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POSSIBLE ETHICAL PROBLEMS WITH MILITARY USE OF NON-LETHAL WEAPONS

*Stephen Coleman*¹

The development and use of new technologies raises a number of ethical issues, particularly when the discussion focuses on new military technologies. However, a simple examination of the legal implications of the use of new military technologies fails to include the ethical issues surrounding these technologies, especially since law almost inevitably lags behind technological developments. The case of non-lethal weapons is an interesting one. Existing international law covers the use of some specific types of non-lethal weapons while remaining silent on others. While there are many reasons why it might be attractive to equip military personnel with non-lethal weapons, particularly when those military personnel are engaged in “operations other than war”, many problematic issues about such a decision exist which ought to be highlighted. This paper notes some of these problems, including issues that might arise in international law with regard to the principle of discrimination when non-lethal weapons are used, and problems that can arise due to differences between the ways non-lethal weapons are tested during development and how those non-lethal weapons are used in the real world. This second problem is

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highlighted through discussion of the problems that have arisen through police use of non-lethal weapons in domestic law enforcement situations.

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I. INTRODUCTION

The development and use of new technologies raises a number of ethical issues, particularly when the discussion focuses on new military technologies. However, a simple examination of the legal implications of the use of new military technologies fails to include the ethical issues surrounding these technologies for two key reasons. First, while there is an intimate relationship between the disciplines of law and ethics, the questions raised by these two disciplines are not the same. Whatever the future may hold, it is impossible to get a sense of what the laws governing the use of a new technology ought to be without considering the ethical issues raised by that new technology. Second, the law almost inevitably lags behind the development of new technologies, so it is usually only after a new technology has actually been developed that lawmakers start to consider how that technology ought to be regulated in law.

The case of non-lethal weapons (NLW) is an interesting one. Existing international law covers the use of some specific types of NLW while remaining silent use of other types of NLW, other than general provisions applicable to all weaponry used in armed conflicts. There are many reasons why it might be attractive to equip military personnel with NLW, particularly when those military personnel are engaged in operations other than war, a category which includes such things as peacekeeping and peace enforcement missions, armed humanitarian interventions, and even counter-insurgency operations. However, while there are attractions in the idea of issuing NLW to military personnel, many problematic issues about such a decision exist which ought to be highlighted.

The term *non-lethal weapon* is itself rather controversial, leading many writers to use other terms when discussing these types of weapons. These weapons have been described *as soft-kill weapons*,

less-than-lethal weapons, and *sub-lethal weapons*, among other terms.² All of these terms are somewhat problematic for various reasons, chief of which is the fact that virtually any weapon can have lethal effects in some situations. So, while recognizing that the term is problematic, *non-lethal weapons* will be used here since it is a term in general use. For the purposes of this discussion, the term NLW will be used only to describe weapons whose effects are intended to be temporary, relatively minor, and reversible. Thus, the definition includes weapons intended to have non-lethal effects, but are known to be lethal if used in some circumstances. The definition specifically excludes weapons intended to maim or cause permanent physical damage of some sort to their intended targets, even if they do not kill.

As was mentioned earlier, law and ethics are very different, but many people still seem to conflate the two, thinking that everything that is legal must therefore be ethical, and everything that is illegal must therefore be unethical. Such thoughts are particularly common amongst people who work within the legal system itself, but they are also frequently found among members of occupations whose actions are greatly restrained by law, such as members of the military. While law and ethics are often closely related, they are far from being the same thing, and it is not difficult to find examples of situations where the demands of law and the demands of ethics come into conflict. Something can be: (1) legal, but unethical, such as the apartheid laws of South Africa; (b) illegal, but ethical, such as exceeding the speed limit to get a critically injured person to the hospital; or (c) ethical, but not enforced by law—almost everyone agrees that parents ought to love their children, but there are no laws that require it, nor could there be any such laws.³

