Chapter 11

Honor in Long-Distance Warfare:

The Impact of New and Emerging Technology on the Warrior's Code

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Every technological innovation, evolution in modes of combat, or rise of a previously unseen group of combatants sparks fresh controversy about the place and continued relevance of ethical traditions in war. As the authors in this volume attest, conflicts arising as the result of or in reaction to threats against entrenched concepts of sovereignty produced several waves of advanced military technology to be applied asymmetrically against unconventional forces. Yet these "new" forms of warfare do not require new ethics. The classical just war principles, which include restrictions on the conduct of war, such as the requirement to respect noncombatant immunity, do not dissolve with the introduction of new tactics. They apply as much to the use of drones[1] as they once did to the targeting of a crossbow or canon. Even when strategies change, the principles remain relevant.[2] As Fisk and Ramos note in chapter 5 this volume, "It is not difficult to see how the just war traditions' concerns for necessity, proportionality, legitimate authority, and last resort—among others—apply to preventive strategies." Nor should traditional just war restrictions be lifted solely because the enemies are non-state actors who violate international law. The original authors of these rules were not unfamiliar with non-state actors or unlawful combatants, though they may have called them barbarians or pirates.

This is not to say, however, that nothing more can be added to our present-day understanding of military ethics. There remains much work to do concerning the best ways to put

the existing ethical principles into practice. Empirical research can be fruitfully applied to the analysis of the effects of current conflicts on combatants. Findings from fields such as psychology and neuroscience can be paired with established ethical frameworks to better enable troops to sustain ethical behavior in the field and minimize psychological trauma.

Many of the drone-related debates focus on the legal, ethical, and strategic implications of drone use.[3] To the extent that the impact of the experience on the drone operators themselves has been studied, the concern has been mainly about the supposed "Playstation effect" (see Vlimer chapter 6) or PTSD levels. This chapter looks at how operating drones impacts the warriors who pilot them, focusing specifically on the psychological effects the chain of command has on drone operators' ability to follow a consistent warrior's code that provides them with the grounds to distinguish what they are asked to do from murder and other ethically irreconcilable actions. While the guiding principles of a robust and coherent warrior's code to guide drone operators can readily be established from the well worn principles of *jus in bello* found in the Western just war tradition, there are human factors that can interfere with a drone operator's ability to remain constant to such a code. Established and emerging empirical research can provide valuable insights into how these human factors operate and how some more pernicious aspects of them might be countered. For example, as will be discussed later, the infamous Milgram experiments shed light on the psychological mechanisms that underlie obedience to authority. Lessons drawn from these experiments can foster greater understanding of the relationship between the context in which drone operators function and their actions and experience. And both psychology and neuroscience can teach us about the dehumanizing effects of distance warfare. There is much to be gained by the marriage of ancient codes with modern discoveries to supplement our understanding of the ethics of war.

I. The Need for a Warrior's Code

War imposes heavy psychological and physical burdens. Soldiers are asked to overcome the most basic lessons of their moral development and kill fellow human beings. While observers have touted the advancement of military technology as a means to lessen bloodshed and save the lives of troops, removing operators from the battlefield and placing them in controlled conditions may deprive them of the psychological support of a warrior's code of honor. This does not imply that the role of, say, a drone warfare operator is inherently dishonorable. Rather, the concern is that unless proper care is taken, these operators may not have the internal narrative necessary to contextualize their place within a meaningful warrior tradition and thus reconcile their actions.

All troops who kill on behalf of their societies need the mental and emotional armor provided by the warrior's code. As explained in *The Code of the Warrior*[4]:

> Warrior cultures throughout history and from diverse regions around the globe have constructed codes of behavior, based on that culture's image of the ideal warrior. These codes have not always been written down or literally codified into a set of explicit rules. […] These codes tend to be quite demanding. They are often closely linked to a culture's religious beliefs and can be connected to elaborate […] rituals and rites of passage. […]The code is not imposed from the outside. The warriors themselves police strict adherence to these standards; with violators being shamed, ostracized, or even killed by their peers. […] The code of the warrior not only defines how he should interact with his own warrior comrades, but also how he should treat other members of his society, his enemies, and the people he conquers. The code restrains the warrior. It sets boundaries on his behavior. It distinguishes honorable acts from shameful acts.[5]

Troops who lack the armor provided by a robust warrior's code are at greater risk of experiencing severe combat trauma and of violating the laws of war. This point is perhaps best

made in Jonathan Shay's contemporary classic, *Achilles in Vietnam: Combat Trauma and the Undoing of Character*. Drawing from decades of interviews and analysis with combat veterans, Shay extolls us to recognize "… the specific nature of catastrophic war experiences that not only cause lifelong disabling psychiatric symptoms but can *ruin* good character."[6] Shay's work and that of many others who study combat-related Post Traumatic Stress Disorder (PTSD) come to the same conclusion – that it is not exposure to violence alone that produces the most severe psychological trauma, but rather what Shay terms the "betrayal of 'what's right.'"[7] Troops who take lives, by any means, need to feel like they are honorable warriors, not murderers or monsters. They need to be able to make sense of their actions in a way that is consistent with the values around which their identities were formed. A U.S. Navy SEAL may have a somewhat different warrior's code than a U.S. submariner, but both will have to be reconcilable with fundamental American values and the U.S. constitution, which they both have sworn to defend.

