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CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES
CSC 31 / CCEM 31

EXERCISE/EXERCICE NEW HORIZONS

PGM: PRECISION GUIDED MORALITY

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PGM: PRECISION GUIDED MORALITY

INTRODUCTION

As the world progresses into the 21st century, advances in technologies are leading to more effective and efficient means to conduct military operations. Many experts have credited these technological advances with creating a revolution in military affairs. Improvements in communications, sensors, miniaturization, microchips and computer modeling and simulation are having a dramatic effect on how modern nations equip, train for and conduct war. One of the most visible and impressive technological advances has been in the field of precision guidance for air-to-surface weapons called precision guided munitions or PGMs.

In 1991 the world watched first hand during Gulf War I as individual cruise missiles followed pre-planned routes directly into specific buildings in downtown Baghdad. Later in Kosovo, the world witnessed how a single coordinated attack using laser-guided bombs could destroy a downtown bridge while leaving nearby houses undamaged. This precise targeting capability has been credited with significant reductions in civilian casualties and collateral damage. In addition, PGMs can be employed from long range thereby reducing the risks to our own military personnel. In view of the impressive capabilities of these weapons, it is hard to imagine that there could be a down side to the use of PGMs on the modern battlefield. At first glance, PGMs would seem to be the answer to both the military user and the moral bystander. Finally, here is a weapon that can be used to selectively destroy military targets while ensuring the safety of innocent civilians as well as our own warfighters.

Examining the use of precision technology within the just war tradition however, reveals that questions can arise regarding the use of these weapons under certain circumstances. Indeed, these moral questions arise from the very precision and utility that PGMs enjoy on the battlefield. This paper will argue that the use of precision-guided munitions may lead to moral conflicts for decision makers and warfighters. Moreover, this paper will illustrate that without adequate moral circumspection, the use of precision guided munitions may lead to potentially unjust military actions, increased destruction of inappropriate targets and increased risk to civilian populations.

In order to show how the use of such precise and discriminating weapon systems might lead to a moral conflict, it is first necessary to outline the concepts of just war theory. Once this is done, the elements of just war theory can then be used to explore the moral issues regarding potential PGM use on the modern battlefield. Where required, this paper will use contemporary situations to help illustrate the fact that precision weapon capabilities may lead to military actions that could arguably fall outside those actions condoned by contemporary just war theory.¹

JUST WAR THEORY

Just war theory envelops many centuries of philosophical reflection on the ethics and morality of war. Commencing with Cicero, Saint Augustine of Hippo in the fourth century, continued by Thomas Aquinas's *Summa Theologica*, refined by Hugo Grotius and later enshrined in the Hague and Geneva Conventions, just war theory provides an ethical framework with which to consider military actions.² As Jean Bethke Elshtain

¹ The use of illustrations is not intended to reflect judgement on past actions but to provide a framework to allow the reader to explore the potential moral questions that may arise from PGM use.

² This is by no means the only philosophical framework available to reflect on military actions. There exists an entire range of philosophies ranging from Hobbesian realpolitik to outright pacivism. Just War

refers to it, ". . . just war thinking is best known as a cluster of injunctions: what it is permissible to do; what it is not permissible to do."³ These injunctions are typically grouped into two divisions: *jus ad bellum*, concerning the justification for going to war; and *jus in bello*, concerning the justification for actions during war.

JUS AD BELLUM

The fundamental concept underpinning just war theory is that justifiable war ought to be an extremely rare event necessitated by extraordinary occurrences. *Jus ad bellum* provides ". . . the specific criteria for a just war serving as uncompromising pillars whereby an exception might be granted . . ."⁴ Normatively, *jus ad bellum* may be expressed as a list of six criteria. For a nation to go to war justly, all of these criteria must be met. These criteria include:

Legitimate Authority. Only those legitimate individuals or organizations assigned with the authority for declaring war by their respective states may declare war;

Public Declaration. Legitimate authorities must announce their intentions to conduct war as well as the necessary conditions for the cessation of hostilities. This serves to facilitate the eventual return to a state of peace - the goal of any just war;

Just Intent. The reason for going to war must be to restore or improve the status quo;

Theory has been chosen because it represents the one of the most common philosophies used to justify, or condemn, acts of modern warfare.

