Decentering Anthropos: Insights from New Materialism

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Armaments are central to the workings of states and the development of International Relations (IR) as a field of study. Indeed, military technologies often underpin the very causes of conflict, warfare, and international power distribution. Yet, previously deemed adequate theories fail to delve deeply enough into the nuanced nature of armaments or how they factor into the calculus of international affairs (Zoppo, 2022, p. 580). Traditional IR theory has viewed weapons primarily as "tools which augment or diminish . . . power" deployed in strategic windows or instances of competition between states, but which cannot exert influence over the essential functioning of state or person (Meiches, 2017, p. 11). These neorealist paradigms dominate accounts of the role of armaments in IR, reducing weapons to simple tools of war. Recent scholarship termed 'New Materialism' has sought to place greater emphasis on how material factors, such as armaments and weapons, shape international processes (Lundborg & Vaughan-Williams, 2015, p. 3). The binding mantra of this 'Materialist Turn' in IR is a "common attempt to thematize the concept of materiality" beyond the boundaries of a "positivist social science," broadening realist assumptions of "an independent material realm" that can be understood in isolation from the normative influences that objects exert (Lundborg & Vaughan-Williams, 2015, pp. 4-6). I will engage with this literature to show the complex nature of weaponry in international processes and how their fundamental characteristics often exert more control over humans than humans do over them.

This paper seeks to utilize new materialist perspectives to frame the agency of weapons in IR, thereby contributing to a more dynamic lens of analysis that appreciates the "unintended and unanticipated changes" armaments produce (Meiches, 2017, p. 12). First, this paper will outline the technological determinism and anthropocentrism fallacies that often obscure a more precise understanding of military technology in IR. Then, a socio-technological perspective on the autonomy of bioweapons will be developed to illustrate how the agency of weapons often exceeds the limitations that actors place on them. Afterwards, a new materialist approach to the instrumentality of lethality will illuminate how the potential for violence latent within weaponry often characterizes conflict and influences humans. Finally, the consequences of autonomous technology extending the sensorial reach of weaponry far beyond the traditional strictures of the human confine will be examined, and how the decentralization of weaponry, using drones as an example, may lead to a future potentially characterized by what Bousquet (2008) terms 'chaoplexic warfare.'

Contextualization: Why New Materialism Matters

One must possess a basic understanding of why technological determinism and anthropocentrism both fail to account for the more complex intricacies of the human-state-weapon dynamic to appreciate the importance of critical perspectives like new materialism. All too often, scholars assert that technology is the "central determinant" of fundamental global processes and that key military technological innovations are the primary impetus driving transformations in the practice of warfare (Bousquet, 2017, p. 2). Even an army strategist as prolific as J.F.C. Fuller boldly stated, "tools, or weapons, if only the right ones can be discovered, form 99 per cent of victory" (1998, p. 31). Similarly, the historian Michael Roberts (1967) asserted that the invention of compact firearms reshaped sixteenth-century warfare tactics, catalyzing the rise of what is understood to be the modern nation-state and further adding to the view that technology itself can act as an independent driver of change. Such traditionalist perspectives of armaments greatly overstate biases of both time and place and systematically ignore the malleable nature of technology as it relates to humans. Take Geoffrey Parker, an academic who pioneered technological determinism, who states that the "military revolution" and subsequent innovations in firearms were crucial in shaping the rise of the

sovereign state (Parker, 1990, p. 43). The very workings of contemporary IR cannot, and should not, be attributed solely to one deterministic path of "military-institutional development" (Sharman, 2019, p. 3).

Critical perspectives like new materialism emphasize the implausibility of a simplistic technological determinism, rejecting the notion of technology and armaments as "a primary explanans" or 'black box' whose very nature is inexplicable (Bousquet, 2017, p. 2). New materialist literature converges around the idea that "political analysis broadly conceived" has not taken sufficient "account of materiality" (Lundborg & Vaughan-Williams, 2015, p. 12). Yet these critical perspectives also reject what lies on the other end of the spectrum of understanding, those being anthropocentric views that imply some complete subordination of weapons to human beings. The essential character of weaponry is abstract and undetermined, and new materialism seeks to disrupt erroneous claims that presuppose the use of firearms as subject to "human intentionality" (Meiches, 2017, p. 10). Instead, armaments and military technologies are complex assemblages that actively interact with a much broader milieu than is typically assumed. Social or collective "machinic assemblages" often determine the very ontology of weaponry and, thus, define their comprehension and usage; the technical capacity of armaments and the broader social landscape that they operate in must be interpreted in unison as mutually interacting and inextricable from one another (Deleuze, Gilles, and Guattari, 2003, p. 397).