The stakes are very high. The reasons for troops to act ethically under the pressures of combat must be internal and cannot depend on the nature or behavior of their enemies or the weapons or tactics used by them or against them. Regardless of what form war takes, troops are best served by acting in accordance with a code of behavior that is not determined by contingencies beyond their control. As Daniel Brunstetter observes in chapter 12 of this volume, the "renegotiation of *jus ad bellum* principles [during the Bush administration] was the cause of considerable consternation in just war circles." But Brunstetter also seeks to renegotiate the just war principles with his theory of limited force – the *jus ad vim* project – that he claims could curtail drone abuses. Renegotiations of the rules, however well intended, can put troops at risk, unless they are clearly and explicitly tied back to familiar values the warriors already accept.

It is essential to make some kind of consistent warrior's code accessible to all troops who participate in killing, including drone operators. Upholding timeless standards of martial honor requires an active moral imagination and careful reflection when death can be delivered digitally, but it must be done. A warrior's code exists to protect the very humanity of the troops. It cannot be constructed merely of shifting rules of engagement, redesigned by each wave of leadership. There must be strong threads connecting every rule closely to an emotionally accessible warrior identity that runs deep and addresses the existential agony that can accompany any kind of intentional killing.

II. How Distance Can Degrade the Psychological Comfort of a Code

Drone operators experience the same signs and symptoms of PTSD as traditional combat troops, despite working in a "safe" environment. [89] Perhaps this is a reflection of the unique challenges of their command climate and the psychological complications of technologically mediated warfare. The better we understand their experiences, the more effective we can be in providing them with insights and lessons from other warrior cultures. There is no need to reinvent the wheel. However, some adaptations may be required.

The fundamentals of war have not changed in millennia, or arguably across all of human history. Wars are essentially large, organized groups of people attempting to settle political disputes through the use of force. Whatever new means are devised the same old questions apply. Did a legitimate authority authorize this use of violence? Did they have just cause to do so? Do they have noble intentions? Is violence the last resort – were all less devastating options truly exhausted?

When it comes to the actual deployment of new weapons of war, the two core principles of *jus in bello* (just conduct of war) established by ancient and medieval scholars remain relevant and indispensable: proportionality and discrimination. Proportionality refers to the magnitude of the response to the actual threat. *Jus in bello* requires that the response be only enough to neutralize the threat and not devolve into mere vengeance. Discrimination requires that all possible care be taken to target only those who pose a legitimate threat and to minimize the harm to noncombatants. The hard work of determining how these and other criteria apply to new technology often necessitates identifying the correct analogy and capturing the spirit behind each principle in order to shape it into practical guidance for the use of the new technology such as drones.

Much has been made out of the fact that drone operators are able to pilot their drones from thousands of miles away, incurring no immediate physical risk themselves. Distance warfare is hardly a paradigm-shattering new concept. It is, however, one that has consistently raised ethical concerns. Face-to-face combat is much less problematic to process and evaluate, both from the point of view of external judgment and the perspective of the warriors themselves. The psychology is straightforward, even primal. Put simply, if I have been ordered to kill you and you have been ordered to kill me, and we fight it out face-to-face, it looks and feels *fair*. As Ginger Rogers' character explains to Cary Grant's in "Once Upon a Honeymoon" after she fights with and kills a Nazi, "He said it was him or me… and, I don't know, in my mind, it just dwindled down to him."[10] There is a sense of shared risk and even a flavor of mutual respect: two humans, struggling with each other for survival. Certainly, there is still significant trauma associated with such a struggle. But the feeling of necessity–that even if the overall justification for the war is questioned, few would question that, in that moment, it was kill-or-be-killed–

provides solace to the surviving warrior and helps him or her come to terms with the gut-wrenching reality of having ended another person's life. For scholars such as Michael Walzer and Christian Enemark, the risk of being killed is essential ethically and even to be considered a "warrior." As Enemark argues, the drone pilot's moral status is diminished as he/she is not put at risk and "[mutual] risk is an indispensible characteristic of war."[11] This goes a step too far in denying warrior status to too many, but it has undeniable intuitive appeal.

Distance strips away a key element of that comforting kill-or-be-killed rationale. If I kill my enemy without giving him at least some chance to kill me, I cannot tell myself it was either "him or me." To reconcile myself to having intentionally and directly caused his death and not to feel myself guilty of a form of murder requires more sophisticated reasoning. Murderers kill for personal reasons and with a certain mindset (what the law terms "*mens rea*," or the "guilty mind"). In contrast, troops kill for a cause and behalf of an authority (for example, conventional members of the military are agents of the state). If I kill from a distance but the target of my attack was a threat to others to whom I owe special duties (such as fellow troops or citizens I have sworn to protect), I defend my action as defending a third party and saving lives. Note that the evidentiary and justificatory bar has been raised significantly from the case of face-to-face combat. Distance warriors will naturally ask themselves questions it would rarely occur to close-combat troops to ask. In face-to-face combat, the combatants are usually in no doubt that they killed from grim necessity. But in distance warfare, the case has to be made, and it must be compelling. Why did you have to kill that particular person who was *not* at the time also trying to kill you?