³ Jean Bethke Elshtain, *Just War and Humanitarian Intervention*, The Third Annual Grotius Lecture Presented at the American Society of International Law's 95th Annual Meeting, (4-7 April 2001), p 5.

⁴ George A. Lopez, "The Fading Relevance of the Just War Tradition," available from <http://www.passievoorvrede.nl/upload/waronterrorism/Lopez%20pxusa%20on%20%20Just%20War%20Tradition%2027-9.doc>; Internet; accessed 1 November 2004. n.p.

Proportionality. The costs, to all participants, of going to war must be offset by the evils that will be avoided. “Proportionality involves considering all the evil resulting from a war, and weighing it against the good that will occur or the harm that will be avoided.”⁵

Last Resort. War must only be initiated after all other potentially successful peaceful means of avoiding war have been exhausted; and

Reasonable Hope of Success. War must only be used when a return to status quo is reasonably indicated for committed forces.

JUS IN BELLO

Just as jus ad bellum defines when it may be justified to go to war, jus in bello defines what is or is not justified during the actual conduct of war. Jus in bello has been refined through the centuries and later “. . . codified in a series of treaties, conventions, and protocols, signed and ratified by most of the principle nations of the world.”⁶

Although slight variations exist among just war theorists, jus in bello is usually expressed as two related humanitarian principles that guide the selection of justifiable actions in war. These principles are proportionality and discrimination.

Proportionality. The principle of proportionality deals with the intended result of an action that is being considered. As described by Gary Brown, “In bello proportionality requires a balancing test between expected military gain and collateral damage. The gain expected must outweigh the expected collateral casualties and collateral damage, or the action must not be taken.”⁷ The military gain referred to in this statement inherently supports another principle sometimes expressed as the principle of necessity. That is, it

⁵ Gary D. Brown, “Proportionality and Just War,” *Journal of Military Ethics*, 2(3), (2003): 172-173.

⁶ Douglas P. Lackey, *The Ethics of War and Peace* (Englewood Cliffs, New Jersey: Prentice Hall Inc., 1989). 58-59.

⁷ Gary D. Brown, “Proportionality . . .”, 180.

is assumed that the military gain sought is also necessary for the required victory. Military gain that does not support victory is considered by just war theory as immoral. Discrimination. The principle of discrimination deals with who and what can be justly targeted during war. “. . . discrimination means the separation of individuals into two categories: those liable to be justly attacked, and those who should be immune from attack.”⁸ Just war theorists sometimes characterize those individuals liable to attack as combatants and those immune from attack as non-combatants. Although in theory, combatants and non-combatants are separate identities, the principle of discrimination becomes difficult when these two identities are co-located or in close proximity to each other. This topic will be discussed later in the paper.

MORE GOOD THAN EVIL?

The first case of potential moral conflict resulting from the use of precision weapons lies in the fact that precision capability has a direct effect on decisions regarding the proportionality involved in a military action. Jus ad bellum proportionality indicates that when a state is deciding to go to war, it should take into account the potential costs of going to war. As Gary Brown describes it, "the good resulting from correcting every wrong does not necessarily outweigh the evil effects of armed conflict."⁹ The moral logic is that if war is going to cause more pain and suffering than it will prevent, than such a war could not be morally supported.

One of the most visible and objective ways to measure the ‘cost’ of going to war is to examine the number of casualties that may result from a military action. In the case

⁸ Lieutenant-Colonel Dwight A. Roblyer, “Beyond Precision: Issues of Morality and Decision Making in Minimizing Collateral Casualties,” The Air Force Institute for National Security Studies Research Report, May 2003, 23.