While the demands of law and ethics do sometimes conflict with each other, it is far more usual for them to coincide, and this overlap is only to be expected. While some laws are enacted simply to maintain stable social interactions or provide social goods, many laws—especially criminal laws—articulate ethical principles which are deemed to be particularly important. Laws against *mala in se* crimes or torts—such as murder, rape, arson, theft, robbery, assault, and battery—exist because of a prior ethical view that it is wrong to murder, assault, and steal. Typically, both domestic and international law heavily regulate military conduct; however, in terms of the discussion of the issues raised by the use of NLW, it is international law that is the most important, particularly the law of armed conflict

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2. See DAVID A. KOPLOW, NON-LETHAL WEAPONS: THE LAW AND POLICY OF REVOLUTIONARY TECHNOLOGIES FOR THE MILITARY AND LAW ENFORCEMENT 9–10 (2006).
 3. SEUMAS MILLER, JOHN BLACKLER & ANDREW ALEXANDRA, POLICE ETHICS 27 (2d ed. 2006).

(LOAC).⁴ While modern LOAC mostly derives from international treaties, conventions, or customary international law, it should be recognized that these treaties and customs also have an ethical basis, in that they are founded on the requirements of an ethics of war which has been discussed and defined over the centuries and has come to be known as just war theory.

II. INTERNATIONAL LAW AND WEAPONS USE

Just war theory is traditionally taken to have two aspects: *jus ad bellum*, which addresses the right to resort to war rather than attempting to resolve a dispute by other means; and *jus in bello*, which addresses the conduct of those who are actually fighting in armed conflict, be they uniformed combatants, paramilitary forces, or even civilians who have taken up arms.⁵ When discussing military use of NLW, only *jus in bello* is of interest. *Jus in bello* consists of two main principles by which the participants in the war must abide: (1) discrimination; and (2) proportionality.⁶ These two principles have been incorporated into LOAC in a number of ways. There are general principles in LOAC which ban indiscriminate and/or disproportionate attacks no matter what weapon is used, as well as treaties which ban the use of certain types of weaponry because these weapons are considered either to be indiscriminate or to cause disproportional harm, or both. Anti-personnel land mines, for example, are banned because their effect is indiscriminate.⁷ Biological weapons and cluster munitions probably fall into this category as well.⁸ Some of the protocols in the Convention on Certain Conventional Weapons (1980) ban the use of weapons considered to cause disproportionate harm. This includes protocols banning the use of weapons that disperse undetectable fragments and the use of permanently blinding laser

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4. See, e.g., *NATO Policy on Non-Lethal Weapons*, NATO (Oct. 13, 1999), <http://www.nato.int/docu/pr/1999/p991013e.htm> (“The research and development, procurement and employment of Non-Lethal Weapons shall always remain consistent with applicable treaties, conventions and international law, particularly the Law of Armed Conflict as well as national law and approved Rules of Engagement.”)
 5. STEPHEN COLEMAN, *MILITARY ETHICS: AN INTRODUCTION WITH CASE STUDIES* 67 (2013).
 6. *Id.*
 7. United Nations Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction, *opened for signature* Dec. 3, 1997 2056 UNTS 211.
 8. See *Use of Nuclear, Biological or Chemical Weapons: Current International Law and Policy Statements*, INT’L COMM. RED CROSS (Apr. 3, 2003) <https://www.icrc.org/eng/resources/documents/misc/5ksk7q.htm>.

weapons.⁹ In fact, the full name of the Convention—The Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects—clearly demonstrates that the aim of the treaty is to enforce the *jus in bello* principles of discrimination and proportionality, at least as far as those principles apply to particular types of weapons.¹⁰ However, treaties such as these are an imperfect attempt to enforce the ethical principles of *jus in bello* and these treaties clearly do not cover every situation.

The realities of international politics and the difficulties related to the negotiation of international treaties mean that international law does not ban some weapons that are clearly indiscriminate or disproportionate. These same difficulties mean that states are prohibited from using some weapons in situations where the use of those weapons might well be ethically appropriate. Nuclear weapons are probably a good example of a weapon which is not banned, but which plausibly ought to be. There is no strict prohibition on either the possession or use of nuclear weapons under international law—indeed, the Nuclear Non-Proliferation Treaty actually recognizes certain states as possessors of nuclear weapons. Neither is there any realistic possibility of the imposition of such a prohibition in the future.¹¹ Since international law bans indiscriminate and/or disproportionate attacks no matter what weapon is used, it could be argued that the use of nuclear weapons is banned despite the lack of a specific international treaty on the use of nuclear weapons.