Again, this is an old problem, brought up centuries ago by the use of such cutting-edge military technology and tactics as longbows and hiding in ambush behind a copse of trees. Is the

experience of the drone operator different in a meaningful way from that of a well-concealed sniper, or a military pilot operating in a region where his or her forces enjoy air superiority, or a submariner launching missiles at a land-based target? All distance warriors depend on assurances that the actions they have been ordered to take are proportional and discriminant: that there is good justification for the killing they are asked to do. For example, in recent asymmetric conflicts, one might expect, "Take out these targets, because they are planting IEDs that are shredding our convoys." "Destroy that building, because the men inside it are plotting terrorist attacks on the U.S. and her allies." However, even when these justifications are provided, other concerns remain.

III. The Dehumanizing Effects of Drones

Beyond distance, relative safety, and concealment, another potentially psychologically troubling aspect of advanced technology-enabled distance warfare is the (often radical) asymmetry of it. There still is nothing new under the sun here. Asymmetric warfare is well documented in the West from at least the Roman era. From the standpoint of military strategy, radical asymmetry is a strongly desired goal. The faster you can "shock and awe" your enemies and overwhelm them with superior force, the quicker the conflict can be resolved.

Yet, historically, sharply asymmetric conflicts have seldom been the swift, decisive routs anticipated by the more advantaged side. Some of the reasons for this raise concerns that apply to drone warfare. The apparently "weaker" side in asymmetric conflicts can be unexpectedly tenacious and find ways to prolong the conflict or even triumph over the "stronger" side. Thus what begins with "shock and awe" and seemingly overwhelming force becomes the quagmire of a counter-insurgency campaign. There are several notable exceptions, but generally the response

of those meant to be shocked and awed into submission is intense anger and deeper resolve not to give in to the will of the "stronger" enemy. It also has the potential to foster generations of new enemies.

Some of the remarkably tenacious responses to strikes by a technologically superior force can be explained simply as any group's natural desire to fight to the end in its own defense. But there is also the fact that being on the receiving end of superior weapons technology–especially that which can kill you with great efficiency while simultaneously protecting those launching the attack from you–is a uniquely dehumanizing and, for lack of a better word, insulting experience. The disrespectful attitude of the "stronger" enemy appears to be, "Our conflict is not really worth risking many lives on our side for, but I am perfectly willing and happy to kill you and your people over it." This perceived attitude becomes a perfect rallying point for the opposition.

P.W. Singer highlights this aspect of drone warfare in *Wired for War*. His research concludes that far from making her less-technologically-advanced enemies feel demoralized with fear, America's use of drones has emboldened her opponents:

> [Rami Khouri, director of the Issam Fares Institute of Public Policy and International Affairs at the American University of Beirut] describes how, instead of cowing the populace, these sorts of attacks were reinforcing the position of radical groups like Hezbollah. The use of such technologies was "spurring mass identity politics…. The new combination of Islamist, Arab nationalist and resistance mentality is seen as an antidote to the technology discrepancy." Instead of receiving a message that they were overmatched, "it is enhancing the sprit of defiance." [The response was] that "the enemy is using machines to fight from afar. Your defiance in the face of it shows your heroism, your humanity…. [They] are also cowards because they send out machines to fight us, ….they don't want to fight us like real men, but are afraid to fight. So we just have to kill a few of their soldiers to defeat them."[12]

The effects of dehumanization in war can now be examined with the context of a richer understanding of neuroscience. Anthony I. Jack explains some of the ways dehumanization

occurs in the brain in "Dehumanizing the Enemy: The Intersection of Neuroethics and Military Ethics:"

> [W]e can identify four broad cognitive modes that humans use to think about other people, which are distinct in terms of the extent and type of cognitive effort involved: (1) When we think of people as objects, we barely engage any effortful cognitive processing. We remain indifferent, including to their suffering, and have cognitive resources to spare. (2) When we think about people as biological machines, as a doctor or neuroscientist does, we engage analytic but not empathetic reasoning areas. (3) When we humanize people (i.e. when we think about their experiential point of view), we engage empathetic but not analytic reasoning areas. (4) When we animalistically dehumanize people, or engage in Machiavellian thinking, we engage both networks. In this mode we think about the person as an agent driven by beliefs and desires, but we refuse to recognize the other as a truly feeling being similar to ourselves. We recognize it if the other person is suffering, but we do not feel concern about it - we may even take sadistic pleasure in it.[13]

Technologically enhanced distance warfare breeds dehumanization on both sides of the conflict. In describing a case study based on an incident in Afghanistan involving Australian troops, military ethicist and veteran Dan Zupan noted how the soldiers, dressed in their advanced body armor, appeared to the Afghans: "They do not see soldiers. They see anonymous figures, clad in armor, wearing helmets, and bearing weapons. They see black shields where human eyes should be. In short, they really do not see human beings."[14] Zupan argues persuasively that this dehumanization causes the Afghans to "detest" the Australian troops more than they otherwise would, which aids in the recruitment of Afghans willing to fight against the Australians and other coalition troops.

