necessary violence. Together, these "agentic" dimensions of automated lethal technology form an assemblage for the necessary and efficient elimination of bad life.

It is here that drone technology moves from being a clinical instrument to a benchmark of professionalism and a source of moral authority. This shift rests on an anthropomorphized understanding of the drone as a peer, if not a guide, to the human and her conduct in warfare. The recently released 'Roadmap for the Integration of Civil Remotely Piloted Aircraft Systems into the European Aviation System', published by the European RPAS Steering Group, indicates this equalization of

humans and machines in terms of the general public's expectations for ethical capacities. The report is emphatic that '[c]itizens will expect [drones] to have an ethical behaviour comparable with the human one, respecting some commonly accepted rules' (European RPAS Steering Group, 2013: 44). In this formulation, the anthropomorphic logic of technology is continued as drones are posited as moral agents that can 'act' rationally, dispassionately, and – at least in principle – ethically.

The anthropomorphized technology narrative does not end here. Drones are designed to *outperform* the human in the tasks of war. They can remain in the skies longer than any manned aerial system and are not plagued by pilot fatigue (Lin, 2011), they can capture and analyse data in greater quantities, they need less frequent breaks, can perform their tasks with much greater accuracy than any human could, and they become "smarter" with every new model and incarnation (Singer, 2009; 2010). It is of paramount importance that we consider the stakes of framing such technologies as ethical agents. Already, narratives are advancing that posit fully autonomous lethal systems as more humane and "wiser" than humans in their approach to killing (Arkin, 2010). Military experts are certain that the future of modern warfare will include robotic machines that can 'hunt, identify, authenticate and possibly kill a target – without a human decision in the loop' (Johansson, 2011: 280), all under the mandate of saving lives. This, as Ian Roderick (2010: 228) puts it, is a form of "Mil-bot" fetish, whereby military robotics becomes 'a science of imaginary technical solutions to the problem of war legitimation'. In such a reality, the capacity for ethical thinking becomes purely a technical capacity, based on the assemblage of technical expertise and life data.

To be clear, the point here is neither that drones currently work without humans nor that they are indeed ethical in themselves. Rather, it is that lethal drone technologies involve the human in an ethical universe that is wired into them. This ethical universe, in turn, is one based on using scientific processes and algorithmic logics to identify "correct" courses of action (Haraway, 1997). This is exemplified in the IF/THEN logic of current discourses on the structures of just target selections for lethal drone strikes. Bradley Strawser's (2013: 17-18) defence of the ethical *obligation* to use drones as a weapon of choice relies on a selection of variables (X, Y, G) and principles (principle of unnecessary risk – PUR) that, combined, serve to confirm the hypothesis – namely, that using drones for killing is an ethical obligation. While it is still the human that makes the decision in targeted killing, the algorithmic logic implied in such considerations reflects a biopolitical and techno-scientific subjectivity in which ethical decisions are *ascertained* through data. President Obama's selection of terrorist targets – using the so-called "kill list" and "disposition matrix" – takes such logics into consideration when choosing between life or death for those under surveillance.

The techno-biopolitical assemblage of expertise in targeted killings by drones thus rests on a form of algorithmic governmentality, facilitated through the technical capacity of the drone as an agent of expertise. Through this assemblage the drone appears as able to 'act' not only better than humans, but also more ethically. This algorithmic logos, however, is also reliant on a rendering of the body politic in anthropomorphic terms, as a body in need of a cure. It is here that the professional and analytical discourse of a necessary medical procedure comes into effect.