International law has a blanket application and thus bans the use of some types of weapons that could be used in a discriminate and proportionate manner, at least in some situations. For example, the Hague Convention of 1899 banned the use in warfare of bullets which “expand or flatten easily in the human body”, as this type of ammunition was thought to cause unnecessary suffering (i.e. to be disproportionate).¹² The ban on the use of this ammunition is now

9. See Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, Protocol I, *opened for signature* April 10, 1981, 1342 U.N.T.S. 137 (“It is prohibited to use any weapon the primary effect of which is to injure by fragments which in the human body escape detection by x-rays.”).

10. See *id.*

11. Int’l Atomic Energy Agency [IAEA], *Treaty on the Non-Proliferation of Nuclear Weapons*, IAEA Doc. INFCIRC/140 (April 22, 1970).

12. *Declaration (IV, 3) Concerning Expanding Bullets, in THE HAGUE CONVENTIONS AND DECLARATIONS OF 1899 AND 1907, ACCOMPANIED BY TABLES OF SIGNATURES, RATIFICATIONS AND ADHESIONS OF THE VARIOUS POWERS, AND TEXTS OF RESERVATIONS* 227, 227 (James Brown Scott ed., 1915).

considered part of customary international law, and has been incorporated into the Rome Statute of the International Criminal Court as a war crime.¹³ Yet police officers in most jurisdictions use such bullets worldwide for good reason, since they reduce the danger of over-penetrating rounds which may cause harm to innocent bystanders.¹⁴ Thus, it is plausible to think that LOAC should also permit military personnel to use such ammunition when they operate in environments where there are significant numbers of innocent civilians present, since the use of this ammunition would be likely to increase the discrimination of military operations in such situations.

Of immediate interest, in terms of the current discussion of NLW, is the ban on the use of non-lethal Riot Control Agents (RCA) as a weapon of war, which are included in the Chemical Weapons Convention.¹⁵ It is obviously possible that these weapons could be used in a discriminate and proportionate manner, which would in fact reduce the harms of war. It could be argued that international law simply has not been able to keep up with the changing nature of warfare and that, in modern asymmetric conflicts, it is actually more appropriate for military personnel to utilize non-lethal weapons than traditional lethal ones. Then Secretary of Defense Donald Rumsfeld actually commented on this situation, complaining in testimony to the House Armed Services Committee that “[i]n many instances, our forces are allowed to shoot somebody and kill them, but they’re not allowed to use a nonlethal riot-control agent.”¹⁶ On the other hand, since the Chemical Weapon Convention allows for the use of RCA in law enforcement, including domestic riot control situations,¹⁷ it could perhaps be argued that the use of RCA is actually permitted in military operations other than war. The reason that the Chemical Weapons Convention actually bans the use of RCA as a weapon of war is almost certainly due to the concern that RCA may be used as lethal force multipliers rather than lethal force avoiders. In other words, RCA may be used in combination with lethal force, thus

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13. Rome Statute of the International Criminal Court, art. 8, ¶ 2(b)(xix), *opened for signature* Jul. 17, 1998, 2187 U.N.T.S. 3.
 14. *E.g., U.S. Social Security orders 174,000 hollow-point bullets*, CBC NEWS (Sept. 4, 2012, 8:50AM), <http://www.cbc.ca/news/world/u-s-social-security-orders-174-000-hollow-point-bullets-1.1220907>.
 15. Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction art. I, sec. 5, *opened for signature* January 14, 1993, 1974 U.N.T.C. 45 [hereinafter Chemical Weapons Convention].
 16. Brad Knickerbocker, *The Fuzzy Ethics of Nonlethal Weapons*, CHR. SCI. MONITOR (Feb. 14, 2003), <http://www.csmonitor.com/2003/0214/p02s01-usmi.html>.
 17. Chemical Weapons Convention, *supra* note 14, at art. II, sec. 9(d).

increasing, rather than decreasing, the lethality of the military operations in which such weapons are used.¹⁸

Some types of weapons are banned for cultural or socio-economic reasons, where the rationale for such a ban seems to make little sense in some places or cultures, but can be much more easily understood when examined from a different perspective. The ban on permanently blinding laser weapons might fit into this category. Some people might regard laser weapons as non-lethal. Nevertheless, while they do not directly kill their target, they clearly cause permanent harm.