As philosopher and expert on dehumanization David Livingstone Smith explains in *Less Than Human*:

> We are innately biased against outsiders. This bias is seized upon

> and manipulated by indoctrination and propaganda to motivate men and women to slaughter one another. This is done by inducing men to regard their enemies as subhuman creatures, which overrides their natural, biological inhibitions against killing. So dehumanization has the specific function of unleashing aggression in war.[15]

This dehumanizing effect is amplified in the case of drone warfare, when those being targeted not only cannot see the eyes of their attackers, but also cannot see their attackers at all. The source of the threat is decidedly non-human, a menacing, buzzing object hovering in the sky above them. It is only human to want to shout in response, "Don't send your damn robots! Come and fight me like a man!" or to quote some version of William Faulkner's famous line, "Tell that bastard to come down here and say that to my face."[16] The nature and form of the attack galvanizes an impassioned resistance whose members may feel justified in using any means available to undermine their enemy's advantages and shattering his seemingly smug sense of security.

Two quick points of clarification are needed here. First, while we, like many others, note that the use of tactics such as drone warfare may produce more enemies for countries like the U.S. and inspire some of those enemies to employ terror tactics and attack so-called "soft targets" (e.g. civilians), this is in no way to say that any such attacks are justified. The intentional targeting of civilians is a clear violation of the principle of discrimination that must never be condoned, even by implication, and we certainly do not do so. All such victim blaming is abhorrent. Secondly, we readily acknowledge that people who believe themselves to be unjustly occupied by foreign powers are likely to resist that occupation with great passion, regardless of what weapons or tactics are employed by those foreign powers. Nevertheless, insofar as there is any truth to the idea that a successful counter-insurgency strategy requires

"winning the hearts and minds" of those on the ground, that cannot be achieved through distance warfare.

IV. Drones and discrimination

Returning, then, to the principle of discrimination, a considerable amount of the international uproar over the use of drones has focused on the deaths of noncombatants–or so-called "collateral damage."[17] Collateral damage is always one of the bitterest tragedies in war. It is also hard to reconcile with a warrior's code that depends on maintaining the distinction between just and unjust targeting. It is often difficult for troops to hold onto the belief that they acting for the good and the right when they see the broken bodies of innocents, struck down by their actions.

Is the outrage any greater because of the nature of the weaponry? If so, the reason is quite comprehensible. Drones are recognized to be a weapon of precision. Appeals to the inherent *precision* of the drone *technology* itself, is rampant both by scholars and policy makers–e.g. President Obama has repeatedly referred to "very precise precision strikes."[18] Enemark has noted that "Technology alone cannot be a determinant of legitimacy, but rather what matters is the ethical use of technology by humans."[19] Furthermore, Brunstetter and Braun also address that drones specifically, "are only discriminate to the extent that their human operators choose to employ them discriminately."[20] Here we have a case of can implying ought, rather than the reverse. Because drones are seen as capable of carefully picking out specific individual targets, it is felt to be more egregious if excessive collateral damage occurs. It is construed almost as criminal carelessness. Again, from the perspective of those receiving the attacks, it adds insult to injury. The read on it is, "You (i.e. the U.S.) *could* have targeted only person X, but you *chose* to kill others, as well." To argue from analogy again, imagine a highly skilled military sniper

who fires indiscriminately into a crowd of people, instead of targeting only combatants within that crowd. Because the sniper is *capable* of much greater precision and discrimination, we are inclined to judge him harshly for his failure to do so–for his decision not to exercise that restraint.

In *Drone Warfare*, anti-war activist and Code Pink founder Medea Benjamin details the kinds of checks and balances employed in the targeting of drones that are supposed to prevent mistakes. Unfortunately, as she notes, these layers of control are not enough to guarantee against human error. She describes a particular incident from the conflict in Afghanistan:

> In the early morning hours of February 21, 2010, US Air Force pilots thought they had found the jackpot: a convoy of Taliban militants closing in on a group of American soldiers just a few miles away – a perfect, textbook case of the surveillance and precision power of drones in action. […] While they were sure they had a "sweet target," […] the Americans did not fire. They still had more checks and balances to go through. In addition to the pilot, cameraman, and intelligence officer stationed at Creech Air Force Base, there was also a team of screeners at Eglin Air Force Base in Okaloosa, Florida, tasked with carefully monitoring the Predator's video feeds and sending their observations to those piloting the drone. Meanwhile, an Army captain on the ground in Afghanistan leading US troops near the suspected Taliban had the final word on whether to fire. […] The pilot told the troops on the ground of the screener's observations, saying that they had spotted "a possible rifle and two possible children near the SUV." As if it was a game of telephone, the original message about identifying children had become "possible children." And the "possible rifle" became proof positive that the convoy possessed weapons. Ultimately, the Army captain decided it was time to fire, pointing to a "positive identification" he had made based on "the weapons we've identified and the demographics of the individuals" – demographics, not identities – as well as intercepted phone conversations picked up from somewhere in the region. The consequences were grave.[21]

The convoy turned out to be unarmed civilians, many of whom were killed in the drone strike, including women and children. In the end, discrimination depends on target selection and good

intelligence about potential targets. Both of these may be hampered by overreliance on distance technology.