⁹ Gary D. Brown, "Proportionality . . . , 173-174.

of a nation deciding to go to war with PGM technology at its disposal, the number of predicted casualties associated with military action might be significantly lower. This is predicated on the fact that precise air strikes will simultaneously decrease the level of collateral damage while increasing the destructive force applied to legitimate military targets. In theory, PGMs will allow the war under consideration to be conducted more efficiently and allow for military action to be concluded in less time.

All of these considerations would seem to be morally positive. Who would not agree that significantly decreasing the number of casualties resulting from war is a good thing? But one must remember that at this stage, war is simply under consideration, and not a forgone conclusion. Herein lies the potential for morally conflicted decisions. The initial attractiveness of this relatively bloodless option can lead a decision maker to conclude that war is justified before all other costs have been weighed. "When war is seen as an ordinary tool of foreign policy – 'politics by other means' – political and financial considerations impinge on the balance between military necessity and humanitarian concerns."¹⁰

One of the costs that is much harder to measure objectively, is the result of enemy reaction to the use of PGMs. As Michael Walzer tells us about war, "That is why it is so awful . . . to set the process going: the aggressor is responsible for all the consequences of the fighting he begins."¹¹ That we may not fully comprehend how our enemy will react does nothing to mitigate the requirement to consider the possibilities.

The fact is that precision weapon use against opponents who cannot defend themselves against this technology may potentially spawn a devastating reaction.

¹⁰ Michael Byers, "The Laws of War, US-Style," available from <http://www.lrb.co.uk/v25/n04/byer01.html>; Internet; accessed 13 October 2004. n.p.

¹¹ Michael Walzer, *Just and Unjust Wars*, (United States of America: BasicBooks, 1977): 23.

Consider Iraq's destruction of the oil wells in Kuwait in response to the precision targeting capability of the coalition during Gulf War I with its resulting environmental impact. "As the Iraqi actions suggest, the use of PGMs might well drive adversaries - especially in less-developed nations - to employ pernicious methodologies to counteract them."¹² This same author concludes that, ". . . [PGM] use . . . could make war, paradoxically, more destructive or inhumane than if the high-tech weapons had not been used at all."¹³

It is essential that all possible effects of a contemplated war be examined to ensure proportionality is indicated. Looking simply at the fact that precision technology has the potential to yield low numbers of casualties may place insufficient weight on a decision to go to war. Likewise, ignoring the potential ramifications of war can also lead to false impressions regarding proportionality. "This 'counting the costs' requires thinking into the future, and while such projection is notoriously risky, it must be done."¹⁴ Precision technology introduces several additional variables to this equation that must be solved. Failure to do so on the part of decision makers may lead to potential unjust military actions.

LAST RESORT OR CHOSEN OPTION?

This leads us to the next potential moral problem caused by PGM capability. *Jus ad bellum* requires that war be considered a last resort. In the past, the high cost in human lives and suffering caused by war tended to ensure that decision makers entered into a state of war only after all other possible avenues of action had been attempted.

¹² Charles J. Dunlap Jr., "Technology: Recomplicating Moral Life for the Nation's Defenders," *Parameters*, (Autumn 1999): 26.

¹³ *Ibid.*, 41.

¹⁴ James Turner Johnson, *Can Modern Wars Be Just?*, (Westford, Massachusetts: Murray Printing Company, 1984), 25.

Nowadays, precision technology can lead to a misguided image of war as Michael Ignatieff explains. "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."¹⁵

With the advent of PGM technology with its precise targeting capability and stand off delivery potential, decision makers are provided with a simultaneously potent and even inviting option to use military force. The use of this military PGM strike option is even more attractive when you consider that your own warfighters will not be endangered, collateral damage will be minimized and that there will be, in the case of an opponent who does not possess similar capability, little chance of a counter-attack.