A soldier from the U.S., for example, may find it difficult to understand why it shooting and killing an enemy is not disproportionate, but permanently blinding that same person is. That soldier might genuinely believe that it is better to be blind than dead. However, a ban on permanently blinding laser weapons will probably make much more sense to that soldier if she considers the quality of life faced by a blind person in one of the less developed states of the world. While a blind person might be able to live a very happy and productive life in a developed state, such as the U.S., a similar result is extremely unlikely if the blinded person lives in a developing region of the world, such as sub-Saharan Africa. Here, a blind person who does not have family willing and able to care for them will probably be reduced to begging on the street in order to survive. Realistically, such a person truly faces Hobbes' famous *state of nature* where life is "solitary, poor, nasty, brutish and short."¹⁹ Given this future, one can certainly argue that the difference between being shot with a bullet and being blinded by a laser is that the bullet will kill its target quickly and relatively painlessly, while the blinding laser will condemn its target to a long slow death of suffering and starvation. When seen in these terms, the claim that permanently blinding laser weapons inflict disproportionate harm, and, thus, ought to be subject to a ban in international law makes considerably more sense.

18. *Id.* at art. I, sec. 5 ("Each State Party undertakes not to use riot control agents as a method of warfare"); MICHAEL CROWLEY, DRAWING THE LINE: REGULATION OF "WIDE AREA" RIOT CONTROL AGENT DELIVERY MECHANISMS UNDER CHEMICAL WEAPONS CONVENTION 2 (2013), available at <http://www.omegaresearchfoundation.org/assets/downloads/publications/BNLWRP%20ORF%20RCA%20Munitions%20Report%20April%202013.pdf>.

19. THOMAS HOBBS, LEVIATHAN *84.

III. LEGAL GAP WITH NEW WEAPONS TECHNOLOGIES

New military technologies might cause problems under *jus in bello* because they are likely to be used in a less-than-discriminate manner, or because they might cause disproportionate harm, or both. NLW might plausibly provide examples of all of these situations. When the principle of discrimination is applied to the use of lethal force, it is always applied *before* the use of that force. LOAC expressly prohibits military personnel from deliberately targeting non-combatants.²⁰ However, many advocates of NLW seem to advocate their use in a manner that applies the principle of discrimination *after* using force, rather than before. The following quotation from Michael Gross is a good example of this:

Unlike the use of ordinary weapons, non-lethal weapons deliberately target civilian noncombatants so that the harm they suffer is no longer incidental but intentional. Targeting civilians in this way requires that one subject the principle of noncombatant immunity to a 'lesser evils' test that compares a small amount of intentional harm with a greater level of non-intentional harm that comes from using high explosives. If the former is significantly less than the latter, then there are moral grounds to targeting civilian noncombatants with non-lethal weapons.²¹

There is an actual example of indiscriminate use of NLW which can be examined in this regard, since such weapons were used by Russian Spetsnaz forces in their response to the Moscow Theatre Siege of 2002. Whether this is, strictly speaking, a military example is open to debate; nevertheless, this case still illustrates some of the problems of discrimination very well. On October 23rd, 2002, forty to fifty armed Chechens, claiming allegiance to the militant Islamic separatist movement in Chechnya, seized control of a crowded theatre in the Dubrovka district of Moscow, about four kilometres southeast of the Kremlin. While some of the patrons in the theatre managed to escape, the Chechens succeeded in securing some 850-900 hostages and threatened to kill these hostages unless Russian military forces immediately withdrew from Chechnya. Surreptitious phone calls between hostages and those outside the theatre suggested that the

20. See Jeff McMahan, *The Ethics of Killing in War*, 114 ETHICS 693, 694 (2004).

21. Michael L. Gross, *The Second Lebanon War: The Question of Proportionality and the Prospect of Non-Lethal Warfare*, 7 J. MIL. ETHICS 1, 15-16 (2008).

hostage takers were in possession of small arms, such as assault rifles and grenades, as well as mines and other explosives, which some of the patrons had apparently seen within the theatre building after the Chechens seized control. During negotiations over the next few days, the Chechens released approximately two hundred hostages, including children, pregnant women, foreigners, and those requiring medical care, but the Chechens repeated their threat to start executing other hostages if Russian officials did not meet their demands.