As Michael Ignatieff argued eloquently back in 2000 in his book, *Virtual War: Kosovo and Beyond*:

> Virtual reality is seductive. […]We see war as a surgical scalpel and not a bloodstained sword. In so doing we mis-describe ourselves as we mis-describe the instruments of death. We need to stay away from such fables of self-righteous invulnerability. Only then can we get our hands dirty. Only then can we do what is right.[22]

In other words, even if new tools of war allow the military to be more precise in their targeting, they may at the same time encourage civilian leaders to jump more readily to the use of deadly force and perhaps even to be more callous about who is targeted. As John Kelsay reminds us in chapter 11 of this volume, leaders should "rightly 'take counsel' as they try to ascertain the matters related to overall proportionality, reasonable hope of success, and aim of peace, as well as to learn whether war may be waged in ways that respect the criteria of discrimination and proportionality." It is all too easy to "send in the drones" (or in future the robots) –not for members of the military, perhaps, who are fully invested and more able to grasp the true costs of such moves–but for political policy-makers who pressure the Pentagon to rely more and more on distance warfare solutions.[23]

V. The Potential to Exercise Moral Judgment

A former colleague at the United States Naval Academy, Cmdr. Bob "Sprout" Proano, used to speak often of one of the best leaders he ever served under as a Navy pilot. When this officer

sent his pilots off to do any mission, he briefed them on their targets and then always added the caveat, “Unless it doesn’t look right.” That simple phrase, “unless it doesn’t look right,” gave his pilots both the freedom and the responsibility to make their own in-the-moment decisions to reject any target that, for example, appeared (in contradiction to the intelligence) to be a civilian target or to include too many innocent civilians as potential collateral damage. If the proverbial school bus full of children started to roll across a bridge they had been told to destroy, the pilots could exercise judgment and hold their fire. The pilots could also react in real time to any fresh intelligence gathered and conveyed by troops or other operators on the ground. This kind of allowance for changing conditions on the ground or mistaken or outdated intelligence enhances the ethical conduct of war.

This level of control and opportunity for moral judgment may not be available to drone operators. Benjamin shares another heartbreaking example of unintended civilian casualties, in which a strike could not be called back in time, reported in the first-person account of the drone operator experience; *Predator*, by pilot Matt Martin:

> [He] had carefully planned to blow up a group of supposed rebels who were standing around a truck. Suddenly, two kids on a bicycle appeared on the screen. There was an older boy, about ten, and a younger one balanced on the handlebars. They were laughing, talking – and riding alongside the truck. Panicking, Martin wanted to stop the missile, but it was too late. The sensor operator had already released it. “Mesmerized by approaching calamity, we could only stare in abject horror as the silent missile bore down upon them out of the sky. When the screens cleared, I saw the bicycle blown twenty feet away. One of the tires was still spinning. The bodies of the two little boys lay bent and broken among the bodies of the insurgents.”[24]

Note that the vivid nature of the imagery used by the drone operators only caused greater psychological trauma for the operator who was forced to witness the awful tragedy unfold. As investigative journalist Mark Bowden observes,

> A B-1 pilot wouldn't learn details about the effects of his or her weapons until a post mission briefing. But flying a drone, the pilot sees the carnage close up, in real time the blood and severed body parts, the arrival of emergency responders, the anguish of friends and family. Often the pilot has been watching the people he or she kills for a long time before pulling the trigger. Drone pilots become familiar with their victims. They see them in the ordinary rhythms of their lives with their wives and friends, with their children. War by remote control turns out to be intimate and disturbing. Pilots are sometimes shaken.[25]

Many drone operators complete their missions in an environment more akin to corporate America than a traditional battlefield, with their actions closely monitored in real time by their superiors. Traditional "boots on the ground" troops are also, of course, supervised in combat and operate within a strict hierarchy. However, a certain amount of chaos often obscures the exact details of their tactical moves and weapon use. While high tech gear and weapons may include GPS trackers, microphones, and recording devices, troops must still rely on their training and individual judgment to assess situations with high physical and moral risks. Individual warriors frequently make the final call to fire their weapons or not. Even if their actions will ultimately be reviewed and possibly second-guessed or even condemned, it will almost always be after the fact, once the "dust settles." The so-called "fog of war" offers some limited protection from the prying eyes of the military hierarchy–warriors can sometimes ignore or creatively reinterpret orders they consider unjust, illegal, or contrary to their intuition. There can be a mild degree of moral privacy drone operators may not experience.

Admiral Jerry Miller told a "Code of the Warrior" class of midshipmen at the US Naval Academy about how he was ordered to do a bombing run near the end of the Korean war over an

area of land that he and his squadron had only the day before covered in leaflets declaring that there would be no more combat operations in that area. Admiral Miller (who was not yet an Admiral then) tried everything he could to get the orders changed before the mission, but to no avail. However, he held firm to the belief that it would be unethical to bomb that area. Therefore, he defied orders–in secret–and led his men to deliver their deadly payloads in an unpopulated area adjacent to the one they had previously papered with leaflets, to ensure the safety of those on the ground. Afterwards, Admiral Miller was "called on the carpet" for what he did (although, as he pointed out to the midshipmen, he still eventually made flag rank), but the timing and conditions were such that he succeeded in preventing bombs from being dropped on the proposed targets.[26] It is doubtful that a drone operator could ever pull off such a stunt in the name of acting ethically.

Like traditional warriors, drone operators must navigate a rigid institutional hierarchy. But every step in their mission, from their decision-making processes to their actual maneuvering, is potentially visible in real time. Each keystroke and click of a mouse controls important military functions: the flight of an unmanned aircraft or the launch of a missile. It is possible for each individual action to be scrutinized, measured, and evaluated as it happens. This environment of comprehensive supervision and collective action places pressure on operators to follow orders unquestioningly while simultaneously distancing them from the actual act of killing (while not shielding them from the impact of that act, as they must still view the bloody aftermath with high-pixel clarity).

