NON-LETHAL WEAPONS: THE PRINCIPLE OF PROPORTIONALITY IN ARMED CONFLICT AND THE RIGHT TO HEALTH IN LAW ENFORCEMENT

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Summary

If thinking about weapons, one generally thinks about lethal technology. However, an abundance of so-called non-lethal weapons, a technology not aimed at killing but merely incapacitating the human target or military objective, is also being deployed both within and outside the ambit of armed conflict. Since non-lethal weapons do not necessarily implicate a zero chance of mortality, but often lead to severe wounds and tremendous suffering, the use and deployment of such weapons raise strong humanitarian and human rights concerns.

The prohibition to cause superfluous injuries and unnecessary suffering, as well as the prohibition of indiscriminate attacks are, amongst others, one of the most relevant provisions potentially having an influence on the deployment of non-lethal technology in armed conflict. However, the invocation of the principle of proportionality may lead to the justification of the use of non-lethal weapons on the grounds that the military advantage anticipated was greater than the human suffering caused. Insofar; one must ask whether there is a “red-line”; where the almost inflationary invocation of the principle of proportionality may defeat the object and purpose of the Geneva Conventions and therefore render the deployment and use of non-lethal technology illegal.

Apart from the battlefield, non-lethal weapons are also being deployed in law-enforcement scenarios, where human rights law plays a pivotal role. In this regard, one must not look merely at the prohibition of torture and inhuman or degrading suffering and the right to life but also at the right to health, a presumably underestimated principle curbing and shaping the use of non-lethal technology outside the ambit of armed conflict.

Keywords: Humanitarian Law, Human Rights Law, Disarmament.

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I. INTRODUCTION

Usually, people associate weapons with lethal technology being deployed by various actors in different scenarios, such as the military in armed conflict or police officers during law enforcement as a means of last resort. However, a significant number of weapons are used for military and policing purposes, which both academia and practitioners refer to as “non-lethal” or “less-lethal”. Tasers, a conducted electrical device, water cannons and dazzling laser weapons are prominent examples of such “non-lethal” technology. Even though countries promote strongly the deployment of such technology as a more human alternative to lethal force, history has shown that non-lethal weapons do not necessarily implicate a zero chance of mortality. On the contrary, many “non-lethal” weapons have caused death or unnecessary and exceedingly intense suffering, in turn raising strong humanitarian and human rights concerns.

This paper aims at analyzing how Public International Law (PIL) responds to non-lethal weapons, especially with regard to humanitarian law and human rights obligations. Most of all, two specific problems arising with regard to the use of non-lethal weapons will be addressed. First, the role of the principle of proportionality in humanitarian law in case of deployment of non-lethal weapons will be examined. In this regard, it must be noted that many humanitarian provisions, such as the prohibition to cause superfluous injuries or unnecessary suffering or the prohibition of indiscriminate attacks, may be justified by the invocation of the principle of proportionality, especially when it comes to the use of non-lethal technology. This begs the question, whether there are cases where the principle of proportionality cannot be invoked in case of non-lethal weapons deployment. Second, the right to health, which has not been addressed in connection with the deployment of non-lethal weapons extensively so far, will be analyzed with a view to determining the meaning and relevance of the right to health for the deployment of non-lethal technology.

It is noteworthy that authors dealt with non-lethal weapons and PIL before but mainly before and after the year of 2000. Insofar, a more or less unsatisfactory state of legal science can be observed. In the meanwhile, many non-lethal weapons have been developed rising more and new humanitarian and human rights concerns. Furthermore, new treaties entered into force and international courts dealt with different types of weapons in their jurisprudence, most notably the European Court of Human Rights (ECtHR). These developments will have to be taken into consideration in order to find adequate answers to the questions raised before. From a practical perspective, it must be noted that not only non-lethal weapons currently being deployed lead to severe and sometimes long-lasting suffering and human rights violations, but many countries currently invest significant amounts of money in the development of new non-lethal technology. From the perspective of PIL, the risks emanating from these new weapons can only be limited adequately by conducting research in order to find answers to the challenges lying ahead.
Against this backdrop, it is of pivotal importance to analyze the actual status quo of non-lethal weapons from the perspective of both humanitarian and human rights law. The two special topics addressed in this paper shall exemplify the complexity of legal norms encasing non-lethal weapons both in humanitarian and human rights law. Before embarking on details, a short introduction on the development, definition and categorization shall ensure clarity on this subject.