In cases like these, precision weapon capabilities may lead to a situation where potential moral implications are not fully considered. These capabilities may “. . . provide planners and policy makers with ever more precise and apparently less destructive tools, and may thereby encourage leaders to attempt solutions that should otherwise be avoided.”¹⁶ The same effect can be seen in public reaction to the use of PGMs as options for foreign policy. As Jean Bethke Elshtain explains, “. . . [the] public seems at this point rather inured to the routinization of use of American bombing in foreign policy situations that it scarcely registers on the radar screen much of the time.”¹⁷

These opinions appear to be borne out when you consider the numerous examples of PGM strikes on foreign states in the 1990s. Over 598 PGMs were used in retaliatory or punitive strikes on Iraq, Afghanistan and Sudan with more than 292 estimated civilian

¹⁵ Michael Ignatieff, *Virtual War: Kosovo and Beyond*, (Middlesex, England: Penguin Books Ltd., 2000), 215.

¹⁶ Erik Dahl, “Too Good to be Legal? Network Centric Warfare and International Law,” *Journal of Public and International Affairs*, Volume 15, (Spring 2004), 52.

¹⁷ Jean Bethke Elshtain, *Just War . . .*, 25.

casualties.¹⁸ The fact that these military actions were conducted to send political messages while diplomatic means stood unused, indicates that the concept of last resort may not have been followed leading to potentially unjust military actions.

TO WHAT END?

The first *jus in bello* case in which PGM capability can lead to potential moral conflict during the prosecution of war is in determining what is and what is not necessary. While precision technologies provide the warfighter with an impressive array of capabilities, it is important not to lose sight of the fact that these capabilities must serve some purpose in order to be morally justified during war. This military necessity is closely linked to *jus ad bellum* just intent in that all military action taken in war ought to support the intent of going to war in the first place.

Armed with today's precision weapons, it is possible for the warfighter to conduct war at a scale and tempo never before possible. During World War II, ". . . it would take 45,000 B-17s dropping 9000 bombs to have the same probability of destroying an important target as would a single stealth fighter dropping one PGM."¹⁹ Modern fighter-bombers can carry two or more PGMs, each of which can destroy a separate target on the same mission. All of this capability, when combined in modern day coalition air operations, leads to the ability to destroy large numbers of enemy targets simultaneously or in rapid succession. The Gulf War I label, 'shock and awe' would rightly characterize the overall effect of such an air campaign.

¹⁸ Source, Tim Cathcart, "Standoff Ethics: Policy Considerations for the use of Standoff Weapons," Paper Presented to a Joint Services Conference on Professional Ethics, 29-30 January 2004, available from <http://www.usafa.af.mil/jscope/JSCOPE04/Cathcart04.html>; Internet; accessed 3 November 2004.

¹⁹ Lieutenant-Colonel Edward C. Holland III, "Fighting With a Conscience: The Effects of an American Sense of Morality on the Evolution of Strategic Bombing Campaigns," The Faculty of the School of Advanced Airpower Studies Thesis, (Maxwell AFB, Alabama, May 1992), 39.

The accuracy of today's precision weapons that allow the warfighter to effectively target, and completely destroy multiple targets, has resulted in new doctrine maximizing the effects of air power. Parallel operations are defined as operations that allow air power to simultaneously strike different enemy capabilities. This is done in an effort to paralyse an enemy and reduce his ability to observe the strikes, orient his forces, decide on a course of action and act on that decision. This cycle is referred to as an enemy's decision loop.

Impressive as this capability is, it is important for the warfighter to remain focused on the reason that military action is being conducted. The fact that parallel operations can be conducted with PGM weapons, does not speak to the necessity of this type of operation. As Clausewitz asserts, "war is not merely an act of policy but a true political instrument, a continuation of political intercourse, carried on with other means."²⁰ At some point the enemy has to be able to respond favourably to this political intercourse. In other words, "A measured response may also maintain an environment more conducive to peace negotiations."²¹

It is possible that by using PGM capability to its fullest, the warfighter may unintentionally prolong a conflict or fail to provide the necessary avenue for an enemy to surrender or sue for peace. Remember the world reaction to the 'highway of death' during the closing moments of Gulf War I. "If A not only soundly defeats B but lays casualties on its enemy by using its superior technology far beyond the point of defeating

²⁰ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1976), 87.