A central question that new materialism seeks to understand in IR is "a question of agency," of to "what extent do we have control over the tools we use" (Dafoe, 2015, p. 1048). Such questions are crucial to rethink and advance the idea of armaments in IR, as they challenge our understanding of the relationship between armaments and man. The academic study of armaments, cast in this light, becomes less concerned with theorizing blanket cause-and-effect statements about the consequences of weapons and more about reconsidering the very nature of objects and matter in IR and how materiality influences individuals and states alike. For the political implications of armaments cannot be reduced to something "intrinsically inert" without any "function or implication," instead should be conceptualized as an "active, affective, and . . . significant set of forces" whose complexity is deeply interwoven into contemporary life (Lundborg & Vaughan-Williams, 2017, p. 12). In this context, new materialism rejects the notion of technologies as "dei ex machina" capable of reshaping society, conflict, and warfare independently (Bousquet, 2017, p. 8). Rather, this paper will explore new materialist approaches to military technologies to reveal the autonomy of armaments and the vast agentic potentialities of weaponry and to illuminate some of the ramifications for the future that this budding critical approach to IR shows.

The Agentic Capacity of Military Technology

Perhaps one of the most prevalent constitutive assumptions in IR is the idea that states have complete control over their weapons and military technology or that the 'balance of power' between two asymmetric states, from a realist view, is automatically tipped in favour of whoever possesses superior technological capabilities (Horowitz, 2010). However, the agency of weaponry often exceeds the limitations that states try to place on them; they exist as agents of violence whose capabilities usually cannot be contained and controlled by the state or the individuals therein. Additionally, and as the section will later explain, the agency of armaments can be framed within the context of the contemporary 'war machine'.

Deleuze and Guattari (1987) characterize a war machine as a force that is radically exterior to the apparatus of the state; the state, therefore, reflects an interiority that exists parallel to the "pure form of exteriority" that is the war machine (p. 354). This conceptualization of the war machine is invaluable when applied to pathogens as it highlights their agentic capacity as objects separate from the state. By revealing this complexity, it decenters the anthropocentric narrative of bioweapons, and weapons in general, as mere tools to be used by individuals for strategic gain.

Occasionally, the latent chaos within certain military technologies transcends the capacity of man or nation to grapple with it. Take biological weapons, for instance, which only began to be viewed as a threat to international security at the "dawn of the twenty-first century" (Koblentz, 2010, p. 99). This heightened global awareness of the threat posed by biological weapons began with the gradual replacement of interstate war with intrastate war as the "main source" of international "armed conflict," as intrastate conflict facilitated disease outbreaks (malaria, tuberculosis, and other

respiratory diseases) that crippled public health infrastructure and attacked the "volumes of displaced persons" generated by war (Koblentz, 2010, p. 103). The second event that cast more attention to the threat of biological weapons was the emergence of terrorist groups in the mid-1990s who sought to acquire "biological . . . and chemical weapons" to inflict mass casualties, such as the Japanese cult Aum Shinrikyo that "used sarin nerve gas" in a terrorist attack on the Tokyo subway system (Koblentz, 2010, p. 104).

Although state caution regarding weaponized biotechnologies appears evident at first, there exists a threat/use discrepancy where the perceived danger that bioweapons pose leads to more significant, disproportionate attempts from the state to try and control a 'war machine' whose very nature resists restraint and governance. Historical deaths from biological weapons have overwhelmingly been accidents stemming from a loss of control during research or testing, not from intentional attacks by a rogue state or terrorist group, emphasizing the discrepancy between the threat and utilization of bioweapons (du Plessis, 2017, p. 46).