2. DEVELOPMENT, DEFINITION AND CATEGORIZATION OF NON-LETHAL WEAPONS

The concept of non-lethal weapons is not a new phenomenon. On the contrary, the earliest incident of the deployment of non-lethal weapons was the fall of the almost impenetrable wall of Jericho around 1400 BC, when high noises emanated from horns bringing down the wall and exposing the meaningful city.\(^1\) In academic terms, the concept of non-lethal weapons developed in the 1960s,\(^2\) when the first riot control agents were deployed for policing scenarios. At that time, civil disobedience, protests and demonstrations were on the rise putting a strain on public security and safety.\(^3\) From the late 1990s onwards, the United States, one of the biggest producers of non-lethal technology, started to use the term “non-lethal weapon” in their weapons program on a regular basis and many other states followed in doing so. Their aim was to develop, stockpile or transfer weapons, whose primary purpose was not to kill but to merely incapacitate the human target or destroy the military objective. Non-lethal technology should serve as an alternative to lethal force\(^4\) and therefore contribute to the humanization of warfare.\(^5\) On the other side, the use of non-lethal weapons should be enhanced in law enforcement scenarios in order to guarantee security and crowd control on the one hand and avoid escalation of the use of force with a view to adhering to human rights obligations, on the other hand.\(^6\) As a result, significant research on the development of non-lethal technology, on their potential use and health related issues occurring in case of non-lethal weapons deployment, had been conducted by the United States, most notably by the Joint

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Non-Lethal Weapons Program. Other countries followed the same direction by investing vast amounts of money in the development of non-lethal technology, such as Russia, China, Israel, France and South-Africa.\(^7\) The increased deployment of non-lethal technology both in military and policing contexts raised the attention of international lawyers trying to find out how to deal with non-lethal weapons, amongst others, from the perspective of humanitarian and human rights law.

Despite the increased interest in non-lethal weapons, no commonly accepted definition of the term “non-lethal weapon”\(^8\) emerged. In default of an official legal definition, both academia and practice refer to the definition provided for by the United States and the North Atlantic Treaty Organization (NATO) respectively.\(^9\) According to the United States Department of Defense, non-lethal weapons are “[e]xplicitly designed and primarily employed to incapacitate personnel or materiel immediately, while minimizing fatalities, permanent injury to personnel, and undesired damage to property, facilities, materiel, and the environment.”\(^10\)

NATO provides for a similar definition of non-lethal weapons, according to which “[n]on-lethal weapons are weapons which are explicitly designed and developed to incapacitate or repel personnel, with a low probability of fatality or permanent injury, or to disable equipment, with minimal undesired damage or impact on the environment.”\(^11\)

Both definitions indicate that non-lethal weapons can either be deployed against humans or against objects. While so-called anti-personnel non-lethal weapons aim at incapacitating the person targeted, anti-materiel weapons are being used with a view to damaging vehicles or whole facilities, such as power plants.\(^12\) Furthermore, anti-personnel weapons unfold their effects directly but anti-materiel non-lethal weapons cause indirect effects. While exposure to pepper spray, an anti-personnel non-lethal weapon dispersing the chemical agent capsaicin, leads to mucosal irritation, increased lachrymation, tracheal cough, disorientation and even asphyxiation by irritating pain receptors of the nervous system, the M2 vehicle lightweight arresting device net, an anti-materiel weapon rendering vehicles immovable by a net stretching over the vehicle, might endanger the life, health or safety of the car driver himself, fellow passengers or innocent bystanders in case of improper deployment and thus creates indirect effects. Insofar, it is of pivotal importance not only to evaluate the legal implications arising with regard to anti-

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\(^7\) Davison, N., op. cit., p. 35.
\(^9\) Dymond-Bass, A./Corney, N., op. cit., p. 32.
personnel but also with regard to anti-materiel non-lethal weapons. Moreover, these two examples show that despite the rather euphemistic labelling, non-lethal weapons do not entail a zero chance of mortality. On the contrary, even apparently non-lethal weapons may cause severe adverse health effects or even death. When non-lethal rubber bullets were used in Northern Ireland by police officers to shut down turmoil in the 1970s, many people died or were heavily wounded by rubber bullets hitting sensitive body parts, such as the ocular system or the temple. Therefore, even though the term “non-lethal” may indicate the cause of less harm, special attention must be paid to the relevant repercussions on health and the overall wellbeing of each person affected by a non-lethal weapon. Even though some weapons are being clearly designated as “non-lethal”, their effects may be far-reaching. Given the high risks on human health caused by non-lethal technology, several Non-Governmental Organizations (NGOs) and authors stated that the term “non-lethal” is a misleading moniker. Instead, terms like “less-lethal”, “less-than lethal”, “soft-kill”, “sub-lethal” or “pre-lethal”, were prioritized emphasizing the possible dangerous and sometimes even fatal effects of non-lethal technology. Until today, no common agreement has been found which term shall be given preference. While the United States (US) favor the term “non-lethal”, most NGOs prefer “less-than-lethal” or “less-lethal”. However, answering this question is merely interesting on an academic level, but it is not relevant for practical purposes, since all terms aim at describing the same types of weapons. In this paper, the term “non-lethal” will be used since most states, with the US leading the way, refer to “non-lethal” weapons.

More importantly, the vast abundance of non-lethal technology nowadays available has to be addressed adequately. Therefore, non-lethal weapons were divided into different categories based on their relevant effects. According to Fidler, non-lethal weapons may be classified into acoustic, biological, chemical, digital, electrical, electromagnetic, environmental, kinetic, optical and psychological weapons. One of the main reasons for the significant number of different non-lethal weapons available today is that non-lethal weapons are being deployed in many different scenarios. Not only do non-lethal weapons offer support in classical policing scenarios including riot control and law enforcement, but they are also relevant in custodial centers, armed conflict and peacekeeping operations, imposing different requirements on non-lethal weapons and the military commanders using them.

