

Flesh and steel: Antithetical figures in the war on terrorism

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Introduction

The 'war on terror' has given rise to two distinct and seemingly antithetical figures of warfare: the suicide bomber and the lethal drone. Both are emblematic of contemporary forms of (counter-) terrorism violence, yet they are characterised as being located on opposite ends of the necropolitical spectrum. In particular, the material conditions that are attributed to each figure differ acutely: while the lethal drone is posited as providing operators with a prosthetic means to conduct war with a distanced, discriminating and deliberate reach into geographies of conflict, the suicide bomber is portrayed as radicalising the fleshy matter of the human body as a site of terror and profound uncertainty. The former is framed as a measured weapon of enlightened, rational actors; the latter as a desperate and irrational means of fanatics. Both, however, have emerged as predominant modalities of violence within the geographies of the 'war on terror' since the mid 2000s.

Suicide attacks are by no means exclusive to present day conflicts, and have wrought havoc on targets in Israel, Sri Lanka, Lebanon, and elsewhere during the first wave of modern suicide attacks in the 1980s (Moghadam 2008, 46; Horowitz 2015, 72). Since then, however, suicide missions have surged dramatically, from 3 attacks in 1990 to 356 attacks in 2005 (Chicago Suicide Database).¹ A sharp increase in suicide missions from 2004 onward led to a record number of 652 attacks in 2015 (Ibid.). Among the focus areas for attacks since the mid 2000s have been Iraq, Afghanistan, Pakistan, Syria, Nigeria and Yemen. The picture for drone strikes in these regions shows a similar pattern, with a sharp incline of lethal activity since the initiation of the CIA drone programme under George W. Bush in 2004, and from 2008 onward.²

¹ There are slight divergences between the Global Terrorism Database (GTD) and the Chicago Suicide Database, whereby the latter claims that the numbers reported on the GTD are too low. General trends and patterns between the two overlap, however.

² Although accurate figures of strikes and casualties from drone operations are notoriously difficult to obtain under the clandestine mantle of CIA operations.

With a still destabilised Middle East, neither form of violence shows any signs of abating – the number of suicide attacks and lethal drone strikes continue to rise. While it is important to stress that correlation is of course not causation, it is evident that together, these two modalities form an evocative fabric for shaping the logics and narratives for an on-going violent struggle. The lethal drone (operator) and the suicide bomber are intricately linked as representational figures in contemporary forms of violence. Consequently, any account of terrorism and counter-terrorism warfare must address these two modalities of violence, and those that wish to take the role of power-knowledge seriously must confront the productive effects of our discourses on each.

In this article, I explore the material-semiotic assemblage of the drone and the suicide bomber by first looking at the material logic of each as a weapons system, and then addressing the contextual semiotic forms of mediation for both. Taking my cue from Josef Pugliese's (2015) call to overcome untenable dichotomies between what is human and what is technological, I instead pay attention to the 'figures' produced through human-technological assemblages, focusing in particular on how these assemblages work to produce an embodied relation between flesh and technology. I argue that the seemingly antithetical characterisation of the lethal drone machine and the suicide bomber masks an underlying commonality, which is a particular relation to technological embodiment as a contemporary means of waging war. Rather than reflecting antithetical materialities, these two figures are constituted through assemblages that adhere to similar logics of technologically mediated economies of violence in which each takes the other as a referent, despite reflecting very different economies of vulnerability. These diverging narratives about the rational drone machine and the irrational suicide bomber function as sense-making devices, however much they might obscure about the historical genesis of each figure. They also serve as an enabling framework for ever-more intrusive forms of technological incursion, encouraging 'expert' interventions in a manner analogous to those of medical professionals. Rather than 'solving' the problem of terrorism, this creates counter-productive, or *iatrogenic*, effects, in which technological mediation escalates rather than diminishes cycles of violence. In order to elaborate this argument, I focus on the techno-material logics that are common to each of these modalities of warfare, aiming to undercut the claims of binary opposition that serve as justification for evermore violence in the war on terrorism. These modalities are part of the same technologically mediated ecology of violence, and so rather than focusing on their differences, I proceed instead from the premise that there is something to be gained from reading both in the same key. This is not meant to downplay the distinct historico-political contexts from which the figures of the suicide bomber and drone operator emerged, nor to disregard the way practices associated with each have co-evolved. Neither is it meant to suggest that the weapons-bodies of the drone operator and the suicide bomber are the same, or that they work within similar military power complexes. This is patently not the case. There is, however, a sense in which both weapons-bodies belong to broader clinical-material assemblages. Seeing the suicide bomber as one technological system responding to another, allegedly more advanced technological system, enables the construction and performativity of each figure to be better grasped and challenged.

My argument unfolds over three sections. Section one addresses the embodied material construction of each figure (the suicide bomber and the drone operator),

teasing out the forms of techno-corporeality produced by each weapon-system assemblage. Here I identify limits to the technological fortification of bodies for war, as well as highlight the logics that connect rather than separate the two assemblages. In section two, I discuss the way divergent narratives based on ideas of rationality and irrationality produce the moral standing of each figure. This divergence yields a tension for the allegedly ‘rational’ wagers of counter-terrorism warfare, which must be resolved through a sense-making framework. I argue that the prevalent analogy between military practices and medical intervention functions as such a framework, rendering the problem of terrorism intelligible and treatable through a lens of technological intervention. This analogy has two main effects: to neutralise the violence of killing by framing it as a technological-professional practice, and to escalate the fiction that medical-military technologies can overcome uncertainty, if not achieve war’s end. In the third and final section, I draw on the medical concept of *iatrogenesis* – which designates an adverse condition resulting from the actions of a physician – using this to reveal a paradox that lies at the heart of the medical-military technological approach. Taking my cue from philosopher Ivan Illich, I conclude that increased investment in technologically embodied modalities of warfare is yielding ever-diminished levels of autonomy for everybody involved, and that this will likely lead to more and not less violence in the future.