²¹ Gary D. Brown, "Proportionality . . .", 183.

B, then A is acting immorally. It is no longer battling but, instead, slaughtering B.”²² As Thomas Barnett writes, "We may find ourselves acting so rapidly within our enemy's decision loop that we largely are prompting and responding to our own signals, which our beleaguered target cannot process."²³ In deciding what is necessary, the warfighter must ensure there is no confusion between what effects are possible and what effects are required. If not, precision weapons can lead warfighters to pursue escalated destruction of inappropriate targets.

Another area for moral concern arising from PGM capability deals with certain enemy capabilities targeted by precision weapons and the level of destruction that can be achieved. The extreme precision and devastating effects of precision technology have translated into doctrinal shifts within air power users. “Rather than focusing on engaging enemy forces directly, current doctrine holds that strategic attack is used to destroy the enemy’s centers [sic] of gravity . . .”²⁴ This doctrinal shift has lead George Lopez to conclude that “faced with the near certainty that one could hit any target one wanted without concern for inadvertent civilian death from such bombing, US war planners have dramatically expanded the list of targets considered as ‘military’ and acceptable for bombing.”²⁵ This list of targets includes electrical grids, water treatment facilities and bridges carrying fibre optic cables.

It can be argued by supporters of strategic attack that the destruction of these types of targets hastens the capitulation of an enemy and can lead to an early end to the

²² Nicholas G. Fotion, *Military Ethics: Looking Towards the Future*, (Stanford, California: Hoover Institution Press, 1990), 32.

²³ Thomas P.M. Barnett, "The Seven Deadly Sins of Network-Centric Warfare," *Proceedings*, (January 1999), 38.

²⁴ Michael A. Carlino, “The Moral Limits of Strategic Attack,” *Parameters*, (Spring 2002), 15.

²⁵ George A. Lopez, *The Fading . . .*, 3.

war. In fact, this is a major tenet of the concept of strategic attack. Michael Lewis, in his review of the aerial bombardment in the 1991 Gulf war talks about the intended use of air power to paralyse the central nervous system of the enemy and concluded that, "The implementation of the air campaign . . . seems to have been conducted with appropriate legal oversight."²⁶

When viewed through the moral lens of jus in bello proportionality, the destruction of these types of targets may take on a different appearance. There have been numerous moral and legal arguments made against this targeting of Iraqi critical infrastructure on the grounds that, ". . . one must take issue with the assertion that the systematic destruction of the civil infrastructure through the use of precision weapons actually reduces the harmful effects of war. Ironically, the very capability of precision potentially augurs greater collateral casualties, not less . . ." ²⁷ Indeed, the civilian casualties resulting from the damage inflicted during the war continued well after the hostilities had ceased. As George Lopez reports, ". . . the US/UN Iraq armistice was signed at the end of February 1991 . . . [yet] in 1992, more than 100,000 Iraqi civilians died from the lack of clean water, the impotency of electrical supply sources. . ." ²⁸

These types of second- and third-order effects of targeting the Iraqi electrical grid were almost certainly not intended by the warfighters during their targeting decisions. This fact however, does nothing to dispel their moral obligation to consider all possible effects regarding the use of precision weapons in determining the proportionality of a considered option. "The sheer number of civilian casualties, whether or not they are

²⁶ Michael W. Lewis, "The Law of Aerial Bombardment in the 1991 Gulf War," *The American Journal of International Law*, Volume 97, 501.

²⁷ J.W. Crawford III, "The Laws of Noncombatant Immunity and the Targeting of National Electrical Power Systems," *Fletcher Forum of World Affairs*, 21 (Summer/Fall 1997): 114.