13 Madea, Burkhard, Handbook of Forensic Medicine, West Sussex, Wiley Backwell, 2014, pp. 483 – 484.
3. NON-LETHAL WEAPONS AND PUBLIC INTERNATIONAL LAW

One could argue that the legal provisions applicable to non-lethal weapons are fragmented. There are three different legally binding regimes dealing with non-lethal technology or at least affecting their potential use in different ways. While arms control treaties regulate the use, deployment, stockpiling and transfer of specific types of weapons, humanitarian law does not address specific weapons per se but provides an abundance of general provisions also relevant for the deployment of weapons in armed conflict. Human rights treaties neither address specific weapons explicitly but most documents comprise fundamental rights and values for each human being promoting respect for and adherence of human rights standards by the states and the international community respectively, which, without doubt, have relevance for non-lethal technology. Even though one might argue that non-lethal weapons and PIL are characterized by fragmentation, the ongoing process of further constitutionalization of the world order and the international community

19 However, there is a vast amount of soft-law applicable to non-lethal weapons, such as the Standard Minimum Rules for the Treatment of Prisoners as of 1955, the Code of Conduct for Law Enforcement Officials as of 1979, the Procedure for the Effective Implementation of the Standard Minimum Rules for the Treatment of Prisoners as of 1984, the Basic Principles for the Treatment of Prisoners as of 1990, the Basic Principles on the Use of Force and Firearms as of 1990 and the Standard Minimum Rules for the Treatment of Prisoners – revision process of 2012. ECOSOC Resolution 663 c (XXIV) of 31st of July 1957 and 2076 (LXII), 13th of May 1977; Standard Minimum Rules for the Treatment of Prisoners; General Assembly Resolution 34/169, 17th of December 1979.
as such also affects non-lethal weapons. The three relevant legal regimes are components of one system being highly interconnected and interlinked with each other pursuing the purpose of reducing the suffering of people caused by the use of certain weapons.

3.1. Non-Lethal Weapons and Humanitarian Law

There is an abundance of treaties in the field of humanitarian law and an enumeration and careful analysis thereof would go far beyond the scope of this paper. Attention will be exclusively paid to the Four Geneva Conventions (GC) of 1949 and Additional Protocols (AP) of 1977, most notably AP I, relating to the protection of victims of international armed conflict.

Even though the GC of 1949 and AP I and II do not address certain types of weapons directly, several provisions are relevant for non-lethal technology. The most important principles having relevance for non-lethal weapons are the prohibition of superfluous injuries and unnecessary suffering, the prohibition of indiscriminate attacks and the related principle of distinction, as well as the principle of proportionality and the regulations on combatants hors de combat. It will be shown that the principle of proportionality will pose the most challenges as to the regulation of non-lethal technology and evoke the most significant legal repercussions.

3.1.1. Prohibition of superfluous injuries and unnecessary suffering

The prohibition to cause superfluous injuries or unnecessary suffering is one of the most prominent provisions in humanitarian law.\(^{28}\) Enshrined in Art 35 para 2 AP I GC, the provision prohibits the deployment of weapons, projectiles, material and the application of methods of warfare causing exceedingly intense harm. However, there is no conclusive and all-encompassing answer as to the question which weapons exactly do fall under this provision.\(^{29}\) According to the International Committee of the Red Cross (ICRC), incendiary weapons, blinding laser weapons, anti-personnel mines and biological as well as chemical weapons, have already been cited frequently as weapons causing superfluous injuries and unnecessary suffering by several states. However, state practice is still too inconsistent in order to assume that a general rule developed according to which all of these weapons constitute weapons causing superfluous injuries or unnecessary suffering.\(^{30}\) Furthermore, the mere enumeration of diverse examples of weapons that fall under the category of Art 35 para 2 AP I,\(^{31}\) does not give an answer if non-lethal weapons are affected by the prohibition to cause superfluous injuries or unnecessary suffering. In this regard, the ICRC’s opinion on Art 35 para 2 AP I and the Commentary on AP I need to be analyzed more closely. According to the ICRC, in order to determine whether a weapon violates the prohibition to cause superfluous injuries or unnecessary suffering, the effects of a weapon need to be taken into consideration, not the intent of the producer or user.\(^{32}\) This could mean, that non-lethal weapons whose effects are comparable to those of lethal weapons already violating Art 35 para 2 AP I,\(^{33}\) are infringing upon the prohibition to cause superfluous injuries or unnecessary suffering, such as biological and chemical weapons.\(^{34}\) The idea of referring to existing arms control treaties in order to evaluate which (non-lethal) weapons constitute weapons causing superfluous injuries or unnecessary suffering