When faced with an order that is illegal, unjust, or in conflict with one's best judgment, traditional warriors are sometimes (although, it should be emphasized, not always) able to physically distance themselves from their commanders to consider their orders and act on the

conclusion of their analysis. In contrast, drone operators experience a work climate akin to two infamous experiments from psychology: the Milgram experiments that explored the negative aspects of obedience to authority and the Asch experiments that explored individual conformity to group beliefs. These classical psychological experiments can be used to spark a discussion on what accountability mechanisms and defenses against abuse of authority ought to be in place to preserve some moral autonomy for drone pilots.

In 1961, Stanley Milgram set out to explore the role of authority and obedience in unethical behavior. Three months earlier, Nazi war criminal Adolf Eichmann's trial had reignited the worldwide debate about the ethical responsibilities of soldiers and civilians under a genocidal regime. Milgram intended to explore the power of authority under controlled conditions. He devised a protocol for testing the extent of an individual's obedience to a malevolent authority.

In the original study, the participant believed himself to be joining an experiment on learning and memory. He met a fellow participant (actually an actor) and was "randomly selected" to be the "teacher," while the actor was made the "learner." The experimenter connected the fake learner to electrical wires in front of the teacher, then he was taken to an adjacent room and told to administer a learning and memory task to the learner. If the learner made a mistake, the teacher was ordered to deliver electric shocks of increasing voltages. The machine was labeled with voltages and intensity of shocks, from "slight shock" to the frightening "XXX."[27] In the first variation of the experiment, Milgram believed that, "the verbal and voltage designations on the control panel would create sufficient pressure to curtail the subject."[28] But he was wrong. Despite Milgram's expectation that the vast majority of participants would refuse to comply well before the final voltage, only fourteen participants of forty stopped the experiment early, and none of them stopped before delivering 300 volts.

After receiving the astonishing results of the initial experiment, Milgram and his team conducted a set of twenty variations to the original experiment in order to identify which factors influenced the number of participants who resisted authority. Though factors such as the gender of the participant (Variation 20) and the prestige of the university (Variation 23) did not affect the number of participants who resisted authority, others, such as the physical proximity of the learner (Variations 3 and 5), had a significant effect.[29]

Though many variations reduced the percentage of fully obedient participants, only one variation led to all participants resisting. In this variation, number 15, there are two experimenters in charge. One tells the subject he may stop, while the other urges him to continue. When a conflicting authority is present, none of the participants continue delivering shocks. This and other variations (including one where the conflicting authority left the room after objecting to the experiment) appear to indicate that the best antidote to a malevolent authority is an equally overbearing benevolent authority. Participants were not empowered to resist authority so much as they were allowed to choose which authority to obey. Participants also resisted authority well when a faux "peer" (in the "Peer Rebels" variation) refused steadfastly to obey the authority figure.

Likewise, Solomon Asch's early experiments on conformity demonstrated that people (or at least, in this case, white male American college students) are willing to go along with a group's decision even when it is manifestly wrong. In Asch's1956 experiment, the participant sat in a room with seven actors pretending to be other participants. The group viewed images of three lines of varying lengths labeled A, B, and C. They were then shown a fourth line and asked to identify which of the other lines was the same length. They said their answers aloud and in order, with the true participant always last. In the first two trials, the actors gave the correct

answer. In the third trial, every actor identified the wrong line as matching the fourth. The participant faced a dilemma: agree with the group and state the obviously wrong answer, or be the only person to deviate. In preliminary tests of the task, participants' error rate was less than 1%. However, on trials where the participant faced a dilemma to conform, their error rate was 33%. Overall, 75% of participants gave at least one incorrect answer during the experiment.

Like Milgram, Asch performed variations to his original paradigm to determine what factors influenced the conformity of his participants. His most relevant finding involved a simple deviation from the paradigm: in these variations, one other "participant" gave a different answer from the rest of the group for some or all trials. Even if this individual gave the other wrong answer, the true participant was far less likely to conform to the group. Thus, as with Milgram's findings, participants were better able to defy one person if they could side with another.

Though there is some evidence that norms have changed since these experiments, they are nevertheless excellent starting points to examine the experience of a drone operator facing orders to fire on an uncertain target. The parallels between the experience of a drone operator and the Asch and Milgram experiments are clear. A drone operator is in a high-pressure situation, in close contact with the expectations of their peers and at least one higher-ranking authority. As previously noted in the quote from *Drone Warfare*, there may be up to eight people involved in a single operation: the pilot, the sensor operator, the mission intelligence coordinator, a safety observer, multiple video analysts, and a ground force commander. Though they are not all physically together, they are in constant communication. These individuals influence one another through their attitude and their expectations of the situation and of their team. Several of them also carry the weight of their rank and their authority. If seven people say they see rifles

and no evidence of civilians riding with a convoy, the remaining person is faced with a hybrid, real-life version of the dilemmas Asch and Milgram created in the safety of their labs.