Early in the morning on October 26th, special forces (Spetsnaz) from the Russian Federal Security Service surrounded and stormed the building. For those inside the building, the first indication that an assault was taking place was when gas began to appear in the main auditorium where all the hostages were being held. The gas, a still unidentified aerosol anaesthetic, rendered many hostages and some of the Chechens, unconscious. The hostage takers did not detonate any explosives in response to the gas, but instead began to fire at Russian positions. After a fierce gun battle, which lasted more than an hour, the Spetsnaz blew open the front door and entered the auditorium, directly engaging those Chechens who remained conscious, and apparently executing any who had succumbed to the gas.

After regaining control of the theatre, the Spetsnaz began bringing out the dead and unconscious bodies of hostages who had been overcome by the gas. Almost all the hostages required medical care due to their inhalation of the gas, but those treating the hostages were never told what sort of gas had been used in the assault, and apparently were not told that gas was even used until after the event, and were thus completely unprepared for the mass casualties they had to treat. Two days after the siege ended, some 118 hostages had been confirmed dead, and of the 646 former hostages who remained hospitalised, 150 were still in intensive care and 45 were in critical condition. At least 33 of the hostage takers and 129 hostages died during the raid or over the following days. Despite official Russian government claims that none of the hostages died due to poisoning, it appears that almost all of the hostages died as a result of exposure to the gas, rather than from injuries sustained during the exchange of gunfire between the Chechen hostage takers and the Spetsnaz.

An official investigation into the incident by the Moscow Prosecutor's office was suspended in 2007. The investigation provided no positive information about: what gas was used; whether an antidote had been available; how many hostage takers were involved in the siege; how many hostages were

released by the operation; or who had decided on the manner of the assault and ordered its implementation.²²

The Spetsnaz Forces used NLW in almost the exact same manner advocated by Michael Gross. The Russian forces could have simply relied on conventional weapons when they decided to storm the theatre, and, if they had done so, it is highly likely that many of the hostages would have been killed, either by the hostage takers or by cross-fire. If such a conventional assault is considered purely through the lens of LOAC, then it would appear to follow the principle of discrimination because, even if the Russian forces killed some of the hostages in the process of assaulting the theatre, they would only have been directly targeting the Chechen hostage takers. What actually happened was that the Russian forces used a NLW, in the form of the anaesthetic gas that they pumped into the theatre's ventilation system. If this actual assault is considered purely through the lens of LOAC, however, then it seems to fail the principle of discrimination because anesthetizing gas is an indiscriminate weapon—everyone in the theatre was a target of the gas, regardless of his or her status in the attack. .

Another NLW which is currently under development, the Active Denial System, provides a reasonable example of a new military technology which might be thought to cause disproportionate harm—in this case, harm in novel ways—and which might also be used in an indiscriminate manner. The Active Denial System is a heat ray, analogous to a giant microwave oven, which can project a beam of approximately two meters in diameter at a range of several hundred meters.²³ Anyone caught in the beam feels an immediate heating sensation, away from which they instinctively want to flee. The sensation disappears almost as soon as a person is no longer within the beam. While the beam can be directed very precisely, the weapon can be used in an indiscriminate manner. The agency developing the weapon for the U.S. military, the Joint Non-Lethal Weapons Directorate, actually suggests that it could be used as a means of clearing non-combatants out of an area before engaging those combatants who remain.²⁴ But perhaps more problematic is the way in which the weapon might cause harm to combatants or non-

22. COLEMAN, *supra* note 4, at 218.

23. *See Non-Lethal Weapons Program, Active Denial System FAQs*, U.S. DEF. DEP'T, <http://jnlwp.defense.gov/About/FrequentlyAskedQuestions/ActiveDenialSystemFAQs.aspx> (last visited Feb. 23, 2015).