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33 It must be borne in mind that state practice is very inconsistent as to which weapons definitely violate Art 35 para 2 AP I. See Henckaerts, J.M., Doswald-Beck, L., op. cit., p. 273. However, there are reasonable arguments to conclude that the strong condemnation of certain types of weapons, such as chemical weapons and public outcry in case of their deployment constitute weapons causing superfluous injuries or unnecessary suffering. Rehman, Javaid, International Human Rights Law, Edinburgh, Longman Publishers, 2010, p. 790.
is supported by Art 31 para 3 lit c VCLT, which reads as follows: “[t]here shall be taken into account, together with the context (…) any relevant rules of international law applicable in the relations between the parties.” The provision of Art 31 reflects the ongoing process of constitutionalization in PIL by taking a systemic approach in treaty interpretation. Art 31 clearly considers PIL as a common legal system where legal regimes are interconnected and complement each other. As early as in Wimbledon, the Permanent Court of International Justice (PCIJ) held that treaties must be interpreted by referring to other treaties having the same object and purpose. Hays rejects the idea of referring to arms control treaties in order to further interpret Art 35 para 2 AP I on the grounds, that arms control treaties and the prohibition to cause superfluous injuries or unnecessary suffering do not have the same object and purpose in common. While arms control treaties have, as their purpose, the prohibition of certain types of weapons, AP I pursues the protection of civilians in warfare in general. This argument can be countered by referring to the commentary of the VCLT, which states that Art 31 para 3 lit c VCLT “[m]ust be taken to refer to all recognized sources of international law the emanations of which can in principle be of assistance in the process of interpretation.” The word in principle indicates that relevant treaties serving as a helpful means of interpretation must not necessarily pursue an identical object and purpose, but the overall similarities have to be taken into account. The only case where an identical object and purpose is required to fill a regulatory gap is the invocation of analogy. It could be argued that arms control treaties may be used in order to interpret Art 35 para 2 AP I per analogiam. In this regard, it has to be taken into consideration that analogy in PIL may be applied only exceptionally requiring that the states parties concerned agreed on the analogous application of treaties in order to fill regulatory gaps. In this case, a more or less identical object and purpose would indeed be required.

However, one must not resort to analogy if better instruments, such as the systemic interpretation according to Art 31 para 3 lit c VCLT, are available requiring merely that the relevant treaty in principle is of assistance in the process of interpretation.

In light of the aforementioned it could be argued that in applying a systemic interpretation, non-lethal weapons already covered by arms control treaties or whose effects are comparable to those regulated by arms control treaties, at the same time constitute weapons which cause superfluous injuries or unnecessary suffering.

However, generally Art 35 para 2 AP I may be justified by the principle of proportionality, a doctrine most widely known in humanitarian law by requiring

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37 PCIJ, Case of the S.S. Wimbledon, 17th of August 1923, PCIJ Reports 1923, pp. 23 – 25.
38 Parks, H., op. cit., p. 86 – 87
states to strike a balance between the injuries caused to civilians and the concrete military advantage anticipated. In case of non-lethal weapons deployment, the invocation of this principle will in almost all scenarios lead to the fact that a weapon is not deemed to cause superfluous injuries or unnecessary suffering because it was proportionate in relation to the military advantage anticipated. However, there are arguments to assume that the principle of proportionality cannot be invoked without limits if the invocation may lead to the complete erosion of Art 35 para 2 AP I and contradict the object and purpose of AP I GC as a whole. In other words, it could be argued that Art 35 para 2 AP I consists of an incontestable nucleus which cannot be derogated from by the invocation of the principle of proportionality. Without doubt, one of the main objects and purposes of the GC and AP I is to guarantee the utmost protection of civilians in armed conflict. In order to better understand the object and purpose of AP I GC, one must have a closer look at Art 31 para 3 lit c VCLT, again. The provision stipulates that in order to interpret treaty provisions, other relevant treaties may be taken into account. In case of AP I GC, arms control treaties may serve as a source of interpretation. Arms control treaties pursue, as their overall purpose, the mitigation of suffering caused by weapons in armed conflict. For example, the Anti-Personnel Mine Ban Convention pursues, as its purpose, “to put an end to the suffering and casualties caused by anti-personnel mines” whereas the Chemical Weapons Convention has as its object and purpose the elimination of chemical weapons and the prohibition of their deployment, which arguably implies that suffering caused from such weapons shall be mitigated in order to protect civilians. As regards the Conventional Weapons Convention, it could be argued that its purpose is to protect civilians from intense and exceedingly injurious suffering. Referring to arms control treaties in order to locate the immutable and incontrovertible core of Art 35 para 2 AP I, where the invocation of the principle of proportionality would clearly contradict the object and purpose of the GC as a whole, does not necessitate that the relevant treaties have, as their object and purpose, the

42 The wording of the International Court of Justice (ICJ) in its Nuclear Weapons Advisory Opinion reiterates the principle of proportionality in stating that superfluous injuries or unnecessary suffering is “harm greater than the unavoidable to achieve legitimate military objectives”, ICJ, Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 8th of July 1996, ICJ Reports 1996, p. 226.
43 Fidler, D., The International Legal Implications of “Non-Lethal Weapons“, cit., p. 44.
44 Art 31 para 1 VCLT.
46 Ibid.
mitigation of the suffering caused by weapons leading to *superfluous injuries* and *unnecessary suffering*. The overall object and purpose of arms control treaties as to protect civilians from suffering in general arguably suffices in order to refer to such treaties when interpreting Art 35 para 2 AP I.\(^{50}\) Therefore, the invocation of the principle of proportionality in a scenario where non-lethal weapons were deployed already covered by existing arms control treaties (which, by the way, in their treaty texts do not allow for a justification by the application of a proportionality test), may defeat the very purpose of the AP I itself.\(^{51}\) Insofar, non-lethal weapons covered by arms control treaties (such as riot control agents and non-lethal anti-personnel mines) are weapons causing superfluous injuries and unnecessary suffering and must not be justified by the invocation of the principle of proportionality.