Violence as medicine

Conceiving of states, nations, or other political communities as “organisms” harbours an always-latent potential to see violence as creative. Hannah Arendt (1970: 74) was early to recognize this, warning us strongly against such a mode of thinking:

The organic metaphors with which our entire present discussion ... is permeated – the notion of a ‘sick society,’ of which riots are symptoms, as fever is a symptom of a disease – can only promote violence in the end. Thus debate between those who propose violent means to restore ‘law and order’ and those who propose nonviolent reforms begins to sound ominously like a discussion between two physicians who debate the relative advantages of surgical as opposed to medical treatment of their patient. The sicker the patient is supposed to be the more likely that the surgeon will have the last word. (Arendt, 1970: 74)

This passage, written in 1970, resonates with contemporary military discourse. Increasingly, medical narratives and metaphors serve as a means to assess what is wrong within a body politic and what can and ought to be done to remedy the ill. This is perhaps not surprising, given that the medical profession and the military industry are located on opposite ends of the biopolitical spectrum: one serves to prevent death, the other delivers it. Both are also instrumental in the survival paradigm: one saves individual life, while the other is tasked with securing the life of a body politic. Biopolitics today is thus rife with pathologizing terms such as sick and healthy, cancer and cure, diagnoses and remedies.

From the outset it is important to note that the use of medical narratives and metaphors in political rhetoric has a long history. Indeed, as John Keane (2004) has shown, democratic regimes have repeatedly deployed medical narratives in order to justify acts of violence, framing these as necessary means through which to excise “sick” or “cancerous” elements from society. But while Keane (2004: 2) insists that ‘mature democracies find such euphemisms embarrassing’, the use of medical metaphors to legitimate violent practices has only increased over the course of the twentieth century, running through military contexts associated with the Cold War, humanitarian interventions, and counter-insurgency programs (Bell, 2012; De Leonardis, 2008; McFalls, 2007).

Medical metaphors are premised on an anthropomorphism that envisions communities as organic entities with human qualities – the state, for example, is conceptualized as a person whose strength is represented in military might, while the well-being and health of this person is typically conceived in terms of wealth and economic prosperity. Such metaphors cast the survival of a community in vital terms, enabling challenges to its military strength and economic prosperity to be seen quite literally as ‘death threats’ (Lakoff, 1991). In broader terms, the analogy rests on a linear and progressive understanding of human development, whereby a community (such as a state or nation) is considered “mature” when it has been industrialized, and economies that do not function in line with the industrialised model are considered under-developed or “immature”. As Lakoff (1991) highlights: ‘there is an implicit logic to the use of these metaphors: Since it is in the interest of every person to be as strong and healthy as possible, a rational state seeks to maximize wealth and military might’.

While phrases such as “surgical strike” have often been interpreted in rhetorical terms – that is, as a means through which to make a messy war appear cleaner than it is – they also betray the biopolitical underpinnings of contemporary

warfare. Such metaphors are not neutral in their cognitive effect. More than mere rhetorical devices, they are what linguists call “figures of thought” – metaphorical phrases whose work ‘consists not merely in *representing* ... objects, but in *depicting* them’ (De Leonardis, 2008: 34, emphasis in original). Furthermore, metaphors have the capacity to create a reality, establishing and manifesting a similarity between two concepts where previously there was none. It is through the use of such metaphors, then, that the logos of a certain socio-political form is disclosed and circulated.

The biopolitical logic of military engagements in Afghanistan and Libya, for example – but also the CIA interventions in Pakistan – has been framed by pathologizing the respective nation or community. The narrative of military intervention as a “therapeutic” procedure that remedies the unhealthy aspects of a specific society in turn renders violence as something good and intrinsically moral. Thus, using biologically grounded metaphors, civilian casualties and targeted assassinations can fully be justified by the biopolitical mandate for survival. ‘Counterinsurgency becomes chemotherapy, killing insurgent cells and sometimes even innocent bodies to save the body politic’ (Gregory, 2011a: 205). This rationale is explicitly invoked in a 2010 article by battlefield officers Lt. Gen. William B. Caldwell and Capt. Mark Hagerott, published in *Foreign Policy* with the indicative title ‘Curing Afghanistan’. In the article Caldwell and Hagerott (2010) draw an analogy between a country in crisis and an ailing patient, likening Afghanistan to ‘a weakened person under attack by an aggressive infection’. They then explain the logic of their interventions by comparing their own position with that of a surgeon, casting the Taliban as an infection and their counter-insurgency efforts as a course of antibiotics. Current advocacy for the use of armed drones in Pakistan, Yemen, and Somalia is couched in similar terms, with drones repeatedly being referred to as instruments that enable cancerous terrorist cells to be eliminated with surgical precision (Brennan, 2010, 2012a, 2012b; Carney, 2013; Strawser, 2013). As such, the use of lethal drones is positioned not only as legal and ethically sound but also prudent and effective.