24. U.S. DEF. DEP'T, *NON-LETHAL WEAPONS ANNUAL REVIEW 7 (2013)*, available at http://jnlwp.defense.gov/Portals/50/Documents/PressRoom/Annual_Reviews_Reports/2013/DoD_Non-Lethal_Weapons_Program_Annual_Review_11.19.2012_HTML_format_v1.pdf.

combatants who are not able to escape the beam, such as those who have been injured to the point of being *hors de combat*.

IV. DISCREPANCY BETWEEN INTENT AND APPLICATION OF NON-LETHAL WEAPONS

One particular problem with the use of NLW by military personnel concerns the differences in the methods by which NLW are actually used in comparison to the methods in which they are tested. NLW are tested extensively in the development stage. However, such tests occur on healthy individuals, with continual monitoring and in a controlled environment. The manufacturers of such weapons stress the various precautions that its users must take in order to use these weapons safely, and, when they start to advertise the weapons for sale, such precautions will be an important part of the sales pitch. Even video clips that are released into the public domain in order to advertise these NLW, as well as to emphasize how safe they are to use, will almost inevitably include warnings about safety requirements. In training and in demonstrations, people on whom the product is being demonstrated will have medical attention easily available. In cases where a person is likely to lose muscle control—such as when a person is shot by an electro-muscular disruption device such as a TASER—precautions are taken to ensure that the targeted person either falls onto a padded mat when they lose muscle control and/or is caught by another person so as to ensure they are not injured when they hit the ground. However, even when there is a desire to exhaustively test a new type of NLW, there may still be various limits imposed on those tests. Thus, while the Active Denial System may have been tested thousands of times on hundreds of different individuals, there are legal requirements at play which prevent it from being tested on certain groups of people, such as children or people with a range of pre-existing medical conditions.²⁵

In contrast to its testing, when NLW are actually used in the real world the situation is very different. While military personnel currently do not have much access to NLW, there are many paramilitary organizations that do use NLW, especially police forces and security companies. These organizations employ NLW on people of varying levels of health, and in an environment that is far from controlled. In the real world, there are very rarely padded mats for people to fall on, or other people around who will ensure that those targeted by NLW will not hurt themselves. Nor are careful checks performed to ensure that the target of NLW do not have a medical

25. Susan LeVine, Principal Deputy, Strategy & Policy, DoD Joint Non-Lethal Weapons Directorate, Comments at Panel Discussion on Non-Lethal Weapons at the 2010 McCain Conference of Service Academies (Apr. 23, 2010).

condition which the use of a particular NLW will exacerbate. Thus, it is no surprise that people have been killed after being targeted with NLW—in some cases, death came as a result of existing medical conditions which, had they been known, may have precluded the use of the particular weapon against that individual:²⁶ in other cases, death came as a result of injuries sustained while falling.²⁷

The fact that police officers have access to weapons which are intended to be less-than-lethal in their effects also seems to encourage the use of such weapons in situations they are not required. The use of NLW may have now become an acceptable alternative to the use of other tactics, particularly tactics that do not involve any use of force. While it is impossible to find clear statistics on the way in which NLW are used by law enforcement officers in the U.S., it is a relatively simple matter to find examples of situations where such officers have resorted to the use of NLW despite it being clear that there was no risk of violence against anyone. While police forces may initially issue NLW to officers as an alternative to the use of lethal force, policies on their use tend to allow the use of such weapons in a much wider range of cases. For example, police officers, working within their department guidelines for the use of NLW have used:

- a TASER on a diminutive, seventy-two-year-old woman who argued with a police officer after being pulled over for speeding in Texas in June 2009;²⁸
- a TASER on a fan who ran onto the field during a break in a major league baseball game in Philadelphia and waved a towel to the cheering crowd while attempting to run away from security staff in June 2010;²⁹