### 3.1.2. Prohibition of indiscriminate attacks

Another principle of humanitarian law relevant for non-lethal weapons is the prohibition of indiscriminate attacks, which has to be read in context with the principle of distinction.\(^{52}\) Parties to a conflict must, within their attacks, differentiate clearly between civilians and combatants and civilian objects and military objectives.\(^{53}\) In the same direction argues Art 51 para 4 AP I GC prohibiting attacks which cannot be directed at a military objective or a combatant.\(^{54}\) It could be argued, for example, that the Long-Range Acoustic Device (LRAD), an acoustic weapon emitting shrill noises aimed at dispersing crowds of people used in armed conflict, contradicts the prohibition of indiscriminate attacks, since the weapon cannot be used in such a way as to distinguish between civilians and combatants properly.\(^{55}\) Indeed, LRAD has a certain reach but within this reach, no differentiation can be made between civilians and combatants.\(^{56}\)

As in the case of the prohibition to cause superfluous injuries or unnecessary suffering, the principle of proportionality must be taken into consideration.\(^{57}\) However, whereas Art 35 AP I itself does not entail a “proportionality-test”, Art 51 para 5 lit b states clearly that the principle of proportionality needs to be taken into account: “[a]n attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage

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\(^{50}\) Dörr O./Schmalenbach K., op. cit., p. 561.

\(^{51}\) With critical remarks see Parks, H., op. cit., pp. 86 – 87.


\(^{53}\) Casey-Maslen, Stuart/Weill Sharon, The Use of Weapons in Armed Conflict, cit., p. 262.


\(^{55}\) Davison, N., op. cit., p. 196.

\(^{56}\) Dymond-Bass, A./Corney, N, op. cit., p. 42.

\(^{57}\) With critical remarks see Crowe, J./Weston-Scheuber, K., op. cit., p. 59.
anticipated.” With regard to non-lethal weapons, the invocation of the principle of proportionality might relatively often lead to the fact that the prohibition of indiscriminate attacks is not being violated.\(^{58}\) Thus, the question rises, whether humanitarian law allows for the invocation of the principle of proportionality in all cases or whether there is a “red line”, which must not be trespassed. Formulated differently: In which scenarios military necessity cannot justify the deployment of indiscriminate non-lethal weapons?

In order to answer this question, one must look at human rights law, most notably the prohibition of torture or inhuman and degrading treatment.\(^{59}\) This principle applies in all circumstances, that is to say, within and outside the ambit of armed conflict.\(^{60}\) It requires that states abstain from any measures that could lead to the torture, inhuman or degrading treatment of individual persons or the whole population. Nowadays, the prohibition of torture is being considered *ius cogens*,\(^{61}\) a right which cannot be derogated from.\(^{62}\) It applies in any circumstances, independent whether states have ratified relevant international conventions, such as the UN-Convention against Torture\(^{63}\), or not.\(^{64}\) Thus, there is a “red line”, according to which military necessity cannot justify the deployment of indiscriminate weapons. Without doubt, the prohibition of torture marks the “red line”, where military commanders have to abstain from using certain types of weapons. According to Art 53 VCLT, a treaty is void if it conflicts with a peremptory norm of PIL. Even though AP I itself does not *per se* conflict with a norm of *ius cogens*, the relationship between the principle of proportionality and the prohibition of indiscriminate attacks has to be interpreted in such a way as it is compatible with existing peremptory norms of international law.\(^{65}\)

However, this leaves the question unanswered, what kind of weapons amount to torture, especially when it comes non-lethal weapons and armed conflict. Generally it can be observed, that the duration and intensity of exposure to a weapon plays a fundamental role in assessing whether the deployment of certain non-lethal weapons constitutes torture or inhuman or degrading treatment.\(^{66}\) In the end, a case-by-case assessment will be necessary evaluating in each situation, whether or not the prohibition of torture, inhuman or degrading treatment has been violated.

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58 Fidler, D., The International Legal Implications, cit., p. 83 – 84.
63 United Nations Convention Against Torture and Other Degrading or Inhuman Treatment, 10th of December 1984, UNTS vol. 1465 no. 24841.
The shutting down of electricity plants by non-lethal anti-materiel indiscriminate weapons leading to starvation, pain and death has been considered as amounting to torture, for example.67

In light of the aforementioned one can conclude that not only the principle of proportionality influences significantly the prohibition to cause unnecessary suffering and superfluous injuries but also the prohibition of indiscriminate attacks. In this regard, Art 53 VCLT requires that the prohibition of torture, inhuman or degrading treatment, a peremptory norm of PIL, is being taken into account constituting the “red line”, where military necessity cannot justify the deployment of indiscriminate (non-lethal) weapons.