²⁸ George A. Lopez, *The Fading . . .*, 4.

unintentional, should be seen as bearing on our moral assessment of whether conduct in war involves use of excessive force, and should do so in a forward-looking way that could proscribe certain courses of action."²⁹ Once again, the military value of destroying an enemy's critical capability must be measured against all possible outcomes of that destruction. If our warfighters do not take this into account, we might find that the awesome destructive ability of precision weapons could be used to escalate the destruction of inappropriate targets.

TECHNICAL OR MORAL DISCRIMINATION?

Yet another potential moral conflict stemming from the use of precision guided weapons and their stand off range is how this capability impacts on the jus in bello principle of discrimination. "Increased accuracy enhances the moral principles that underlie protection of the innocent norms because it allows one to aim narrowly at legitimate targets and carefully away from noncombatants."³⁰ Precision allows the warfighter to more carefully adhere to the principle of discrimination. Because of these weapons precision guidance, individual warfighters can also release these weapons at greater distances from their intended targets without degrading the accuracy of the weapon. This capability significantly decreases the danger to the warfighter by allowing the warfighter to avoid heavily defended areas.

These two interrelated capabilities would seem to serve just war extremely well. Precision weapons increase the warfighter's capability to discriminate while minimizing

²⁹ Lionel K. McPherson, "Excessive Force in War: A 'Golden Rule' Test," Tufts University, available from <http://www.as.huji.ac.il/conf/ex-force/macpherson.pdf>; Internet; accessed 27 October 2004, 10.

³⁰ Stephen Wrage, "Compliance with Aerial Bombing Norms: A Study of Two Periods - 1939-1945 and 1990-2004," Presented to a Joint Services Conference on Professional Ethics, (29-30 January 2004), available from <http://www.usafa.af.mil/jscope/JSCOPE04/Wrage04.html>; Internet; accessed 13 October 2004, 8.

the risk to the warfighters themselves. The moral difficulty arises when the two capabilities are played against each other. While employing precision weapons from stand off range does not degrade the accuracy of the weapons, it can have a significant effect on a warfighter's ability to properly discriminate between combatants and non-combatants. It is possible that by employing precision weapons from long range to minimize the risk to the warfighter, the resulting risks to non-combatants could increase.

During the 1999 NATO bombing campaign in Kosovo, NATO pilots bombed a convoy of vehicles near Djakovica. At the time, the pilots were restricted to flight altitudes above 15,000 feet. This altitude restriction was ". . . imposed to protect aircraft and pilots from FRY air defences . . ." ³¹ From that altitude, the pilots were physically unable to visually confirm that the targets were combatants. The attack resulted in approximately 70-75 civilian deaths and has prompted numerous moral criticisms of the Kosovo air campaign. ³² "As the campaign went into its second month, the alliance's moral preferences were clear: preserving the lives of their all-volunteer service professionals was a higher priority than saving innocent foreign civilians." ³³

Although this level of criticism may be unwarranted, the above example serves to illustrate the potential moral issue surrounding the principle of discrimination and the use of precision technology. There is nothing morally prohibited in the concept of force protection. In fact, military commanders have a strong moral obligation to ensure the safety of their forces. However a moral conflict can arise when precision technology is

³¹ W.J. Fenrick, "Targeting and Proportionality During the NATO Bombing Campaign Against Yugoslavia," *European Journal of International Law*, Vol. 12, No. 3, (2001), 501.

³² Source: *Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia*, available from http://beqiraj.com/kosova/de/allied_force/final_report/index.asp; Internet; accessed 1 November 2004, n.p.

³³ Michael Ignatieff, *Virtual . . .*, 62.

used to maximize the safety of the warfighter at the cost of placing non-combatants in greater peril. Just war theory would suggest that in this case, the principle of discrimination may not be served.³⁴

The last, and one of the most complex, areas of potential moral conflict is the use of precision weapons involving the *jus in bello* principle of discrimination where discrimination is impossible. Clearly, warfighters are morally prohibited from directly targeting non-combatants. However, this type of moral clarity quickly disappears under circumstances normally experienced in war. In battle, warfighters will almost certainly be confronted with situations where bombing military targets will also necessarily kill non-combatants. Dual use targets present just such a situation to the warfighter. A dual use target is defined as a target that serves both a military as well as civilian role.