Bacillus anthracis, for example, has incredible weaponry potential, as when left untreated, it kills "up to 90% of humans who inhale it", and the spores could hypothetically be sprayed over a large city, infecting and killing millions (du Plessis, 2017, p. 45). Despite the vast potential for destruction inherent to Bacillus anthracis, only two instances of deaths from "weaponized anthrax exist". The first happened in 1976 when spores accidentally contaminated a Soviet bioweapons research facility in Sverdlovsk and killed 68 people, while the second incident occurred in September of 2001 when letters containing spores were mailed to members of US congress and 23 people were subsequently infected (du Plessis, 2017, p. 45). The victims of both cases were government employees residing in their home country, revealing that the success rate of weaponized anthrax as a potent biotechnology used to enhance state security is negative. Using weaponized diseases strategically in war is also a rare occurrence, with "weaponized plague, tularemia, smallpox, botulism," and virtually any infectious agent that could be used in a bioweapons program all possessing the same low success-use rate as anthrax (du Plessis, 2017, p. 46).

States continue to spend enormous resources on "developing and stockpiling countermeasures" against potential bioterrorist attacks, believing that some rogue non-state actor (NSA) or terrorist group might succeed where others have fallen short (du Plessis, 2017, p. 46). The U.S. President's advisors on science and technology firmly announced in 2016 that they must prepare a biodefense strategy that is both anticipatory in nature and vigilant against known threats (PCAST, 2016). The threat/use discrepancy that characterizes bioweapons does not stem from a lack of danger, however, but rather from the inability of states and individuals to control the technologies they develop.

Further insight into the nature of bioweapons can be found by analyzing why the 'war machine' exists distinctly separate from the state, ultimately resisting the attempts of both man and nation to subvert it. The exteriority of the microbial war machine can be illustrated by "distinguishing between smooth and striated space;" war machines exist in smooth spaces like the desert, the ocean, or air that are resistant to the "coding and striation efforts of the state." In contrast, the state strictly controls and delineates striated space (du Plessis, 2017, p. 52). Thus the government apparatus attempts to striate microbes and strictly classify them within the interiority of the state: "clean-dirty, sterile-non-sterile, safe-unsafe," and tries, through biopolitical territories like laboratories and research facilities, to control and harness the weaponry potential intrinsic to biological armaments (Deleuze & Guattari, 1987, p. 386). Yet infectious agents actively resist these efforts, as "anthrax, chickenpox, influenza, measles, smallpox, and tuberculosis" are exterior to the apparatus of the state but not to human bodies, rendering any attempt to delineate between microbial life in smooth and striated space impossible (du Plessis, 2017, p. 53; Prescott et al., 2015). Microbes cannot be "trained to answer to discipline" or used as spies for surveillance; they do not listen to humans and cannot be reasoned with, for they exist only in their own "unnatural participations of contagion and mutation" (du Plessis, 2017, p. 57). Bioweapons and microbes resisting attempts by the state apparatus to control and striate them illustrate the agentic capacity of weapons and refute the anthropocentric view of technology as subordinate to an individual will and limited to a predetermined utility.

Even within a potentially striated environment like a laboratory, one slippage or "false step . . . could release a nightmare" (Alibek, 1999, p. 63). Thus, the state cannot exhibit complete control over microbial bioweaponry as microbes cannot be controlled enough to "create a fail-safe defensive barrier" or be controlled sufficiently to create "a

systematized weapon" (du Plessis, 2017, p. 53). There can never be complete control over microbes regarding the wars they enter, which, taken more broadly, posits several necessary implications about the very character of weaponry. Understanding the unpredictable nature of biotechnologies or armaments that occupy smooth versus striated spaces disrupts the narrative that total control of weapons can be achieved through human advancement, illustrating that oftentimes control must be relinquished for the greater good of public health and security.

It is clear that the nature of weaponry is amorphous and ever-changing, and their creation cannot be strictly defined by man or state. This perspective also rejects the tenets of simplistic technological determinism because, instead of treating bioweapons as an isolated determinant of social arrangements, it acknowledges the "wider sociotechnical systems" (smooth/striated) within which technologies operate (Bousquet, 2017, p. 8). Here a broader agency of armaments is revealed by not attributing to bioweapons a causative role premised upon an impoverished understanding of the broader systems within which they operate.