Making a war body

The body as subject and object in warfare has received much needed and excellent attention from a variety of scholars concerned with bodies in war. Centrally, Elaine Scarry’s (1985) work has been eminently insightful and influential in understanding the “the body in pain” and its role in warfare. Kevin McSorley’s (2012) edited volume on war and the body, Lauren Wilcox’s (2015) recent analysis of ‘bodies of violence’ and Christine Sylvester’s (2010) engagement with the experiential aspects of bodies of war have each made insightful and original contributions to the study of war, traditionally dominated by discussions of rationality and strategy. Specifically burgeoning feminist literature has a great deal to offer in breaking the category ‘war’ open and interrogate some of the logics implicitly perpetuated in the practice of war. When we speak of embodiment in war, of human bodies, we must consider a profusion of bodies and how they are affected in their formation, instrumentality, position and actions in war. This includes fleshy on-the-ground soldiers that, although enhanced and fortified, still work with their bodies as instruments of war. We encounter the drone operators, whose meat-bodies are mediated and extended through screens and steel prosthetics in the administration of warfare. Our concern should also be with the embodied corporeality of targets of war, the injury or destruction of which, as Scarry (1985, 63) points out, serves as the very object and outcome of war. To better understand the embodied experience of war, we ought to look at how bodies in war are used and produced, how narratives about bodies are employed, how bodies are constituted as killable through scopic regimes of technologized warfare or mediated for wider access through the “aesthetic regime of somatic war”, as Kevin McSorley (2012b) puts it. Or, indeed, how they are produced as new, deformed bodies in the aftermath of a war, or as traumatised, dismembered populations. Each dimension of corporeality in war offers a fragment, toward a more comprehensive tapestry of embodied war. The technologically mediated soldier-body in

contemporary warfare constitutes one of these fragments and it is to this that I turn my attention in this section.

Enhanced, fortified, invincible

“Man is the first weapon in battle for it is he who brings reality to it”, French military theorist Ardant du Picq wrote in 1860 (quoted in Grossman 2009, 198). If we take his claim seriously, we must begin with a basic assertion: the technologically unmediated soldier has never existed. In his analysis of enhanced soldiers, Josef Pugliese (2015, 29) points out, “[t]he body of the soldier must be seen as always already mediated by an inextricable relation between corporeality and technology”. What constitutes the soldier, or warrior is produced through both, technology as objects (tools, implements and instruments) and technology as practice or organising principle (education, training, formation). In other words, the soldier war body is produced through its relation and integration with the weapon object. Here it becomes increasingly difficult to discern where the human ends and technology begins (if the two are already always one and the same). It is with this in mind that I examine the seemingly opposed figures of the suicide bomber and drone operator as techno-corporeal assemblages in war. I begin with the Western war-body becoming thing.

The production of extremely resilient soldiers has a long standing history of involving technics and technologies that work toward enhancing and fortifying the human body and mind in a multitude of ways to extend and enhance capacities in war. Such technological augmentations begin with straightforward tools – the crossbow, the machine gun, the rocket launcher, etc. – and extend into the production of the soldier-subject through various modes of scientific-technological inscriptions, shaping docile bodies toward ‘machine-being’ (Foucault 1991, 135). Today, as humans and machines are evermore closely entwined, the production of the ‘Super Soldier’, where human tissue and technologically circuitry fuse for maximum performance, is well underway. DARPA currently runs several projects, which aim to enhance, augment or supplement soldiers’ physical, cognitive, sensory and metabolic capacities to render individuals stronger, more durable, more resistant and attentive in warfare (Galliot and Lotz 2015, 2). From neurological, cognitive and biomedical augmentation, to body armour and smart exoskeletons to fortify soldiers on the ground, high-tech militaries work to make their soldiers and personnel increasingly entwined with technologies in progressively intrusive ways for greater resilience, better performance and, importantly, fewer deaths. This technological fortification serves several goals. At a most basic level, technological enhancements aim at reducing the vulnerability of a soldier’s fragile physical body. In a military operation where every soldier’s death is a near-prohibitive political cost, vulnerability – an implicit risk in warfare – presents a problem. Making soldier’s “kill-proof” (Singer, quoted in Lin, Mehlman, and Abney 2013, 6) is seen to be one of the solutions to this problem.

While the pursuit of ‘invincibility’ in war serves as a core rationale for enhancing and fortifying soldiers in various ways, there is a corollary to the technological enhancement of military personnel – to bring them up to capacity with what technology already does much better. The diverse military human enhancements technologies aiming to improve soldiers’ energy levels, endurance, alertness and metabolic capacities are one aspect in which soldiers’ performance is intended to be

attuned to a higher (artificial) level. Inserting the military body into an automated network of sensors, screens and firepower is another. In other words, technological enhancements aim at tuning the human body up to function like technology, or, at a minimum, to adhere to the logic of technological performance. In order for the body to function in adherence with machine logic and technological power, human limitations must be mitigated, whether that is limitations to visual capacities, sensory abilities, endurance or simply the soft fleshy condition of the mortal body. In this way, the soldier is progressively conditioned toward becoming an operative system, as part of a technological weapons complex. The technological hardware system, however, is the benchmark and authority for optimal performance.

The drone operator, fits into such a cyborg schema of an enhanced human-technology assemblage for zero-deaths and superior capabilities. And at work here too, is a hierarchical placing of technological functional capacities as superior to the soldier, or operator. Here the drone operator is embedded in an “interface environment [...] composed of non-human objects, as well as human practices” (Ash 2015, 13), that represents a digitalised version of specific action worlds in war. The human body here is no longer target for augmentation and physical perfection, rather it serves as a component for the hardware of the machine, which otherwise replaces the body. Less fortified soldier, more ‘liveware’, the drone operators’ “eyes and operational skills [are] privileged in this assemblage” (Williams 2011, 387). They serve to guide the instrument to its intended target (together with technological guidance system) and determine the moment of when the lethal charge is released towards a target.