Dual use targets present a moral dilemma to the just war theorist. On the one hand, the target is a legitimate military target and therefore may be attacked. On the other hand, any attack will result in the deaths of non-combatants who are prohibited from being attacked. Of course, one could simply refuse to attack the target and avoid the entire situation. In the case of a just cause, one worth fighting for, this is a morally unsatisfying response. As Whitley Kaufman puts it, "To aspire to moral perfection, wherein one could act only where one was certain of never causing harm, would be to undercut the possibility of any significant action at all."³⁵ In order to resolve this dilemma in a way that permits action, most just war theorists call on the doctrine of double effect.

³⁴ For a well written and thorough treatment of the rights of combatants and non-combatants please see Michael A. Carlino, "The moral Limits of Strategic Attack," *Parameters*, (Spring 2002): 15-29.

³⁵ Whitley Kaufman, "What is the Scope of Civilian Immunity in Wartime?" *Journal of Military Ethics*, 2(3), (2003): n.p.

Michael Walzer, in his book *Just and Unjust Wars* provides an extremely useful variation of the doctrine of double effect. He expresses it as four necessary conditions:

1. the act must be a legitimate act of war;
2. the intended effect of the act must be morally acceptable;
3. the evil effect must not be intended, actively minimized, accepting costs to the actor; and
4. the good effect must sufficiently compensate for the evil effect.³⁶

As the doctrine of double effect is used here, just war theory would support the attack of a dual use target provided: the target was a legitimate military target; the intended destruction served a valid military purpose; the civilian casualties were neither intended nor the means to achieving the intended military purpose and were minimized by accepting increased risk to the actor; and the destruction of the target sufficiently compensated for the civilian casualties.

In any imaginable conflict, there will be certain targets that cannot be attacked without inflicting collateral casualties. Now if we imagine ourselves as an airforce equipped with only unguided bombs, the military worth of those targets would have to be large before they would meet the principle of proportionality and become potential valid targets. Now let's imagine we have just purchased new precision guided munitions. With their increased accuracy and decreased probability of collateral casualties, our purchase will therefore result in 'extra' potential valid targets. If we now consider the targeting decisions surrounding one of these imagined 'extra' targets, we can illustrate how our acquisition of precision technology can lead to a potential moral conflict.

³⁶ Michael Walzer, *Just and Unjust . . .*, 153.

In order to bomb this 'extra' potential target, we must apply the doctrine of double effect. The first two necessary conditions are achieved by ensuring that the target is indeed a legitimate military target and that the destruction of the target will serve to achieve our military intention. The third necessary condition requires us to minimize the risk to the non-combatants involved in this planned attack. At first glance, we could seem to meet this necessary condition by limiting our attack to precision weapons. But this thought is worth revisiting. If we rethink our plan to use precision weapons we may arrive at an odd realization; the only reason we are considering an attack on this target is because we have just purchased precision weapons.

By planning to use precision weapons we have actually placed non-combatants at risk who, before our precision technology decision, were not at risk. How then, can we reduce the risk to these non-combatants by using weapons that have placed them at risk in the first place? The only available answer is that we cannot. Another method of reducing the risk to these non-combatants must be found, such as reducing the size of the warhead or timing the attack to coincide with minimum non-combatant presence. From the above example, we can see that simply relying on the use of precision technology does not guarantee that we are morally correct. "It could be easy to be seduced into believing that, because PGMs are discriminate weapons, any use of them is morally acceptable."³⁷ This seduction could lead us to a point where our use of precision technology actually places additional risk on non-combatants.

³⁷ Steven Lee, "Double Effect, Double Intention, and Asymmetric Warfare," *Journal of Military Ethics*, 3(3), (2004): 249.