The question becomes how to apply Milgram and Asch's findings. One of the challenges, of course, is linked to concerns over transparency regarding some of the drone programs, such as those involving the CIA. If we don't know how they operate, then it is difficult to draw decisive conclusions.[30] Notwithstanding this obstacle, we can still infer some conclusions based on what we know from leaked documents about how CIA drones operate, as well as the way in which the U.S. Air Force employs them. Returning the physiological experiments, both Milgram and Asch found that individuals are best able to hold true to their initial beliefs when they are not alone in their actions. Milgram's participants most effectively resisted a corrupt authority when they could side with a benevolent authority or ally. Likewise, Asch's participants were able to give the correct answer when the group was not unanimous, even if the other deviator gave a different answer. In both scenarios, participants were able to take solace and courage from another person. They experienced doubt about the actions of the group from the beginning, but were mostly unable to follow through on their moral (or perceptual) convictions until a rebellious other gave them a socially acceptable way to do so. In the circumstances of drone operations, an individual's ability to express doubts about the group's consensus could mean life or death for civilians on the ground.

Fortunately, the administrative structure of drone operations is designed to include numerous checks and balances. The issue becomes ensuring that these checks and balances serve their function. Such a system, created with good intentions, can easily become only a mindless routine that must be checked off before the real action can begin. On the opposite extreme, this practice could serve as an echo chamber in which a false consensus is reached. Ideally, however,

each check on drone operations would provide an opportunity for any individual involved to voice doubt. If the culture of the unit is created such that moral concerns are genuinely welcomed and encouraged, drone operators will be better able to resist the pull of group unity and authority. The command climate must be open to moral discussion—and the protocol designed to foster objections—so that one person can deviate from the group. As Milgram and Asch have demonstrated, any others with similar doubts will then feel free to follow.

In addition to potentially fostering moral debate, the current administrative system serves a logistical purpose. Technologically mediated warfare demands a bureaucracy to manage information flow to the operators. Bureaucracy is not an inherently worrisome instrument in this context. If managed well, it supports a climate of accountability that can be helpful in executing high stakes military operations while adhering to basic ethical codes. However, the operational bureaucracy also regulates information flow to operators in such a way that they may not have enough information to know when to object to unethical orders. Operators are sometimes assigned a specific target and asked follow that target for days or weeks, without being aware of who this person is or how he or she relates to wider enemy activities. Due to the constricted information flow, operators cannot be called upon to act as a meaningful check on the power of the military institution in such cases. They may not be in a position to judge if it "doesn't look right," let alone have the autonomy to act in line with their conscience if they do have qualms.

An incomplete flow of information has dire psychological implications. Warriors are often required to kill and to view the ghastly consequences of their killing, which causes trauma. However, as noted earlier, warriors in combat are more likely to feel that their actions were necessary, proportionate, and discriminant. Although operators may seem remote from the battlefield, high-resolution cameras and a lightning fast connections force them to view the

gruesome details of the carnage their actions caused, without helping them place it in context. The focus of the cameras is at once too clear and too narrow. All troops must execute missions that have been justified by a hierarchy, with little say in whether the larger missions are ethical. But if drone operators are given less freedom even than traditional warriors to perform their own mental calculus and decide if and when to rebel against an order, in addition to not having access to the "it was either him or me" narrative, then they are cut off from key sources of psychological comfort to help them process what they have done.

IV. Conclusion

In conclusion, technology-enhanced distance warfare is nothing new, and the ethics of its use can and should still be evaluated using the established principles of just war theory. Troops who employ lethal force today face the same challenges as those from other historical periods to maintain their sense of being part of an honorable endeavor and acting a warriors, not murders. Having a warrior's code anchored in core values with which warriors can deeply identify is as relevant as ever. At the same time, it cannot be denied that certain traditional considerations of military ethics are magnified by the new technology. There is a greater risk of dehumanization on both sides of the conflict. The response to asymmetric assaults may be more severe. The increased distance and capacity for precision put greater pressure on policy-makers to improve discrimination and carefully calculate proportionality. Civilian and military leadership owe it to the troops who operate these technologies to take additional care to provide clear and compelling justifications for their missions and, if possible, allow them some autonomy to (on rare occasions) resist authority and group dynamics to reject targets that "don't look right." These

steps may not be easy to take, but they are required both by the principles of just war and by the warrior's psychological need to be allowed to follow a coherent code of honor.

Notes

[1] For the purposes of this chapter, we will be using the term "drone" to refer to unmanned aerial vehicles/systems (UAVs/UASs). The literature on drones is vast: for good overviews, see: Frank Sauer and Niklas Schörnig, 'Killer Drones: The 'Silver Bullet'of Democratic Warfare?', *Security Dialogue* 43, no. 4 (2012), pp. 363-80; James DeShaw Rae, *Analyzing the Drone Debates: Targeted Killings, Remote Warfare, and Military Technology* (New York: Palgrave Macmillan, 2014), Sarah E. Kreps, *Drones: What Everyone Needs to Know* (Oxford University Press, 2016).

[2] On the evolution of rules governing aerial force, see Matthew Evangelista and Henry Shue (Eds). *The American Way of Bombing: Changing Ethical and Legal Norms, From Flying Fortresses to Drones* (Cornell University Press, 2014).

[3] As a case in point from a vast literature, see two recent edited volumes structured by this frame: Steven J. Barela (Ed.), *Legitamacy and Drones: Investigating the Legality, Morality, and Efficacy of UCAVs* (Surrey: Ashgate, 2015); David Cortright, Rachel Fairhurst, and Kristen Wall

(Eds.). *Drones and the Future of Armed Conflict: Ethical, Legal and Strategic Implications* (Chicago: University of Chicago Press, 2015).