This insertion into a setting in which sensory capacities are directed to become part of a technological system constitutes part of a wider digital conditioning. This conditioning is prominent in all contexts where interfaces and screens dominate the sensory landscape. Such digital conditioning produces a multi-tasking brain that has diminished capacities to sustain drift or navigate flows, producing technologically conditioned subjects that “compulsively anticipate the next decision point” (Rushkoff, quoted in Ash 2016, 6). To be clear, this is not a condition specific to the sentient component of the drone system. Conditioning of this sort works upon any video game player or app user to a certain extent. However, this conditioning, taking place in a environment in which sensory stimuli are limited to affect the eyes primarily, and decontextualize or perhaps marginalise other senses – smell, sound and other bodily sensation, it is a limited, reduced version of the human that is of functional use to the technology and is conditioned accordingly in the process of becoming war-body. The immersive and enhanced sensory work is itself done by the machine body. It is here thus no longer the drone’s hardware and software that must fit within the human interface, but vice versa. Embedded in the machine logic, the relevant human functions become cognitive prosthesis to the technology. Like the super-soldier body, the drone operator body is, however, contextually disjointed. The body that was machine for the duration of a shift, becomes non-military body once they leave the military zone and return to the civilian space nearby. The truncating of a more comprehensive sensory awareness is temporary. A spectre of real violence, real effects of war and real consequences remains, despite the radical mediation of the human as weapons component.

For some, it is this disconnect between the sensory ‘real’ of the body and the ‘functional’ real of the technological war body that the source of the greatest stress

resides. The negative effects remote controlled warfare has on some of the operators has been explored and documented extensively in recent years (Pugliese 2016, 5). They range from elevated stress levels to alcohol abuse to PTSD at rates akin to those of combat pilots, suggesting that the human-technology assemblage is not the seamless war body that it was perhaps hoped it could be in the pursuit of zero-death warfare. Conditioned and shaped by the digital interface, some drone pilots struggle considerably with the incongruity of the sanitized or professionalized technological interface, the military-civil setting and the sheer brutality of the act of killing human bodies elsewhere. With new forms of trauma and stress emerging for the drone-war-body, “the medicine of war has had to adjust accordingly” (Anderson 2015, n.p.). To address this problem, a Human Performance Team (HPT) operates at Creech Air Force base. The HPT at Creech is a relatively recent addition. It comprises an interdisciplinary team of psychologists, physiologists, chaplains and assistants whose jobs it is to look after the physical and emotional stability of the ‘liveware’ in the drone assemblage and ensure smooth performance (as the name suggests) of the entire human technology system. This includes adjusting the hardware – seats, lighting, positions of controls – to ensure a most seamless integration of the human body into the machine. However, the degree to which the mental stress is addressed appears to be limited. In 2014 the HPT managed to prevent 13 suicides (Everstine 2015, n.p.). To mitigate the negative impact of the sensory disconnect, more technology to (con)fuse the drone hardware with the digital and human software is called to aid. Medical researchers on this problem have suggested to integrate a “Siri-like user interface to quell the psychological effects of fatigue and burnout [t]he interface would function as a kind of virtual co-pilot, anthropomorphizing the drone in a way that would allow crews to deflect the gravity and blame of a mission” (Anderson 2015, n.p.).

Where the drone operator is becoming-weapon in a highly technologized military setting, the suicide bomber assemblage follows a material logic that, rather than diverging antithetically from high-tech systems of western militaries, matches assemblages of fusing cognitive systems with hardware systems for better precision and impact.

Suicide bomber as weapons assemblage

The suicide bomber is also a weapons assemblage. This may at first seem like an ahistorical way of framing the practice of suicide bombing, and to be sure there are important historico-political factors that one could bring into frame. For example, some have argued that the contemporary practice of suicide bombing emerges as a guerrilla tactic to deal with asymmetries in military power and technology, essentially turning suicide into “an extension of war” (Ahmed 2013, 89). In this sense, the practice can be seen as a direct response to technologies of Western warfare and oppression. Akbar Ahmed demonstrates this clearly in his analysis of Waziristani tribesmen, who adopted suicide bombing in the face of drone operations after 9/11. More broadly, the historical conditions under which the suicide bomber has become an emblematic actor in contemporary warfare are deeply infused with a wider colonial history of scientific-technological domination. The point remains, however, that the practice of suicide bombing today functions within a broader technologised ecology of violence, and for this reason it is worth considering it a technological system in its

own right. In straightforward terms, the suicide bomber is someone who has joined into a relationship with an explosive device (Grove 2016, 5) – either directly (suicide vests and belts) or via insertion into further technologies (vehicles). The most widely used definition for ‘suicide bombing’ offers a first and clear indication that here too, a machine-human assemblage is at work: “A suicide bombing is most often defined as an attack where the death of the bomber is the means by which the attack is accomplished ” (Horowitz 2015, 74). The instrumental nature of the demise of the perpetrator, for the purpose of killing is what is at stake here. The instrument – the suicide bomb – is thus part human and part weapon.

On a technical level, the soma-technical assemblage for the suicide bomber draws on a logic not too dissimilar to that of the drone assemblage. What is at work here is a system of intelligence, paired with the technological capacity to deliver lethal power to its intended target. As such, the mechanisation of the human to assemble a suicide bomber offers first and foremost a “technical solution to a practical problem” (Lewis 2007, 224). Jeffrey Lewis takes the suicide bomber as precisely this: a precision guided bomb delivery system, the development and rise of which corresponds, to some extent, to the drive toward greater control and precision in the US military. For Lewis, the suicide bomber as a weapons system has technological capacities which are precisely those qualities of weapons systems the US military has long sought to refine: intelligence and precision. In other words, the human capacities – or ‘liveware’, as Lewis calls it – in the suicide bomber assemblage is essentially the guidance system, “equipped with sophisticated abilities to recognize targets and determine the best moment to detonate”, needed to effectively deliver a charge to its intended target. In this “do-it-yourself cyborg” assemblage, the body becomes “the expendable delivery mechanism” (Thrift 2007, 279).