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26. See Anthony Dowley & Matt Schultz, *OC Spray Man Dies in Police Van on Way to Dandenong Police Station*, HERALD SUN (Melbourne) (Dec. 22, 2009, 9:59 AM), <http://www.heraldsun.com.au/news/victoria/oc-spray-man-dies-in-cop-van-heading-to-dandenong-police-station/story-e6frf7kx-1225812683663> (man suffering from a psychiatric illness died after use of a NLW).
27. Inman Morales died after officers of the New York Police Department shot him with a TASER and he fell, head first, more than 10 feet (3 meters) to the pavement below. See *Statement from the New York City Police Department*, N.Y. TIMES (Sept. 25, 2008), <http://www.nytimes.com/2008/09/25/nyregion/25taserletter.html>.
28. Jerome Tuccille, *Texas Cop Tasers Great-Grandmother*, EXAMINER.COM (Jun. 2, 2009), <http://www.examiner.com/civil-liberties-in-national/texas-cop-tasers-great-grandmother>.
29. *Tased Phillies Fan Sparks Debate*, CBS NEWS (May 4, 2010, 6:59 PM), <http://www.cbsnews.com/videos/tased-phillies-fan-sparks-debate/>.

- a TASER on a twelve-year-old girl who tried to run away from a police officer in Miami in November 2004, a case which is especially notable since the officer stated that he never had any intention of actually arresting the girl;³⁰
- a TASER on a bed-ridden, eighty-six-year-old, disabled woman who “took a more aggressive posture in her bed”;³¹
- pepper spray on a group of seated, unarmed but passively resisting protestors at an Occupy Movement protest at the University of California, Davis.³²

Police associations and police departments often support the introduction of new NLW on the grounds that increased options will reduce the likelihood of police officers needing to use deadly force, thus reducing the level of risk of harm faced by members of the community. However, the procedures for the use of these NLW suggest that, in many cases, the concern is not so much about reducing the level of risk faced by the community, but rather about reducing the level of risk to which the police officers themselves are exposed.³³ Significantly, while the availability of NLW may actually reduce the level of risk faced by police officers, the availability of NLW simultaneously reduces the perceived level of risk to which such officers can acceptably be exposed. In simple terms, the availability of a particular NLW leads to an imperative to use it, often in a much wider range of circumstances than was intended when that NLW was originally issued. Thus, NLW come to be used in situations that would have previously been resolved with the use of less force, or even

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30. Susan Candiotti, *Police Review Policy After Tasers Used on Kids*, CNN (Nov. 15, 2004, 8:43 AM), http://www.cnn.com/2004/US/11/14/children.tasers/index.html?_s=PM:US.
 31. Tim Hull, *Police Said to Taze Grandmother*, COURTHOUSE NEWS SERV. (June 24, 2010, 12:54 PM), <http://www.courthousenews.com/2010/06/24/28330.htm>.
 32. Brian Stelter, *U.C. Davis to Investigate Use of Pepper Spray at Protest*, N.Y. TIMES (Nov. 20, 2011), <http://query.nytimes.com/gst/fullpage.html?res=9F0DE6D91731F933A15752C1A9679D8B63>.
 33. One of the aims of the study of the use of OC spray by Queensland Police was to see if the introduction of OC Spray had reduced the number of injuries suffered by police. While the study concluded that there was no statistical evidence to suggest that the use of OC spray had reduced the number of assaults on police or the number of injuries suffered by police, it also noted that officers believed the introduction of OC Spray had reduced the injuries suffered by police. CRIME AND MISCONDUCT COMM'N, OC SPRAY: OLEORESIN CAPSICUM (OC) SPRAY USE BY QUEENSLAND POLICE xi (2005), available at <http://www.ccc.qld.gov.au/research-and-publications/publications/police/oc-spray-oleoresin-capsicum-oc-spray-use-by-queensland-police.pdf>.

without the use of any force at all. Reviews of the misuse of the various types of NLW available to police officers also suggest that the more inexperienced or less highly trained an officer is, or both, the more likely an officer is to either use NLW inappropriately or resort to the use of NLW before such use is really necessary.³⁴