3.1.3. Persons Hors de Combat

According to Art 41 AP I GC persons hors de combat must not be attacked. This provision constitutes one of the most important provisions in humanitarian law limiting and curbing the use of non-lethal weapons.68

In this regard, it is noteworthy that a significant number of non-lethal weapons were used by military commanders with the aim to enhance the effectivity of lethal weapons. For example, a dazzle grenade aimed at causing temporary blindness, may be used with a view to incapacitating combatants which then can be shot without causing higher risks to the own military division. Such behavior clearly contradicts Art 41 AP I GC but has occurred many times in international and non-international armed conflict. In case an enemy combatant has been incapacitated by the use of non-lethal technology, the armed forces having deployed such weapons must undertake anything to take care of the person injured.69 Insofar, the deployment of non-lethal weapons is being heavily restrained by the use of non-lethal technology, the armed forces having deployed such weapons must undertake anything to take care of the person injured.69 Insofar, the deployment of non-lethal weapons is being heavily restrained by the use of non-lethal technology, the armed forces having deployed such weapons must undertake anything to take care of the person injured.69 Insofar, the deployment of non-lethal weapons is being heavily restrained by the use of non-lethal technology, the armed forces having deployed such weapons must undertake anything to take care of the person injured.69 Insofar, the deployment of non-lethal weapons is being heavily restrained by the use of non-lethal technology, the armed forces having deployed such 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68 Fidler, D., The International Legal Implications, cit., p. 85.
3.2. Non-Lethal Weapons and the Right to Health

Apart from humanitarian provisions, human rights also curb and restrain the use of non-lethal weapons. While humanitarian provisions apply in armed conflict only, human rights may be referred to within and outside the ambit of armed conflict. In addition to that, most human rights treaties already reflect customary law binding not only states, which ratified or acceded to international human rights treaties but the international community as such. This paper will focus on health related issues and the deployment of non-lethal weapons. The right to health constitutes one of the most complex human rights being interlinked with several other obligations, such as the right to freedom from torture and the right to life.

“Health” can be understood adequately if taking a holistic approach encompassing all human needs, starting from access to water, food, sexuality and physical integrity. “The right to health” could be relevant for the deployment of non-lethal weapons in various contexts. First, the right to health enshrines physical integrity obligating states parties to abstain from any active measures jeopardizing that principle. Second, the right to health enshrines the obligation to guarantee adequate medical standards in hospitals to treat injuries caused by non-lethal weapons rendering it necessary to actively undertake measures in order to guarantee such medical conditions. However, the right to health, as any other human right, except for those constituting ius cogens, is not absolute. Restrictions on the full attainment of the right to health are possible if certain criteria are met, such as necessity and proportionality, as in the case of law enforcement. Furthermore, treaty provisions may be derogated from in case of public emergency. No existing treaty entailing a provision on the right to health spares the right from a possible derogation.

71 ICJ, Legality of the use of Nuclear Weapons, Advisory Opinion, 8th of July 1996.
73 With critical remarks see Holning, Lau, Rethinking the Persistent Objector Doctrine in International Human Rights Law, Chicago Journal of International Law, vol. 6, 1/2005, p. 510.
The first document mentioning the right to health was the Universal Declaration of Human Rights as of 1948 stressing in its Art 25 that “everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.”\(^7\) In the preamble of its constitution the WHO adopts a much broader approach by stating that “health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”\(^7\) In 1966, the right to health was introduced into the International Covenant on Economic, Social and Cultural Rights\(^8\) stressing in its Art 12 that “[T]he States Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.” Since the adoption of the 1966 pact, several institutions have expressed concern over the use of non-lethal weapons in a health related context.\(^8\) In 2002, the UN Special Rapporteur on Torture warned against non-lethal effects and their adverse but still under-researched health effects by stating that “chemical agents, such as teargas/irritant munition and pepper spray weapons, are said to be promoted as providing effective control without the risk to life, i.e. as ‘humane alternatives’ to lethal force. However, according to information received, insufficient research has been undertaken into their potential effects on targeted persons”.\(^8\) Even though the Special Rapporteur’s mandate is to investigate incidents potentially inflicting torture or inhuman or degrading treatment, he examines health-related issues in context of non-lethal weapons. In 2006, the UN Special Rapporteur on the right to everyone to the enjoyment of the highest attainable standard of physical and mental health criticized harshly the conduct of force-feeding and drug injections on inmates. From a broad point of view, such measures could be equated with non-lethal weapons, being used with almost the same intention and causing similar adverse health effects, such as vomiting, nausea and disorientation.\(^8\) The Rapporteur clarified that the right to health was violated when detainees were force-fed or injected with drugs. His reasoning indicates that not only states must guarantee sufficient hygienic conditions and adequate medical treatment but also have to abstain from measures causing adverse and non-consensual health effects on detainees in confined spaces.\(^8\)