The suicide bomber is thus instrumentally conditioned to function as a mechanical element in the assemblage. Rather than constituting a simple and rudimentary weapons system, suicide bombers are resourceful systems that respond to the specific vulnerabilities implicit in a technologically sophisticated enemy, namely the political cost of any loss of physical life amongst troops. Furthermore, the suicide bomber assemblage adheres to notions of ubiquity and stealth as advantageous features of weapons systems. Eluding one clear specific profile, the materialisation of the suicide bomber is as an every-day person who is able to blend into crowded surrounding with relative ease. Posing as an unsuspected citizen, he or she becomes undetectable and in their potentiality, omnipresent. The un-detectability and stealth-masking ability of the suicide bomber, who is at once everyone and no one, render this technology ubiquitous and uncanny (Pugliese 2008, 55) – not unlike the drone and its ubiquitous presence in certain geographies of war.

The two crucial logics reflected here are precision guidance to reach an intended target, and un-detectability. This is what makes each so uncanny to the other in contemporary warfare. Both represent a weapons system, which has become “a condition of possibility in almost all of contemporary life” (Grove 2016, 5). Far from being antithetical, the emergence of the suicide bomber as a weapon mimics the US weapons in the ‘rapid response’ arsenal, of which the drone is representative. In other words, the ubiquity of the lethal drone is mimicked and matched by the suicide bomber. However, the relationship between human and prosthesis here is inverted, whereby the human attributes enhance the lethal attributes of the technology in question. Inverse to the fortified super-soldier, the destructive nature of the

technology is the prime component to the assemblage. Physical embodiment and vulnerability is crucially instrumentalised here, rather than masked, or indeed denied. The deliberate instrumental conditioning of the human in this assemblage runs deep in order to produce the docile body required for the weapon. For Lewis, the conditioning in the suicide bomber works akin to ‘programming’ through social, cultural and economic pressures, applied in a systematic manner. This includes the embedding of information networks and mediated screens – videotapes – as either educational material, or to create a binding and irrevocable commitment to becoming an instrument of killing (Lewis 2007, 236).

Unlike the case with super soldier or lethal drone assemblage, the suicide bomber is under no illusion, or fiction, which posits invulnerability through technology. Instead, the human body here is radically enhanced for maximum destruction and maximum impact. Discontinuation of the physical body is implied in becoming machine. In this sense, as Nigel Thrift (2007, 279) notes, “subject becomes object, so to speak, and the self is left behind in the final compulsion of the moment”. In this, we see perhaps a more total acceptance toward becoming-weapon (ideas of embodied existence in afterlife notwithstanding) as part of a social and cultural dimension than is presently the case in the relationship of technology with human capacities in the fortified soldier or drone operator, as the tensions highlighted above indicate.

Both the suicide bomber and the drone operator are mediated through their respective technological appendages and consequently conditioned toward becoming-thing – weapon-thing. Both are also woven into a social and cultural apparatus that enables technological practice as such. In this article, I engage with the Western perspective and narratives on the two figures produced in the war on terrorism. This is not meant to prioritise such a perspective – a thorough engagement with the social and cultural apparatus that produces suicide bombers is undoubtedly an important part of the picture. However, such an approach exceeds the scope of my analysis and I focus here on a critique of the discourses relevant to the production of the drone figure. The analogous and symbiotic constitution of the suicide terror weapon and the drone weapon stands in contrast to Western narratives of ‘good’ and ‘evil’, which underwrite contemporary counter-terrorism efforts. Let us be under no illusion about the actuality of horror the impact of either weapon system produces. Despite the sanitised images a drone operator might see after a strike – amounting sometimes to nothing more than a seeming pulverisation of the target, the reality on the ground is as grim as a suicide bombing. Accounts of the aftermath of drone strikes describe an equally horrific scene of body parts strewn around, burning flesh and the stench of charring hair and skin (see for example Pugliese 2016, 16; Forensic Architecture Project n.y.). The narrative of the bloodless elimination of suspects, however, serves as a persistent prop to perpetuate the anaesthetic outcome.

Where the technologically progressive capabilities of Western militaries posits violence as a necessary and therefore a *just* incursion into a foreign body politic, the suicide bomber is shown to be barbaric, crude and thus inherently *unjust*. It is precisely in this dichotomy that perhaps the greatest misunderstanding of contemporary weapons technologies resides. As Baudrillard (2002, 13) notes, “We believe naively that the progress of Good, its advances in all fields (the sciences, technology, democracy, human rights), corresponds to a defeat of Evil”, when instead, the two constitute part of the same movement, progress together and are constitutive

of the same logics. The technological fortification of the Western military is simultaneously its very weakness. Its drive toward invulnerability through distancing and technological shells, toward zero military deaths, renders it, paradoxically, most vulnerable. Where technological fortification serves as a conduit to uphold ideas of technologically ‘clean’ warfare and military fantasies of invulnerability, its counterpart is the realisation on the soldier’s part just how fallible and vulnerable the sentient components of the war machine are (MacLeish 2012, n.p.). Similarly, it betrays to the outside observer, the degree to which such a technologically fortified society is vulnerable (Baudrillard 2002). It is this paradoxical relationship, which produces a tension in the Western rationale of warfare, which is resolved through narratives that posit the suicide bomber as an abhorrent fanatic, and the drone as a clearheaded assemblage of medical professionalism in the war on terror.