These examples exemplify the “naturalization” of politics at work in contemporary military affairs. As De Leonardis (2008: 37) explains: ‘what is at stake here is a view of society as an organic body that is threatened by some external or internal noxious substances, a *corpus organicus* that can be cured only by a ruler-physician’. In the same vein as two specialist consultants would, Calderon and Hagerott (2010) ‘examine’ the course of treatment hitherto applied and find that ‘Afghanistan’s illness’ was diagnosed too late, and that the ‘low level antibiotics’ employed so far will not be sufficient to cure it. Within this biopolitical logic, stepping up military action can be seen as a heavy but necessary dose of medication – this course of action may produce side effects, such as ‘civilian casualties’, but these will ultimately be minimized through the deployment of ‘surgical precision’ (Calderon and Hagerott, 2010). Moreover, once the cancer is cured the US military can help Afghanistan build a strong immune system through support for what Calderon and Hagerott (2010) call the collective security forces – ‘the police, the military and the security bureaucracy’. In other words, once cured the *corpus organicus* of Afghanistan can only maintain its health if it is secured by an executive branch in possession of the legitimate means of state violence.

The homology of biological and social malady implies a specifically biopolitical power relationship whereby the ‘governed must submit to the ruler with the same eagerness a patient entrusts his/her health to a physician’ (De Leonardis, 2008: 39). This relationship has been enacted by the US military in earlier conflicts.

Conceptions of immunology and virology, for example, were a strong influence on Cold War rhetoric, where ‘the germs of communism’ were cast as ‘a threat to the national body conceived as an individual’ (Wald, 2007: 172). In her analysis of this rhetoric, Priscilla Wald highlights how the distinction between immunology and virology operates as a mirror of the distinction between a cold war and a hot war respectively. Where cold wars require remedial action, hot ones require violent intervention, echoing Arendt’s analogy of the physician carer and the surgeon.

Drones today are clearly part of a hot war, but so far the role of medical metaphors in US counter-insurgency efforts have been analysed in terms of the remedial treatments they propose. Gregory (2008: 40-43), for example, notes how counter-insurgency doctrines are rife with medicalized terminology, describing the initial securing of populations as a means of ‘stopping the bleeding’, making further reference to ‘outpatient care’ – an analogy for stabilising the body politic in question – and framing ‘gated communities’ in Iraq as ‘tourniquets’ (Gregory 2008 40, 43). In a similar vein, Colleen Bell (2012) highlights how the hybrid modalities of counter-insurgency rely on medical discourses of therapy for the remedial care of a body politics beset by insurgents. The discourse of the drone program, however, takes on a much more radical logic, manifesting Arendt’s precocious fears – “the sicker the patient, the more likely that the surgeon will have the last word”. Not concerned with therapeutic or remedial action, drone technology deals with the worst of all pathologies and can only do so with the work of the surgeon.