The range of physical force options, including NLW, which are available to police officers are a reflection of the role which they perform within society and of the wide range of different situations which they might face while performing that role, situations which they have been trained to expect and to deal with in the ordinary course of their duties. The usual role of military personnel, on the other hand, is very different from that of police officers, and the training received by military personnel, along with the equipment they are issued, reflect this.³⁵ Basic military training is about preparing military personnel for combat. In blunt terms it is about killing people; in particular, examining who it is legally appropriate to kill and when, how and why it is appropriate to kill them. The basic equipment with which military personnel are issued is also focussed on this task. All the fighting equipment issued to an ordinary soldier is designed for one of two purposes: (1) either to help the soldier kill enemy personnel; or (2) to protect the soldier from the enemy's attacks. Simply issuing military personnel with NLW will give them another use of force option which they do not currently possess. Currently, a soldier who engages someone who is thought to pose a threat will use lethal force. If it turns out that the soldier made a

34. See, *e.g.*, *id.* at 32 (noting in addition that younger officers are also more representative of spray use on the police force because they are more likely to be placed on the frontlines where spray use is necessary); NSW OMBUDSMAN, THE USE OF TASER WEAPONS BY NEW SOUTH WALES POLICE FORCE 68–69 (2008), *available at* http://www.ombo.nsw.gov.au/___data/assets/pdf_file/0004/3379/The-use-of-Taser-weapons-by-NSW-Police-Force-Special-Report-to-Parliament-November-2008.pdf; OFFICE OF POLICE INTEGRITY, REVIEW OF THE USE OF FORCE BY AND AGAINST VICTORIAN POLICE 58 (2009), *available at* <http://www.ibac.vic.gov.au/docs/default-source/opi-parliamentary-reports/review-of-the-use-of-force-by-and-against-victorian-police---july-2009.pdf>; FED'N CMTY. LEGAL CTRS., TASER TRAP: IS VICTORIA FALLING FOR IT? 18–19 (2010), *available at* http://www.fclc.org.au/intranet/public_resource_details.php?resource_id=1668.

35. It should be noted that in the U.S.A. in particular, many police departments now have access to a range of equipment which was previously only available to the military. Although the intention in providing that equipment may have been to ensure that the police would be able to handle counter-terrorism operations, its use in many other situations has led to concerns about the militarization of policing. *E.g.*, Matt Apuzzo, *War Gear Flows to Police Departments*, N.Y. TIMES (Jun. 8, 2014), <http://www.nytimes.com/2014/06/09/us/war-gear-flows-to-police-departments.html>.

mistake and that person was not actually a threat, then clearly it would have been better if the soldier had used a NLW rather than lethal force. Simply issuing military personnel with NLW, however, will not help those military personnel in dealing with situations for which they have not really been trained, i.e. those modern operations where military personnel are being expected to act like police officers, rather than soldiers. Police already appear to be overusing NLW, so it can be expected that military personnel will do the same. Given that those military personnel are already dealing with situations for which their training has not really prepared them (hence the desire to issue them with NLW in the first place), they can perhaps be expected to rely on NLW even more than police do, a situation which certainly seems problematic.

The final point is perhaps an obvious one, but is nonetheless extremely important. Many companies are engaged in various forms of research into NLW around the world and the holy grail of such research is to develop the perfect NLW; one whose effects are temporary and reversible without any medical intervention, but are also unpleasant enough to ensure compliance with the directions of the user. Groups such as Amnesty International already worry about the potential for existing NLW to be used for purposes such as torture,³⁶ so it should never be forgotten that the perfect NLW is also likely to be perfect for abuse, enabling painful punishment to be inflicted on the victim by an unscrupulous user with minimal risk of detection. Given the stressful situations which military personnel are often placed in, the risk to life and limb that they may face, and the tendency of such personnel to de-humanise their enemies, it seems a near certainty that some types of NLW would be misused by military personnel if they were to be issued to them. This is one final reason to be wary about the use of NLW by military personnel.

36. See, e.g., Amnesty Int'l, *Amnesty International's Concerns about Taser Use: Statement to the U.S. Justice Department Inquiry into Deaths in Custody*, AI Index AMR 51/151/2007 (Oct. 1, 2007), available at <https://www.amnesty.org/download/Documents/60000/amr511512007en.pdf>.