Making sense of war-bodies

Despite a corresponding logic as weapons systems, wherein the human functions as an element of the technological system, there is an antithetical positioning of the two figures and their representation in contemporary narratives. Although a wide range of scholarship is dedicated to the strategic aspects of suicide bombing,³ what seems most perilous to the wider public, policy makers and researchers alike is the question: ‘how do “normal” people become suicide bombers’ (de la Corte Ibáñez 2014, n.p.). Rarely is it: ‘how do “normal” people become MQ-9 Reaper pilots?’ Similarly, news reports of suicide bombings tend to emphasise the horror, terror and brutality of the act, specifically with reference to civilian deaths. A brief survey of recent headlines indicates that a common way to lead on a suicide attack story is by emphasising how many *people* died and were wounded in an attack. In contrast, lethal drone strikes reported by the media predominantly focus on the *militants* and alleged *terrorist group members* that fell victim to the strike, and only in exceptional cases include civilian casualties in their headlines.

The suicide bomber, as prototypical terrorist for our time, features in narratives of the war on terror as a manifestation of horror, as a disease or cancer that must be eliminated surgically, for which the drone is at hand to serve as a distanced and neutral tool to dispense with this job. The more interesting question is thus, as Talal Asad puts it, not “‘Why do individuals become suicide bombers’, but ‘Why does suicide bombing generate horror?’” (Asad 2008, 127) and, extending this to a co-productive dimension, “what response does suicide horror generate?”. The response to the horrific figure of the suicide bomber as radical uncertainty is its logical opposite: radical technological mediation as a seemingly contrasting means of establishing ‘good’ and ‘evil’ in clear and professional terms. I have written elsewhere on the performative function of this particular medical narrative in facilitating targeted killing with drones as a practice (Schwarz 2016). In the following, I expand on these Western narratives for each figure further and elaborate how this serves as sense-making framework for continued violence in the war on terrorism.

³ See for example Dipak Gupta and Kusum Mundra 2005; Paul Gill 2007; Assaf Moghadam 2008; Riaz Hassan 2010; Benjamin Acosta 2016, among others.

Pathologising the figure of the suicide bomber

While the image of the irrational, crazy suicide bomber has been somewhat debunked in academic scholarship over the past decade⁴, there is a remainder of incomprehensibility attached to the suicide bomber that persists in contemporary discourses and military institutions. Self-destructive violence is at once an unintelligible reality and a persistent spectre haunting the cultural logic of US forces.⁵ In a cultural logic within which life and survival are the primary legitimate values, acts of self-and-other directed violence are not only politically challenging but also uncanny. A narrative to create some distance and enable sense-making is required. Positing the suicide bomber as the fanatical, monstrous and abnormal ‘other’ to Western military efforts produces this distance. It is a powerful, performative semiotic architecture that facilitates the logic of continued violence in the war on terrorism. Crucial for this sense-making framework is the *figure* of the suicide bomber as the prototypical representative of Middle Eastern terror, which has been “etched into the political imaginary [...] over the course of the last two decades” (Bargu 2013, 804). Very often, particularly in Western narratives, the image conjured up in the figure of the suicide bomber is underwritten by an “Orientalist impulse” (Ibid.) in which the suicide bomber is not merely framed in racialised, but moreover *pathologising* terms. The figure of the suicide bomber is not only problematically stereotyped and dehumanised, but also rendered a mortal pathogen to “tabulate, index and record” (Said 1991, 86). This clinical aspect feeds directly into the escalatory character of technologised warfare.

The dimensions of the racialised production of the suicide bomber have been discussed in a number of key articles. In his work on ‘Biotypologies of terrorism’, for example, Josef Pugliese (2008) explores the racialised stereotypes through which the suicide bomber is produced in official documentations intended for US law enforcement personnel, and other institutional audiences that are tasked with identifying terrorist threats. Such documents rely heavily on producing biotypologies and typically “mark the figure of the suicide bomber as singularly Muslim” (51). Underwriting this assessment is, as Pugliese notes, an entrenched Orientalism in which the West is represented as “freedom-loving” and Arabs as “evil, totalitarian and terroristic” (Said 1991, 27). A racial profile is thus already coded into identifications of irrational and fanatic evil, in stark contrast to its Other, the calm, rational and functional Western subject (52). The ‘Deputy Chief of Staff for Intelligence (DCSINT) Handbook 1.03’ on *Suicide Bombing in the COE* is illustrative. In attempting to find proto-typologies for suicide bombers, the manual’s authors identify four categories: the religious fanatic, the national fanatic, the avenger and the exploited. The label fanatic speaks for itself. The avenger is “hopeless, vengeful” and has a “tendency to see their life as worthless”, and the exploited is marked as

⁴ See for example Talal Asad 2007; Robert Anthony Pape 2006; Nicholas Michelsen 2013; 2015; Melissa Finn 2012, among others.

⁵ The number of suicides among active duty military personnel in the US more than doubled between 2001 and 2012. In 2015, 273 active duty member committed suicide. In 2013, more US troops died from suicide than combat in Afghanistan. The problem is most pertinent among active duty and veteran army personnel (Pilkington 2013). There are reports that suggest that suicidal ideation among drone pilots is disproportionately high (Asconas 2013).

“dependent, anxious, difficulty-withstanding pressure, recognition seeking” (DCSINT 2005, III, 4-6). It is this Orientalist juxtaposition, Pugliese (2008) suggests, that shifts the possibility of addressing Western state-terrorism into spaces of obscurity and intangibility. Looking at the language with which the war on terrorism is cast, I suggest – not in contrast to Pugliese’s insights, but in extension of them – that what takes place here is contemporary a ‘medicalisation’ of the subject matter, which facilitates a technological–professional response. The ‘out of control’ fanaticism of the Muslim terrorist is posited as akin to the malignant proliferation of not-to-be-reasoned-with cancer cells. In other words, the iconic status that Orientalism bestows on the suicide bomber contains an uncanny and hauntingly dangerous dimension which provokes an additional rendering of the figure of the suicide bomber as *pathologically malign* that can be met only with appropriate scientific-technological force, usually of lethal nature.