Only a few months after Obama publicly admitted to the existence of targeted killing operations, John Brennan (2012a) offered a medical rationale for the use of drones when he presented his speech on ‘The Ethics and Efficacy of the President’s Counterterrorism Strategy’. The speech highlights the positioning of drone technology as necessary and preventative medical instruments through which the “cancer” that is Al-Qaeda terrorists can be removed. The narrative of his address thus suggests not only that are drones ‘wise’ – because they remove risk for US personnel altogether – but also that they also conform to the ‘principle of humanity which requires us to use weapons that will not inflict unnecessary suffering’ (Brennan, 2012a). The underlying assumption is thus that the US possesses the wisdom and authority to perform this surgery, with ‘laser-like focus’, using very specific tools, and doing so responsibly. The US administration is the surgeon, countries like Pakistan, Yemen, Somalia, Afghanistan, and others beset by terrorism the sickly patients. In a follow up interview, Brennan further elaborated on the necessity of this medical intervention for the rescue and survival of humanity:

... we have been very, very judicious in working with our partners to try to be surgical in terms of address those terrorist threats. ... Sometimes you have to take life to save lives, and that’s what we’ve been able to do to prevent these individual terrorists from carrying out their murderous attacks. (Brennan, 2012b)

A year later still, in 2013, Brennan reiterated the notion of the US military as an expert surgeon, equipped with the right technology to heal a body politic prophylactically:

[I]f we don’t arrest the growth of Al Qaeda in a Yemen, or a Mali, or a Somalia, or whatever else, that cancer is going to overtake the body politic in

the country, and then we're going to have a situation that we're not going to be able to address. (Brennan, quoted in Cherlin, 2013)

The White House has consistently defended the use of drones as ethical and wise to 'save American lives' (Carney, 2013), and even in issuing caution against a gratuitous use of drones, the terminology remains within a medical narrative, with President Obama acknowledging that drones cannot be seen as a 'cure-all for terrorism' (Obama, 2013). In order to observe professional restraint, he ensures the public that the US government has strong oversight over every strike. In so doing he only further affirms the type expertise upon which the lethal use of drones rests.

The narrative, much like the patient, refuses to die. The justification and alleged ethicality of the use of drones is consistently framed in terms of the professional expertise of the administrator, the technological expertise of the tools available, and the survival mandate that underpins their work. In many ways the rationale behind the defence of targeted killing by drones evokes a modern, militarized version of the Hippocratic Oath. It manifests a perspective of the intervener, armed with lethal drones, bound by professional duty to eliminate a condition of sickness, and now equipped with the 'right' precision tools to do so. The novelty of lethal drone use thus lies in the combination of a medical narrative to justify targeted strikes with the technological capacity to do so.

Adiaphorized killing

The underlying rationale of such a techno-biopolitical framing has several consequences for the ethics of political violence in general, and for the ethics of lethal drone strikes in particular. One is that it enables the drawing of dichotomous boundaries between what is normal and what is abnormal, always with a view to prescribing effective treatment for abnormal conditions. This, in turn, manifests a moral prioritization of necessity and affirms the authority of scientific and technological expertise, turning drone strikes into a tool in the hands of experts, who wield them like a scalpel as they pursue the biopolitical survival mandate. The counter-side to this is an ethical demand on the "diseased elements" in a society to submit to being cured – for their own good, and for that of a wider body politic – by the entity in possession of the knowledge, expertise, and technology needed to correctly diagnose and treat their sickness. What emerges is thus a hierarchical power relationship, enabled by the socially constructed medical categories of health and illness, and cemented by a moralized technology (Bauman, 2012: 159; De Leonadis, 2008: 39). The morality of the remedy, understood in terms of utility, stands unquestioned in the survival mandate. The modern aspiration toward the omnipotence of man means that not only is everything possible, but also that, as Jack Bauer insists, "we have no choice". The moment of ethics is thus *occluded* by the mandate to secure the health and well being of humanity.