The Agentic and Violent Potentiality of Weaponry

Alongside resisting the striation and control attempts of both the state apparatus and individuals, weapons exert formative influence as a consequence of their existence. One of the primary impediments "of anthropocentrism" is how frequently research revolves around "our projection on the world" rather than the various influences of the material world on us (Grove, 2014, p. 10). In a Spinozan sense, weapons possess their own body or 'conatus' capable of engaging in complex relationships with humans (Spinoza, 1992, p. 108). Weapons themselves are agentic entities able to build influential relationships with humans; the weapon and the person exist in a "mutually affective, mutually constitutive" state where neither element is entirely dominant (Danil, 2018, p. 331).

The instrumentality of the infantry rifle is a revealing example of how new materialism illustrates the capacity of weaponry to influence individuals and even precipitate conflict. For Shah (2017), the introduction and adoption of the infantry rifle are reflective of a self-perpetuating cycle where the weapon becomes an apparatus that "enables and embodies an accepted . . . way of killing" and conducting violence in warfare (p. 82). Barad (2003) explains the relationship between objects and the people that use them as emerging from an ontological and ethical reality that makes them intelligible. Through this lens, the technological evolution of the infantry rifle over time has resulted in it becoming a "prosaic and perfunctory dimension" of contemporary warfare, a "categorical object" that establishes against whom lethal violence can be applied and also when and with what objects (Shah, 2017, p. 83). Thus, the infantry rifle becomes understood not as a mere weapon subordinate to the controlling and cerebral individual but rather as a manifestation of the violence of warfare and a tool through which it is continued. The rifle is war personified and what captures and refines the entropic chaos of violence, ultimately instilling it into a weapon of conflict. The same can be applied to any archetypal weapon of war throughout history; sword, bow, and musket all became the vehicle through which war was actualized and perpetuated.

The testing and refinement of the infantry rifle was a long and arduous process that took hundreds of years. A staggering number of adjustments were made to the length and diameter of the bore, the number or style of rifled grooves, bullet sizing and shape, and ballistic power; these technical adjustments had strategic significance, and as the specifications of the rifle became standardized, so too did their technical capacity to exert violent force (Shah, 2017, p. 90). Normalizing the rifle as a lethal instrument of the war characterized the very nature of 'acceptable violence' in relation to the object through which it is conducted, expanding our understanding of the rifle as a form of destructive power that standardized a very distinctive manner of violence. Thus, these technical specifications coalesced into a signature weapon of "socially acceptable" force in which "lethality was forged and functioned" as an inextricable component of conflict (Shah, 2017, p. 91). Understood differently, the implications of armaments in killing make "explicit the potential for innovations to serve destructive ends" (Rappert, 2005, p. 211).

Many scholars use technological efficiency to characterize which technologies can become weaponry (Keegan 1993; Van Creveld 1991). However, by ascribing lethality from efficiency alone, these theoretical lenses fail to acknowledge the more nuanced aspects of the agentic capabilities latent within weaponry. Nor should weapons be interpreted as central "determinants of power" that dictate "the outbreak and outcome of war" (Shah, 2017, p. 88). Such technologically deterministic arguments lend too much power to the technology itself and ignore the whole "spectrum

of forces" at play (Shah, 2017, p. 88). Interpreted in the context of new materialism, infantry rifles are their own actors and agents whose potential for lethality becomes legitimate through their standardization and adoption, operating within a dynamic construction of violence where both humans and weapons are implicated and capable of emanating subversive influences.

Thus understood, weapons both transform the landscape of conflict and enable the "social formation of war" as a result of their "potentialities," and any action taken therein cannot be attributed solely to "human consciousness and rational decision-making," but instead to a much wider group of agents capable of affecting change (Bousquet, 2017, p. 156; Meiches, 2017, p. 20). Weapons within a new materialist perspective, therefore, exist dually as the necessary precursor to war and the mechanism through which war is waged, for war becomes the arena within which the potential of weapons is actualized. These drive the "self-augmenting tendencies of war"; armaments "incite . . . demand for more weapons" and intensify the potential for conflict, but also create human responses like fear, disgust, hatred, and hostility that "restrict the tendencies of war" (Meiches, 2017, p. 20). Viewing weapons as agentic entities whose lethality both encourages and inhibits violence illustrates the nuance of their existence as objects in relation to people. It also undermines traditional literature that fails to recognize armaments' sometimes invisible role in the "rendering of war" (Meiches, 2017, p. 20).