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13. Provided that these “adverse health” effects were not absolutely necessary in the concrete situation of exposure. This was clearly not the case when people were force-fed or injected with drugs.
Apart from these general considerations, a right to health in the context of non-lethal weapons has not been addressed at the UN level so far. However, the situation is quite different at the regional level. At the outset, it must be noted that neither the European Convention of Human Rights nor the Fundamental Rights Charter provide for an own right to health. Instead, the ECHR refers to the right to life and the right to freedom from torture, the prohibition of slavery and forced labor, as well as the right to freedom and security. However, given the significant interconnectedness of the right to health, all these rights could potentially affect health issues. Interestingly, the fact that the court takes into consideration health-related issues with regard to Art 2, 3, 8 and 14 of the ECHR is not a new phenomenon. A compound of case law exists, showing in which way the court examined health-related issues in different contexts. Furthermore, several court decisions exist, which are also relevant for the deployment of non-lethal weapons and health related issues. In 2010, the ECtHR emphasized the severe health effects caused by the use of mustard gas to humans. In the case concerned, the applicant claimed an infringement of Art 6 and 7 of the ECHR vis-à-vis his home state, the Netherlands. Even though the ECHR does not provide explicitly for a right to health, the ECtHR seized the opportunity to clarify the adverse health effects of chemical weapons. Indeed, the court did not refer to non-lethal weapons but the reference to health issues indicates that health is a concern for the court when interpreting other rights and obligations. In 2014, the ECtHR dealt with the use of TASER-weapons, a non-lethal conducted electrical device discharging electrical darts at humans causing incapacitation and immediate muscular paralysis. The court did not endorse a right to health per se but it stressed the severe pain caused by such technology. In the case concerned, the court saw a violation of Art 3 ECHR but it is obvious that health-related issues contributed to the interpretation of Art 3 in the present case. In another judgement, the ECtHR examined the legality of the use of pepper spray in custodial centers where inmates reportedly died because of prolonged exposure to CS Spray. The court stressed that the use of pepper spray, especially in confined spaces, such as custodial centers, poses an imminent risk to health and overall well-being capable of causing nausea, vomiting, and respiratory problems. Even though the court has not addressed non-lethal weapons in a health-

85 Crowley, M. op. cit., p. 371.
89 ECtHR, Van Anraat vs. the Netherlands, 6th of July 2010 Application No. 65389/09, p.6.
90 ECtHR, Georgiev and others vs. Bulgaria, European Court of Human Rights, 30th of December 2014, Application No. 51284/09, § 32.
91 ECtHR, Tali vs. Estonia, European Court of Human Rights, 13th of May 2014, Application No. 66393/10, § 75 – 76.
related context intensively so far, the abovementioned court decisions indicate, that the right to health and non-lethal technology will become more and more relevant, despite the fact that the ECHR does not provide for an own right to health.92

Health related issues in connection with the deployment of non-lethal weapons have not only been addressed by the ECtHR but also by the European Committee for the Prevention of Torture. In 1994, the committee paid several visits to European custodial centers. After a visit to a Spanish prison, the Committee disclosed a report criticizing strongly the deployment of non-lethal electronic shock devices in several custodial centers.93 In its report issued to the Spanish Government, the CPT not only referred to obvious allegations of torture and ill-treatment but it also elaborated the various adverse health effects correlating with ill-treatment and torture by providing medical information and findings.94 Insofar, even though the Committee itself deals exclusively with torture-related offences, health related issues undoubtedly plaid a role in its assessment.95

Furthermore, analyzing the right to health in relation to non-lethal weapons necessitates having a closer look at the FRC. Unlike the ECHR, the FRC provides for an own right to health. Looking at Art 35 more closely unveils that the article might not be applicable to non-lethal weapons if one applies a systematic interpretation of the FRC.96 The Art is located in chapter IV referring to solidarity. The term “solidarity” indicates that rights enshrined in this chapter primarily deal with socio-political aspects.97 The use of weapons, on the other side, touches upon human dignity, the first chapter of the FRC. Insofar, the rights potentially dealing with health-related issues are the same rights that come into play at the level of the ECHR: the right to life, freedom from torture and other inhuman or degrading treatment.

In light of the aforementioned it can be concluded, that health related issues play a pivotal role when it comes to the protection of human rights and non-lethal weapons deployment. Whereas universal institutions are rather reserved when it comes to health-related issues and weapon technology, several regional institutions, most notably the ECtHR, approve that non-lethal weapons, human rights and health are imperatively connected.