This tendency rests on a reductionist assumption that the complex and contingent elements in a society can be scientifically captured and brought under control – a biopolitical belief that a society can be ascertained and "cured". Ben Anderson (2011) highlights the way the US military has adopted such methods in their PSYOPS engagement in Afghanistan. These operations hinge on a boundary-drawing process that distinguishes between 'transformable' (curable) and 'non-transformable' (incurable) populations. While members of Al Qaeda are deemed to be beyond remedy and, from the very outset, must be eliminated,⁴ non-combatants and

civilians are shifted into a zone of potentiality that renders them subject to on-going assessments about the level of danger they might pose both now and in the future (Anderson, 2011: 224). Just as in preventive medicine, the figure of the ‘suspect’ becomes subject to preventive actions – actions designed to secure their healthy and normal behaviour, before it can slip into categories of abnormality. The medical metaphors employed in hybrid counter-insurgency practices thus underline deeper biopolitical rationales based in immunology and virology. In targeted killing with drones, however, the concern is not to strengthen the immune system, but to combat the virus with the most efficient force possible. It is a logic of viral infection for which only the surgeon’s precision tools and decisive interventions will do. What emerges with drones is thus a regime of political violence based on medical expertise – an intrinsically moral rationale that cannot be challenged with ease.

The medical narrative combines expertise with authority and thus functions effortlessly as a moralizing principle in modern societies preoccupied with the rationalization and application of ethics. The narrative is largely congruent with existing laws and where it does not fit, the quasi-divine goodness implicit in the profession of the healer and caregiver renders both the intervener and the target of intervention beyond moral questioning. As Laurence McFalls (2007: 1) highlights: ‘The apparent neutrality of the Hippocratic commitment to human life and well-being, moreover, exempts medical intervention from ethical critique’. Morality is integral to the very profession and implicit in all its efforts to save lives.

It is here that Zygmunt Bauman’s (2000: 92) notion of *adiaphorization* strikes a chord. Drawing on ecclesiastical terminology, *adiaphorized* acts may be regarded as neither good nor evil, but rather exist in an artificially created a-moral space. It is the product of organized modern societies that enables people ‘to silence their moral misgivings in order to get certain jobs done’ (Jacobson and Poder, 2008: 81). Bauman (2000: 92) himself uses the term to denote ‘the tendency to trim and cut down the categories of acts amenable to moral judgement, to obscure or deny the ethical relevance of certain categories of action and to refute the ethical prerogatives of certain targets of action’. In such a process ‘difficult moral and ethical questions are elided in favour of action’ (Finn, 2014: 498). Technology plays a significant role in processes of *adiaphorization*, and the distancing technology of the drone is central to the *adiaphorization* of their use.

In a series of letter exchanges with David Lyon, Bauman discusses the technological aspects of *adiaphorization*, touching briefly on drones. For the most part he focuses on their surveillance capacity. However, he also notes how the ability of drone technology to facilitate swift action can circumvent complex ethical and moral considerations. As he puts it: ‘[T]he most seminal effect of progress in the technology of “distancing, remoteness, and automation” is the progressive and perhaps unstoppable liberation of our actions from moral constraint’ (Bauman and Lyon, 2013: 86). *Adiaphorization* is thus closely linked with the capacity of a technology to create distances, and rests on an inherent technocratic basis that enables the shifting of socio-political matters, relations or things, into a space of ‘technical performance, instrumental rationality and administrative competence’ (Doel, 1999: 73).

The significance of drones as a distancing technology here is thus not that they install an ethics *of* or *at* a distance. Indeed, it is not even clear that they do this – recent studies suggest that there is something strangely intimate, and traumatic, about being a drone operator (Williams, 2015; Williams, 2011). Rather, what the technological and scientific expertise of the drone does is move the very practice of targeted killing into a specialized and neutralized zone, a distant zone beyond ethics.

In this zone ‘the strikes are “surgical,” the passion of the killing absolutely minima ... The casualties on our side should be nil (surgeons don’t die), and the casualties on the other minimal (a few patients die)’ (Mooney and Young, 2005: 120). By employing cutting-edge science and technology, the act of killing can be framed as dispassionate, precise, and necessary – a move that effectively neutralizes it. These medical narratives, however, are based on bio-medically conditioned algorithmic subjectivities, and it is these that enable the adiaphorization of killing (Cheney-Lippold, 2011; see also Till, 2013: 39). The process of adiaphorization thus rests not so much on a willful instrumentalisation of individuals (although this case could be made as well), but rather on a techno-biopolitical assemblage that frames both the individual and the body politic through forms of scientific and algorithmic expertise. The seemingly dispassionate approach and framing of targeted killing – from establishing kill zones to disposition matrices – renders the practice professional in technological and medical terms, and in so doing adiaphorizes the process. Moreover, the necessarily speculative nature of the US drone program – the inability to ascertain effectiveness and a clear body count, in terms of civilian casualties or overall damages incurred – only further empowers forms of technical expertise.