If the agency of weapons like the infantry rifle can become manifestations of war and violence, then their ability to influence people must also be called into question. Danil (2018), in response to the aforementioned work by Benjamin Meiches, conceptualizes weapons as becoming a point of "effective identification" through which individual identities become shaped and changed (p. 336). This process can be seen in the transformation of a civilian into a soldier; during the training period and beyond, the potential soldier begins to perceive themselves "through the prism of the weapons" they possess and use, as well as through "the prism of the war machine more broadly" (Danil, 2018, p. 336). This inculcative process is illustrated through the 'Rifleman's Creed', part of the US Marine Corps philosophy. The Creed, which states that "[m]y rifle, without me, is useless. Without my rifle, I am useless," establishes a "mutually constitutive relationship" between the rifle and the soldier (Danil, 2018, p. 337). Here, the gun acts as a crucial, inseparable point of identification by reflecting its own agentic capacity for violence back at the individual, fusing man and weapon and serving as the vehicle through which the violence of warfare is introduced or transferred into the soldier.

Applying new materialist approaches to the study of armaments illustrates how technologically advanced and standardized weapons like the infantry rifle become physical instruments of war and manifestations of violence that are heavily integrated into a vast socio-technical milieu (Bousquet, 2017). By destabilizing the traditional theoretical assumptions of humans controlling armaments towards their own presupposed ends, these accounts of weaponry illustrate that they can take on a form of 'non-life' of their own that is inextricable from the concept of warfare and that actively plays a role in influencing individuals and states alike.

Extending the Capillaries of the Contemporary War Machine

Perhaps one of the most distinguishing hallmarks of warfare in the twenty-first century is the automation, and subsequent decentralization, of armaments in conflict. The epoch of the internet and cyber-dominated warfare has effectively extended the global reach of weapons, allowing the 'contemporary war machine' to broaden its sensorial reach far beyond the confines of the human being.

This intimate relationship between man and machine can be understood by analyzing the linkages between the eye, weaponry, and war. Take Bousquet's (2017) account of the "specific rearticulations of vision" that are enacted through "successive orders of targeting" in contemporary warfare (p. 63). As he explains, the increasingly complex technological advancements associated with aiming, tracking, ranging, and guiding weaponry have resulted in the convergence and fusion of "perception" with "weaponry" (Bousquet, 2017, p. 63). Bousquet describes the "act of taking aim" as not only a "way of technically aligning ocular perception along an imaginary axis," but also as a visual line of sight aligned with future potential lethal force delivered via bullet, missile, torpedo, or mortar (Der Derian, 1998, p. 3). Framed through the "iron sights, crosshairs, and other reticles" of the modern age, the soldier's line of sight, therefore, becomes a "lethal perpendicular ray" through which violence is actualized; such views decenter

anthropocentric notions of "sheer physical prowess" controlling the outcome of weaponry, as the delivery of lethal force hinges on the workings of the nervous system and a single appendage (the trigger finger) (Bousquet, 2017, p. 64).

Patterson (2009) understands these targeting apparatuses as "specifically dedicated to augmenting, informing, and enframing the soldier's process of seeing," directly shaping the "actions of which he is capable" through a process where a "new paradigm of visuality" is introduced, expanding human capabilities (p. 42). Seeing and perceiving, therefore, becomes the process where, enhanced by technology, soldiers find, identify, and kill targets. This "sustained fixing of the target" generates data streams that lead to the exertion of lethality, for "to see is to model is to comprehend is to destroy" (Bousquet, 2017, p. 69; Patterson, 2009, p. 42). Weapons therefore become objects whose agency drives humans towards conflict by materializing violence. Perhaps more importantly, they become the very appendage that bridges the gap between human perception and executing the act of violence itself.