As a figure, the suicide bomber wields magnificent power by being at once infinitely mobile and precise, yet stealthily masked or invisible. From this “doubleness” springs the horror of indefensible deviance (Pugliese 2008, 50). Attempts to prototype characteristics of suicide bombers in documents like the DCSINT HB 1.03 notwithstanding, the ability to disguise the suicide weapons system as a mere civilian body capable of blending into mundane and benign environments renders the figure of the suicide bomber potentially ubiquitous – everywhere and nowhere at once. As terrorism expert Bruce Hoffman notes in a 2005 interview: “With the exception of weapons of mass destruction, there is no other type of attack that is more effective than suicide terrorism, [...] the perception is, that it’s impossible to guard against” (Eggen and Wilson 2005, n.p.). For Pugliese (2008, 55), this very condition of ubiquity and unknowability of the suicide bomber is what propels Western law-enforcement organisations and militaries into a “cultural panic, inscribed by unbounded paranoia and hallucinogenic psychosis”. More so, I argue, it prompts a sense-making framework that allows for the radical uncertainty to be tackled with a medical-military framework that permits perpetual and escalating scientific-technological incursions on a large scale.

This radical unknowability of the prototypical terrorist echoes the unknowability of Western civilisations’ most formidable nemesis – cancer. And indeed, in popular and official discourses, the two are frequently linked, as in Obama’s *Address to the Nation* in December 2016, where he referred to the threat of terrorism as a “cancer that has no immediate cure”. Such rhetoric is also popular with the current US administration. Donald Trump has made use of the trope during his presidential campaign, declaring that the “cancer of terrorism needs to be stopped before it ‘festers and festers and only gets worse’” (Belvedere 2015, n.p.), and former National Security Adviser to the Trump administration, Michael Flynn, is known to liken all of Islam to a “malignant cancer” that has “metastasized” and must be stopped at all cost (Rosenberg and Haberman 2016). Further examples of such rhetoric in current discourse are too numerous to include here, but it is worthwhile highlighting a relatively recent article in the *Boston Globe*, which describes in clear terms how strategies of targeted killing (a common term in oncology) for cancerous cells are analogous to combatting terror. The article notes that a similar precision strategy for targeting cancer is relevant for combatting terrorists: “Using finegrained analysis of big data, governments could develop algorithms to identify clear markers that distinguish terrorists from the general population”, the author writes (Westphal 2016, n.p.). This of course is the

approach the US has already taken in its war against terrorism. Strategies of constructing bio-typologies and creating profiles upon which to take out individual targets have been a common practice since 2002. It is only within a sense-making framework of portraying the suicide bomber as a pathology that such seemingly indiscriminate practices as ‘signature strikes’ are deemed legitimate. Identifying and targeting a specific pathological signature, based on patterns is a common medical approach in oncology.⁶ The logic of identifying ‘signatures’ through pattern analysis in medicine, and ‘signatures’ through pattern-of-life analysis in fighting terrorism align here. This is not accidental. Rather, they reveal a long entwinement of the co-constitutive logic with which medical and military processes develop and are justified.

The war against terrorism then shapes up along the logic of the war against cancer. With technologically sophisticated tools and a dispassionate, distanced scientific approach to identifying the exact typologies, profiles and signatures of the pathology, the medical (military) professional does what is necessary to prevent the cancer from spreading. Rendering the figure of the suicide bomber in pathological terms, as an irredeemable and dangerously prolific element, allows for a more radically violent response. This has troubling echoes of what Robert Jay Lifton (2000) refers to as “medicalized killing” in Nazi Germany: “the imagery of killing in the name of healing”. In his seminal study on Nazi doctors, Lifton effectively highlights how easily biomedical ideas and a proposed necessity of killing can become entwined and how thin the boundary between healing and killing may become.

As Alison Howell (2014) effectively demonstrates, war and medicine are far more than incidental allies. Since the nineteenth century, medical and military industries have shared an imbricated history, which is underwritten by the same techno-scientific logos of managing individuals and population: “both aim at the population, both are strategic, both claim to produce security” (Howell 2014, 975). Shared terminology such as ‘triage’, ‘targeted killing’, ‘surgical precision’, or ‘signatures’ is one indicator of the deep technological entwinement of the military and the medical. Shared practices and interest in approach is another. Howell here considers the development of enhanced soldiers and new approaches to intelligence gathering through the use of genetics as representative of the ever-deeper logical and technological entwinement of the two sectors. And indeed, contemporary counter-terrorism practices draw on a range of technologies that meld military and medical applications. This includes the whole range of preventive technologies, from eye scans among Iraqi populations, such as the Biometric Enrolment and Screening Device (BESD), to the Future Attribute Screening Technology (FAST) Project initiated by the Department of Homeland Security (DHS). The former project employs portable biometric technologies which capture “fingerprints, iris patterns, and facial images”, which are compiled on an internal watch-list and cross-referenced whenever a new individual is encountered (de la Corte Ibáñez 2013, n.p.; Pugliese 2008, 59), so as to identify friendly or neutral individuals, “while denying the enemy anonymity” (Breedon 2013, n.p.). The biometric population scanning programme was created as a direct response to a suicide attacker that had breached a US security facility in Mosul in 2004. The FAST project – currently in a Beta testing phase – aims

⁶ See for example Ross et al. (2000), whose breakthrough identifies systemic variations in gene expression patterns in human cancer cell lines, or Calin and Croce (2006), who identification of MicroRNA signatures in human cancers which allows for the profiling of tumors.

to overcome current limitations regarding the unknowability of intentions by technologically ascertaining ‘mal-intent’. Eye movements, gaze, pheromone levels, respiration and heart rate are all captured by the system and fed into an algorithm that, in real-time, assesses whether a person is up to no good.