PRECISION WEAPONS AND MORALITY

Precision weapons provide modern nations with a formidable military capability. “Advanced technology provides the capability to employ coercion via non- or low-lethal means in a way that greatly minimizes the immediate noncombatant losses.”³⁸ Precision weapons allow for potentially lower collateral casualties as well as the ability to more effectively and efficiently conduct modern warfare. “If anything, modern technology makes it possible to fight with greater discrimination now than in the past, if there is a political will to do so.”³⁹ The important realization is that precision weapons only provide the potential for more just action. PGMs themselves are not moral weapons

Precision weapon capabilities allowing relatively risk-free actions can influence decision makers into deciding to go to war. “If war becomes virtual – and without risk – democratic electorates may become more willing to fight . . .”⁴⁰ This same reasoning can also lead decision makers to decide on war as a preference rather than as a last resort. “The ready availability of [PGMs] may tempt them to conclude that force need no longer remain the option of last resort, and induce them to employ their arsenal without due reflection.”⁴¹

For our warfighters, precision weapons also provide capabilities that can lead to moral mis-use. Precision targeting effectiveness can lead to wars conducted closer to a concept of ‘total war’ than is morally acceptable. The ability to target critical infrastructure may lead to significant military effects on our enemies, “. . . but it also

³⁸ Charles J. Dunlap, “Technology: Recomplicating . . .”, 17.

³⁹ Michael Walzer, *Just and Unjust* . . . preface to the second edition, xiii.

⁴⁰ Michael Ignatieff, *Virtual War* . . ., 180.

⁴¹ A.J. Bacevich and Lawrence F. Kaplan, “The Clinton Doctrine,” *The Weekly Standard*, 30 September 1996, 20-21.

eliminates civilian life-support systems.”⁴² Precision weapons can potentially allow our warfighters to conduct low-or zero-risk missions to themselves while transferring risk to non-combatants. Precision weapon use can also place at risk, civilians who may normally be safe from harm during war. Consider these last two possibilities against the fact that, “. . . the record shows that the ratio of civilians to military personnel killed in armed conflicts has, in fact, increased since the Conventions of 1949.”⁴³

In the preceding descriptions of potential use of precision weapons, this paper has tried to outline several areas where the precision capabilities of modern weapons can lead decision makers and warfighters into moral conflict. The common source for all of these potential moral conflicts occurs when our decision makers and warfighters look on precision weapons as inherently moral, and fail to consider the morality of the circumstances surrounding the use of precision weapons. “The weapons are discriminate only when they are used in a discriminate way; otherwise they simply kill civilians more accurately than the old munitions did.”⁴⁴

Clearly, the answer to avoiding these potential moral conflicts is for decision makers and warfighters to maintain their perspectives as moral actors. “Moral danger . . . lies in failing to ask ourselves clearly enough whether our moral emotions are real, whether they authentically belong to us and accurately respond to a situation – an abuse, a crime, a catastrophe – as it really is.”⁴⁵

⁴² J.W. Crawford III, “The Laws of Noncombatant . . .”, 101.

⁴³ Colonel Charles J. Dunlap, *Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts*, Prepared for the Humanitarian Challenges in Military Intervention Conference, (Carr Center for Human Rights Policy, Kennedy School of Government, Harvard University, Washington DC., 29 November 2001): available from <http://www.duke.edu/~pfeaver/dunlap.pdf>; Internet; accessed 3 November 2004, n.p.

⁴⁴ Stephen Lee, “Double Effect . . .”, 249.

⁴⁵ Michael Ignatieff, *Virtual War* . . ., 214.

CONCLUSION

Precision weapon technology allows modern weapons to discriminate between legitimate targets and non-combatants. This discrimination is technical in nature and, in no way, answers just war theory requirements for discrimination. Just war theory requires moral discriminations to be made – to decide when to go to war justly and how to fight justly once at war. Decision makers and warfighters must never give up their roles as moral actors and never stop thinking about the moral context of their actions. Precision munitions cannot carry moral virtues.

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