[4] Shannon E. French, *The Code of the Warrior: Exploring Warrior Values*, *Past and Present*, Second Edition (Lantham, Maryland: Rowman and Littlefield Publishers, 2016).

[5] *Ibid*, 4.

[6] Jonathan Shay, M.D., Ph.D., *Achilles in Vietnam: Combat Trauma and the Undoing of Character* (New York: Simon and Schuster, 1994), xiii.

[7] *Ibid*.

[8] Dao, James. "Drone Pilots are Found to Get Stress Disorders Much as Those in Combat Do." *The New York Times.* 22 Feb 2013. Online.

[9] Chappelle, Wayne, Goodman, Tanya, Reardon, Laura, Thompson, William, "An Analysis of Post-Traumatic Stress Symptoms in United States Air Force Drone Operators." *Journal of Anxiety Disorders*. 28 (2014): 480-487.

[10] Perf. Rogers, Ginger, Grant, Carey, Dir. McCarey, Leo. *Once Upon a Honeymoon.* RKO Radio Pictures. 1942.

[11] Christian Enemark, *Armed Drones and the Ethics of War* (New York: Routledge, 2014), 96.

[12] Peter W. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century* (New York: Penguin Books, 2009), 308-309.

[13] French, Shannon E., and Jack, Anthony I., "Dehumanizing the Enemy: The Intersection of Neuroethics and Military Ethics." David Whetham (ed.), *Responsibilities to Protect: Perspectives in Theory and Practice,* The Netherlands and Boston: Brill/Martinus Nijhoff Publishers, 2015.

[14] Dan Zupan, "The Child Soldier: Negligent Response to a Threat," *Journal of Military Ethics* 10, no. 4, (December 2011): 321.

[15] David Livingstone Smith, *Less Than Human: Why We Demean, Enslave, and Exterminate Others,* (New York: St. Martin's Griffin, 2012) 71.

[16] William Faulkner, *Snopes: The Hamlet, The Town, The Mansion*, (New York: Random House, 1957, 1994 edition), 512.

[17] NYT Editorial Board. "The Trouble with Drones." *The New York Times*. 7 April 2013. For an overview of the debate, see Chris Woods, "Understanding th eGulf between Public and US Government Estimates of Civilian Casualties in Covert Drone Strikes", In David Cortright, Rachel Fairhurst, and Kristen Wall (Eds.). *Drones and the Future of Armed Conflict: Ethical, Legal and Strategic Implications* (Chicago: University of Chicago Press, 2015), pp. 180-98.

[18] Scott Shane, "U.S. Said to Target Rescuers at U.S. Drone Strike Sites," *New York Times,* February 5, 2012.

[19] Christian Enemark, *Armed Drones and the Ethics of War* (New York: Routledge, 2014), 96.

[20] Daniel Brunstetter and Megan Braun, "The Implications of Drones on the Just War Tradition." *Ethics and International Affairs* 25 no. 3 (2011): 351.

[21] Medea Benjamin. *Drone Warfare: Killing By Remote Control* (London: Verso, 2013), 91-93.

[22] Michael Ignatieff, *Virtual War: Kosovo and Beyond*, New York: Picador USA (Metropolitan Books, Henry Holt and Company, 2000), 214-215.

[23] On the need to better understand the military perspective on ude of force issues, including that of aerial power, see: Martin L. Cook, "Drone Warfare and Military Ethics", In David Cortright, Rachel Fairhurst, and Kristen Wall (Eds.). *Drones and the Future of Armed Conflict: Ethical, Legal and Strategic Implications* (Chicago: University of Chicago Press, 2015), pp. 46-62; also

Charles J. Dunlap Jr., "Clever or Clueless? Observations about Bombing Norms Debates", In Matthew Evangelista and Henry Shue (Eds). *The American Way of Bombing: Changing Ethical and Legal Norms, From Flying Fortresses to Drones* (Cornell University Press, 2014), pp. 109-30.

[24] Benjamin, 90-91; includes excerpt from Matt J. Martin and Charles W. Sasser, *Predator: The Remote-Control Air War Over Iraq and Afghanistan: A Pilot's Story* (Minneapolis, MN: Zenith Press, 2010), 211.

[25] Bowden, Mark. "The Killing Machines How to Think about Drones" *The Atlantic,* (September 2013), 7.

[26] This story was shared by Admiral Jerry Miller in Shannon E. French's NP232: Code of the Warrior class at the U.S. Naval Academy in 2004.

[27] Hockenbury, Don & Hockenbury, Sandra. *Psychology*, 5th ed. (Worth Publishers, 2008), 501

[28] Perry, Gina. *Behind the Shock Machine: the Untold Stories of the Notorious Milgram Psychology Experiments*. (New York: The New Press, 2012), 305-308.

[29] Milgram, S. *Obedience to Authority: An Experimental View.* (London: Tavistock Publications, 2009).

[30] NYT Editorial Board, "Transparency in the Drone Wars", *The New York Times*, 19 March 2016; http://www.nytimes.com/2016/03/20/opinion/sunday/transparency-in-the-drone-wars.html?_r=0; accessed May 1, 2016.