Such a radical intrusion into the corporeal private sphere of ordinary citizens through technology is paralleled in practice only in the medical industry. Technologised warfare then always already has some form of medical rationale immanent in its logic. Whether that is the preventive protection of the soldier through technological fortification, whether telescopic distancing or the technological incursion into target populations to ascertain intent, technology perpetuates the denial of vulnerability and radical uncertainty as a core characteristic in warfare. The drone *figure*, with its associated practices of pattern detection, bio-typological profiling and signature-based targeted killing fits well within this architecture of medicalised warfare.

The drone figure as medical professional

The digital vantage point of the drone, paired with the power to violently intervene into landscapes of suspicion is often rendered in terms of the “God-Trick” (Haraway 1988) or a God’s eye view (Wilcox 2014; see Derek Gregory 2015), producing the illusion of a quasi-divine objectivity in the administration of death. The image of the drone figure “smiting people from the heavens” (Gusterson 2016, 78) is a useful and powerful way of sense-making for operators and critics alike. The divine position enables a frame of justification for the riskless incursion of a drone strike – one that implies that the act is righteous, if not inherently just. While the rendering of divinity is in many ways an appropriate lens to make sense of a seemingly disembodied assemblage of authority, I suggest that such an illusion of objectivity is *operationalised* through the very real façade of professionalism with which the technologically produced operator normalises the practice of killing that which, for the therapeutic benefit of the body politic, must be killed. The historical entwinement of medical and military contexts is crucial here and is, in the first instance, betrayed by the convergence of terminology. I have already highlighted terminology such as signatures, targeted killing and surgical precision strikes in relation to actual interventions on targets. But the wider context for drone strike missions reflect a semiotic setting that appears to mirror that of professional medical interventions. Consider, for example, the terminology Martin L. Cook (2015) uses in his insightful engagement with the tactical, operational and strategic utility of drone warfare. In his discussion of the tactical benefits he considers:

There is more room for error in signature strikes, since patterns of activity are subject to interpretation. ... On the other hand, the long-loiter capability of the RPV makes it the best possible platform for careful observation of the target for long enough a period to make a good faith determination regarding threatening behavior and preparation. (52)

Zooming out further on the operational view Cook explains: ‘[h]ere I analyse only the military utility of an ongoing program of drone strikes in advancing the operational goals in the theater’ (53). Here, the dispassionate, clinical explanation of possible error, of a technological capacity to eliminate specific targeted objects, is embedded

within the familiar terminology of “operations” and “theatres” – both frequently used in military as well as medical contexts. Documents like the *Joint Targeting Cycle and Collateral Damage Estimation Methodology* (2009) – a presentation put together by the US Joint Chiefs of Staff are further illustrative in indicating the professional prudence and technical approach to drone strikes. In a series of flow charts, graphs and tables it offers an acronym-rich delineation of the technical aspects of targeting, risk assessment and damage assessment. It concludes: “Never before has a nation taken such measures and resources to reduce the likelihood of civilian casualties. Our processes and procedures are rigorous” (20). In other words, the drone figure is constituted by the technological platform capable of careful observation and precision incursion, informed by practices and processes that hold up to the most rigorous professional standards. The strike is presented and justified as a necessary, clinical procedure based on the highest scientific-technological standards available.

Very much posited on opposite ends of the spectrum of rationality and irrationality, the drone figure is rendered intelligible as a necessary means in the fight against the uncanny danger the suicide attack figure constitutes. But where both weapons systems produce similar scenes of horror and terror on the ground, the aftermath of a drone strike – the broken and dismembered bodies it produces, the disrupted civil spaces it creates through scattered shell fragments, clothes, shoes and other debris, the panicked responses it generates by publics wanting to help – scenes such as these are very rarely represented and disseminated in mainstream media reports on drone strikes. They remain, in Pugliese’s (2016) terms “effaced and dematerialised”, confined to a “geopolitical space outside the frame of representation” (16). The narrative of the scientific and professional elimination of malign elements, paired with an invisibility of those affected by a drone strike, serves as a persistent prop to perpetuate the anaesthetisation of the outcome of a drone strike and promote an image of the cool, dispassionate and earnest figure of the drone. The façade of prudence and professionalism works to situate the violent act within a professional duty. Moreover, the persistent framing by the Obama administration of the use of drones as “ethical, legal and wise” (Brennan 2012; Carney 2013) has facilitated a professional narrative with which the most violent of drone strikes can now be rendered justified. To be clear here: the act of targeted killing as a strategy of counter-terrorism described above is not exclusive to the drone as a weapons instrument. However, the drone assemblage and its specific superior technological capacities for data collection, monitoring, contribution to pattern recognition and ostensible precision in targeting presents the ideal scientific-technological tool to address terrorism as an incurable medical condition. This, paired with a medical metaphor, makes for a powerful narrative.

Considered against a background where Islamist militancy is suggested to resemble “a global health threat or epidemic” (Stares and Yacoubian 2007, 427), that should best be tackled by aligning counter-terrorism with an epidemiological approach, or a method echoing the “harsh, if localised” reprisal that cancer demands (Katz 2015), it is easy to see how the drone figure can be framed to constitute an efficient and effective tool for the monitoring, diagnosing and excising of a pernicious element. The drone thus becomes an instrumental figure of healing, rather than destruction, in the medical-technological problem solving of conflicts. Within a context of medical-technological approach to counter-terrorism, the blended military-civilian space from which drone operations are conducted becomes intelligible. As a physician or medical

professional would, the drone operator enters the site of operations not by being embedded within geographic sites of war, but rather from a civilian space, able to leave at the end of a day's work. Here too, Pugliese's (2016, 18) work is instructive as he notes the blurring lines of civilian and military spaces prevalent in drone warfare: "for the US drone operators, the 'forward edge of the battle area' now becomes coextensive with their own home, as the practices of military killing are exercised from sites that are enmeshed within their suburban lives". Like in medicine, here too technology makes a difference in permitting certain strategies and approaches – often more intrusive ones. Technologically mediated medical killing justifies and normalises the military-civilian continuum of killing from domestic zones. In contrast, the civilian spaces of populations targeted in response to the possible threat the suicide bomber-as-pathology constitutes become subject to ubiquitous surveillance, monitoring and lethal militarisation (Pugliese 2016, 18). In other words they are rendered patients, liable to drone surveillance, and biometric monitoring, for their own ostensible benefit. The technological capacity here functions as an authoritative screen with which this military-medical benefit can be more easily applied. And with ever-more radical uncertainty the figure of the suicide bomber bestows, the solution appears to be ever-more radically intrusive technologies with which to monitor, regulate and control affected populations.