As weaponized targeting grows more complex, so does the association of perception with destruction. Infrared frequencies have allowed the detection of radiant heat sources at night; radar technology utilizes radio waves to track movement over vast distances in all conditions; and sound ranging and sonar have allowed individuals to extend their sensory capacities beyond the limitations of the electromagnetic spectrum (Bousquet, 2017, p. 74). Each of these "regimentations of perception" extends the "reach and precision" of deadly weaponry, interweaving the separate agencies of human and machine together (Bousquet, 2017, p. 78). As these precision techniques become more technologically advanced, so too do they grow more distant from the traditional capabilities of the lone individual, birthing what may be termed the "self-sufficient gaze" of the machine "looking for itself and no longer for some spectator," as exemplified by the self-guided missile (Der Derian, 1998, p. 9). Militarized perception has increasingly become a fundamental part of the modern-era conflict, resulting in the individual being "reinterpreted along computational lines" (Bousquet, 2017, p. 69). The "epistemological violence" latent in both surveillance and targeting means that the increasing automation of weapon systems and the prominent aim of "overcoming human error" on the battlefield may catalyze a widespread decentralization of armaments (Suchman, 2020, p. 177). The more our technological abilities advance, the more decentralized and autonomous our armaments become, potentially culminating in a future characterized by the gradual fading of human autonomy in relation to the weapons we use.

TrackingPoint, a Texas-based firearms company, presents an illustrative example of the fusion and coalescence of 'perception' with 'violence'. In 2013, they introduced a laser-guided "precision-guided firearm" that dramatically increases "first round hit probability" through the video scope, which allows the user 'tag' their target by locking a laser rangefinder onto it (Bousquet, 2017, p. 75). The on-board computer then calculates the ballistics, factoring in bullet drop, wind, weather conditions, distance, and firearm incline, after which the operator only has to align the tag with the video scope for the gun to fire at the most opportune moment (Bousquet, 2017, p. 75). This innovation effectively removes the threshold that experience and training pose for deadly sharpshooting, bringing humanity closer to making sensorial acquisition the sole requisite for operating a weapon. Such armaments propel forward the new paradigm of visuality as human capabilities are enhanced by technological innovation, militarizing perception and distancing violent action from the traditional strictures of human capacity.

Analyzing the relationship between weapons, targeting apparatuses, and humans grants greater clarity as to how the body is incorporated into acts of warfare through the machine, expanding the already ambiguous locality of agency and illustrating the entanglement of the line of sight with lethal force.

Drones, Automated Conflict, and a Future of Chaoplexic Warfare

Until recently, the operation of warfare was limited to the locus of human physicality and psychology. Gone are the days of the warrior seeing the target, identifying it as a threat, and then telling their hands where to direct their weapons of choice; now, these tasks are being "outsourced to machines" (Singer, 2009, p. 78). One clear example that combines both the alignment of targeting apparatuses with destruction and the decentralization of weapons with humans is the effect of the view from drones. Drones provide a "God's-eye-view" of hypervisibility that fuses a birdlike view with the information collected from its sensors; this view is not just an aerial view but "an all-knowing one" that "presumes to see everything" (Kindervater, 2017, p. 31). The production of this cosmic view, this powerful

manner of organization and perception, is inherently violent and interfused with warfare, for "there are few perspectives more culpable in their enlistment into practices of war, violence and security than the aerial one" (Adey et al., 2013, p. 3).

The roots of decentralized drone warfare are also firmly planted "in relations of domination and control" (Kindervater, 2017, p. 32). Weapons, heavily reliant upon targeting technologies, such as drones, end up contributing to a narrative of 'cynegetic war', or a "predatory form of warfare in which unequal access" to technology and armaments enables one side to hunt another asymmetrical power: drones in this respect act as "quintessential instruments of manhunting" (Meiches, 2017, p. 21). Unlike the logic of kamikaze warfare as "my body is a weapon," the drone exists as "my weapon has no body," creating an immense distance between the human operator and the "exposure to death" (Chamayou, 2015, p. 84). Drone autonomy reduces the casualties associated with inflicting violence, divorcing humans from the destructive repercussions of conflict. This automation signals a new "configuration of the human in relation to war and its killing machines" and an increasingly complex and uncertain international understanding of armaments and conflict (Kindervater, 2017, p. 35).