The adiaphorization of ethical content thus rests on an assemblage of techno-biopolitical and scientific expertise that operates with and on the notion of a body politic as an organic entity. This assemblage of scientific and technological expertise then turns ethical considerations into a technical matter, neutralizing these to the point of occlusion. In the practice of targeted killing with drones, not only is the target depoliticized by being unable to defend herself as a human rather than an algorithmically abstracted biological entity, but as John Williams (2015: 103) notes, ‘the ethical importance of the autonomous choice of the individual to engage in activity that he knows renders him potentially liable to lethal force’ is also hampered. Furthermore still, the ethics of healing an allegedly ill or sick body politic through violent incursions become difficult to challenge when faced with this specific techno-biopolitical assemblage. Violence is already no longer the last resort, as the consequences of the violent act are allegedly only harmful to the suspected sick cells. And it is precisely this medical narrative of precision and prevention that allows for the program to ‘penetrate areas and kill people in ways that would not previously have been available without major political and legal obstacle’ (Sharkey, 2010: 375). The danger is that this adiaphorization stands to eclipse or at least occlude our moral imagination beyond evaluations of effectiveness or procedural legality.

Conclusion

The accelerated drive toward automated and autonomous technologies that aid (or supersede) the human in the process of killing shapes perspectives toward categories of thinking about war, including ethics. This is exemplified in the prevalence of thinking about the ethics of killing with drones in terms of their effectiveness, their intended performance, and their properties as an instrument. What is at work here is the production of a new type of ethical proposition – for Chamayou (2015: 136), a ‘necro-ethics’ – that paradoxically frames killing as a humanitarian, moral act of care. In this logic, the act of ethical killing is biopolitically justified for purposes of prophylaxis and prevention, in order to maintain the homeostasis of an organic entity. The framing of targeted killing for this purpose is infused with allusions to and metaphors from the medical field. Drone technology provides the medium and expertise to undertake targeted killing with a professional ethos and neutral distance,

just as a physician would. What emerges in this context is not a form of ethics at all, but rather a narrowing of ethical horizons altogether in favour of swift action posed as vital and necessary. This constitutes an adiaphorization of drone warfare, mediated through a scientific structure of biopolitical thought and technological expertise, which is so clearly posited as ethical that it becomes difficult to contest it. This not only has implications for discussions on the ethical implication of drones, but also on their use. Beyond legal considerations, the oath of killing to save lives and the claim to do so ethically must be unsettled and then challenged.

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Notes

¹ Christian Enemark (2014), for example, has written at length on drones in relation to the Just War traditions. The *International Journal of Human Rights* has also recently published a Special Issue on ‘The Legal and Ethical Implications of Drone Warfare’, which includes discussion from a range of perspectives (vol. 19 no. 2, 2015). Meanwhile, the Birmingham Policy Commission Report of 2014 includes an entire chapter on the ethics of drone use in UK foreign policy.

² The US had allocated US\$19.5 for traditional combat aircrafts and US\$3.8 for unmanned aerial vehicles in 2013 (USDOD, 2012).

³ For example see Lorenz, Mittelstaedt, and Schmitz (2011), Ouden and Zwijnenburg (2011), and Sanger (2011).

⁴ To stay with the medical metaphor, here drone strikes and **targeted killings**, frequently framed as surgical strikes, have become increasingly frequent as a means with which to eliminate the incurable element from a given society.