The efficacy of the technological fix, however, is far from certain. The technologised military gaze, like the scientific medical gaze "tells us as much about the performance of healing, suffering and dying, as chemical analysis tells us about the aesthetic value of pottery" (Illich 1976, 103). In short, the scientific-technological approach to either, medicine or military problem solving may well lose sight entirely of social and cultural contexts that may contribute more effectively in solving the problem of conflict. It is at this point that I briefly draw on the concept of *iatrogenesis* - by way of conclusion and to perhaps open an avenue for further critical inquiry into the current trajectory to solve socio-political problems with purely techno-logical procedures.

Iatrogenic effects

Conceptual choices, the lenses we use for sense-making and narrations, affect both hermeneutics and practice. They are, as Jabri (2016, 210) highlights, "constitutively related to the contingent matrices that structure relationships and ideas situated in time and space locations". As such they can be limiting, if taken as universal modes of looking at contexts across time and space. But they can also enable us to identify resonances of logics that exist across certain contexts. I have highlighted above the conceptual proximity between military and medical problem solving and the entwined practices this produces. It is the evident continued analogy to medical terminologies and practices, such as identifying an enemy as a figure with a pathological profile, for example, which enable perspectives of violence as necessary medical interventions. The use of medical metaphors in military context are rarely every politically and ethically unproblematic (McFalls 2007). However, taking the relation of therapeutic domination seriously enables us to theorise conditions that perhaps remain under-examined in approaches that favours therapeutic technological fortification, in medical practice, as in military practice: "specific counterproductivity" (Illich 1976) In the medical sector, this condition is known as *iatrogenesis*.

Derived from the Greek words *iatros* (physician) and *genesis* (origin), the term denotes a condition “resulting from the activity of a health care provider or institution; said of any adverse condition in a patient from treatment by a physician, nurse or allied health professional” (Illich 1976, n.p.). Predominantly a term used by healthcare professionals, the seminal work of Ivan Illich takes up the task of investigating the wider social and cultural counter-productive impact medicine as an institution has on a body politic. The health industry, with its implicit claim to morality, continues to produce paradoxical adverse effects for the population it works on. These specific counter-productive effects are manifested not only as clinical iatrogenic effects, but also register as social and cultural iatrogenesis. Where clinical iatrogenesis denotes the physical damage done to individuals by faulty, toxic or ineffective treatment (Smith 2003, 928), social iatrogenic effects reach further through the socio-political body and denote, for Illich all those adverse socio-economic effects on a population which have been facilitated by the institutionalisation of medicine. In other words, when a growing number of physical issues become subject to the regimes of medical intervention, when “healing outside the patient role [is] labelled a form of deviance”, society suffers from an adverse reaction to the increased scientific-technological authority of the medical-industrial complex (Illich 1976, 20). Crucial here is a turn from the caring health professional to the medical industry as a facilitator of risk management. A third form of iatrogenesis manifests for Illich in its cultural variant, which results from the medicalization of life and suffering. Cultural iatrogenesis presents when a society loses the capacity to address and work through pain and suffering outside of “[p]rofessionally organised medicine [which] has come to function as a domineering moral enterprise that advertises industrial expansion as a war against all suffering” (Illich 1976, 51). In all three forms of iatrogenesis, Illich detects a diminishment of autonomy of the targeted population in shaping their physical (and mental) lives according to traditional cultural and social standards.

Illich’s social critique in *Medical Nemesis* must be read against the specific context of its time, when the institutionalisation of the medical sector, among other sectors, began to take a more expansive form and the number of malpractice suits experienced a sharp increase in the United States. At the time, it was received as a polemic text which incited many a critique. However, core elements of Illich’s critique have gained perhaps greater salience over the years and for our current condition. His clear understanding of the implicit moral positing of good and evil mapped onto health and technology; his assessment of the medical industry as a securitisation institution for risk, and, most importantly his clear understanding of the instrumental role of technical means for medical problem solving in producing iatrogenic effects. In his assessment, it is the “increasing manpower, prestige and money invested in technical means, seeking technical effects” that yield decreasing results. It is indeed the “increased investment in medical technologies” that yields the counter-productive outcomes, producing ever-growing populations in peril and with diminished autonomy to address their conditions (Illich 1975, 78). It is the targeted populations at the receiving end of the medical interventions that are at stake here. It is with this in mind that I would like to return to the topic at hand. Recall the statistics on the growing occurrence of suicide bombings, which align with a stepping up of drone warfare. Rather than mitigating the problem with greater technological capacities, it would seem that drone warfare as a counter-terrorism strategy has specific counter-productive effects. Again, this is not to suggest that drone warfare causes greater

levels of suicide bombing, but it does not, at the very least, appear to ameliorate the problem. This much is clear after more than a decade of US drone strikes.

A similar logic of good and evil, necessity of intervention and technological authority appears to be at work in current semiotic architectures of sense-making in drone warfare. Despite the material-technical logos that underwrites both modalities of warfare – suicide bombing and drone strikes – one is clearly posited as unmistakably and irredeemably a mode of inflicting terror on a population while the other is posited as a technologically superior modality of excising evil in the pursuit of healing, thereby escaping frames of reference that might clearly mark the practice of drone warfare as producing terror itself. If we take Illich's critique seriously, a good and thorough look at the technological military approach is required in assessing the possible counter-productive effects drone warfare and its correlates might have on the population and on the possibility of ending conflict.

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