Drones not only enable a predatory mode of violence between the state and the singular target but also hold the potential to precipitate conflict between asymmetrical powers by virtue of their design. Because drones dramatically decrease the "international and domestic political costs" of war, they lower the possible threshold for believable action, making violent threats more believable as states can conduct "military action without military casualties" (Zegart, 2017, p. 20). The 'God's-eye-view' that drones perceive supplies another instance of possible coercion between states, for as wars become less conclusive and last longer, the "constant stare and precision" strike threats offered by drones enable countries to "sustain combat operations" over extended periods of time, imposing disproportionately high costs on the target state with "vanishingly low costs on the coercer" (Zegart, 2017, p. 9).

These understandings of the nature of autonomous weaponry provide an opportunity for potential change and posit important implications for the future of warfare. One prospective and forward-looking theorization is known as chaoplexity, or the convergence of theories of chaos and complexity to describe a future where chaos and decentralization become the "very condition of possibility of order" and "nonlinearity" and "self-organization" are the most key features of the interaction between man and machine (Bousquet, 2008, p. 923). Bousquet envisions a future characterized by "chaoplexic war" where the military embraces the "complexity and uncertain nature of warfare" that accompanies the decentralization of technology (Kindervater, 2017, p. 35). Chaoplexic warfare can be seen as one possible culminating apotheosis of distancing the human from the weapon and of the widespread adoption of technological automation within an increasingly disorganized and anarchic system. Bousquet (2008) posits that decentralized self-organized systems of "quasi-autonomous units" are better equipped to handle an environment of limited predictability and contingency than centralized systems (p. 925).

The Vietnam War constitutes one of the most contemporary illustrations of where the currently normalized method of cybernetic warfare falls short. The conduct of 'technowar' in the context of Vietnam was repeatedly blighted by the attempts of the political and military hierarchy to "micro-manage the conflict" and by an obsession with "statistical evaluation and information gathering" while misplaced faith in the notion of military omnipotence via the so-called "powers of technoscience" led to unnecessary reliance on armed force to solve problems (Bousquet, 2008, p. 925). There is a tendency to see critically advanced, autonomous technology as a panacea that will eliminate the fog of war and result in 'enlightened' combat. Rather, dissociation between human and weapon in a chaoplexic future will help organize synchronicity in face of the very anarchy and unpredictability latent to war.

Although some debates around network-centric warfare seem to be pushing towards a decentralized and dissociated image of the future, an actual chaoplexic future will ultimately hinge more upon "doctrinal and organizational commitments" than on any "particular information technologies" or armaments (Bousquet, 2008, p. 929). Autonomous weaponry widens the divide between the human operator and the act of violence itself, effectively lowering the threshold for violence and divorcing man from the violent consequences and potentialities latent within the armaments they operate.

Conclusion

Viewing armaments and weapons strictly from traditionalist International Relations theories places severe limitations on the discourse surrounding the agency of guns and their interaction and subsequent influence on states and humans. New materialist approaches to armaments stimulate vital discussions on the very nature of weaponry, for to grasp the nature of weaponry is to study arguably one of the most crucial components of warfare, conflict, and violence. These three fundamental tenets have endured alongside humankind throughout the millennia. Indeed, mainstream approaches to armaments within IR have neglected to acknowledge the highly complex agencies that permeate and characterize military technologies. Scholars like Jairus Grove (2014) appreciate the distracting fiction that is the 'discreteness' of objects, for atomizing "sectors, objects, or agents of security" defeats the "systemic character of change, behaviour, and the emergence of both" and advocates the need for theoretical diversity to comprehend the creativity of material objects (p. 367).

This paper sought to explain the nebulous nature of materiality and illustrate how new materialism helps peer beyond the veil of technological determinism and anthropocentrism. This was accomplished by showing how the agency of weapons cannot be controlled or limited by states or actors, how the potential for violence latent within weapons ends up perpetuating warfare and influencing humans, and how targeting and the separation of armaments from the sensorial confines of the human may lead to an autonomous and 'chaoplexic' future. By decentering anthropos within IR and revealing the agency of weapons, perspectives like new materialism hold the key to a truly dynamic understanding of armaments and how they interact with the variability and formative character of the social world. Such approaches are theoretical and challenging in nature but are nonetheless crucial to the evolution of IR as a discipline, for they push the boundaries of what is known, what is accepted, and what still remains to be learned about the world of armaments in International Relations.

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