92 Crowley, M., op. cit., pp. 374 – 375.
93 Spain, Visit 1994, CPT/Inf, 96/9, 21st of September 1994, Facts Found During the Visit and Action Proposed
94 Report to the Spanish Government on the visit to Spain carried out by the European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT).
95 Crowley, M., op. cit., p. 344.
96 Art 31 VCLT.
4. CONCLUSION

The importance of non-lethal weapons increases steadily. Whether in armed conflict, in case of riot control or in custodial centers, non-lethal weapons constitute an alternative to lethal force. However, those weapons by no means indicate a zero chance of mortality and therefore raise strong humanitarian and human rights concerns. As regards humanitarian law, it can be concluded that provisions, such as the prohibition to cause superfluous injuries or unnecessary suffering, may be eroded easily by the invocation of the principle of proportionality. In almost all scenarios, where non-lethal weapons come to use, the deployment of such technology may be justified on the grounds that military necessity was given in a certain situation weighing more than the human suffering caused. However, the invocation of the principle of proportionality begs the question, whether there should be a “red line”, where the principle must not be referred to because it would clearly contradict the object and purpose of the GC. Taking into consideration existing arms control treaties and applying a systemic interpretation according to Art 31 para 2 lit c VCLT, it could be argued that arms control treaties absolutely condemning certain weapons, are at the same time weapons causing unnecessary suffering and superfluous injuries, where the invocation of the principle of proportionality would defeat the very purpose of the GC. According to international law, most notably the VCLT, it is not necessary that arms control treaties explicitly condemn weapons causing unnecessary suffering or superfluous injuries. Arms control treaties as such pursue the same overall purpose of protecting civilians in armed conflict as the GC. Insofar, arms control treaties may be referred to in order to perceive the “red line”, where the principle of proportionality must not be invoked anymore. When it comes to the prohibition of indiscriminate attacks, it can be concluded that the principle of proportionality cannot be invoked in all scenarios. Especially the prohibition of torture, inhuman or degrading treatment, a principle constituting a peremptory norm of PIL, must be taken into account. In case of conflict with this principle, legal provisions contradicting or infringing upon the prohibition of torture, degrading or inhuman treatment are void and cannot be invoked. A case-by-case assessment will have to be conducted in order to evaluate, which weapons would violate the prohibition of torture, inhuman or degrading treatment.

As regards human rights, it must be noted that the right to health has not been addressed by authors in a non-lethal context so far. However, especially the recent jurisprudence by the ECtHR reveals that health-related issues play an ever important role when it comes to the protection of human rights. Even though the ECHR does not enshrine an own “right to health”, health has influenced the interpretation of other human rights, most notably the prohibition of torture and inhuman or degrading treatment. This is of particular importance for non-lethal weapons. States’ increasing interest in non-lethal technology necessitates addressing these issues carefully. Even though not all problems can be solved by analyzing non-lethal weapons from the perspective of PIL, it contributes significantly to the protection of humans, both within and outside the ambit of armed conflict.
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Sažetak

NESMRTTONOSNO ORUŽJE: NAČELO RAZMJERNOSTI U ORUŽANOM SUKOBU I PRAVO NA ZDRAVLJE U POLICIJSKIM POSTUPANJIMA

Kada se govori o oružju, obično se pod njime podrazumijeva primjena smrtonosne tehnologije. S druge strane, u i izvan oružanih sukoba, često se koristi i tzv. nesmrtonosno oružje, kojemu svrha nije ubijanje, već oneposobljavanje pojedinaca ili vojnih ciljeva. Budući da nesmrtonosno oružje ne mora nužno uzrokovati smrt, ali uzrokuje ozbiljna ranjavanja i velike patnje, korištenje takvih sredstava otvara brojna humanitarna pitanja i pitanja zaštite ljudskih prava.

Zabrana uzrokovanja suvišnih ozljeda i nepotrebne patnje, kao i zabrana neselektivnih napada su jedne od najznačajnijih zabrana u međunarodnom ratnom pravu, a koje se mogu primijeniti i na korištenje nesmrtonosnog oružja u oružanom sukobu. Međutim, primjena načela razmjernosti može dovesti do opravdavanja korištenja nesmrtonosnog oružja. To se opravdava očekivanim prednostima njegove primjene u oružanom sukobu, koje pretežu u odnosu na uzrokovane ljudske patnje. Stoga se postavlja pitanje postoji li „crvena linija“ njegove primjene. Učestalo pozivanje na primjenu načela razmjernosti može poništiti cilj i svrhu Ženevskih konvencija te dovesti do opravdavanja nezakonitog korištenja nesmrtonosnog oružja.

Osim u oružanim sukobima, nesmrtonosno se oružje može koristiti i u policijanskim postupanjima. U tim slučajevima osobito značenje ima zaštita ljudskih prava. Pri tomu se u obzir ne smije uzeti samo zabrana mučenja i uzrokovanja nečovječnih ili ponižavajućih patnji te pravo na život, već i pravo na zdravlje. Pravo na zdravlje ograničava i postavlja granice uporabe nesmrtonosnog oružja izvan okvira oružanog sukoba.

Ključne riječi: humanitarno pravo, zaštita ljudskih prava, razoružanje.

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Zusammenfassung

NICHT TÖDLICHE WAFFEN:
PROPORTIONALITÄTSGRUNDSATZ IM BEWAFFNETEN KONFLIKT UND RECHT AUF GESUNDHEIT BEI DER RECHTSDURCHSETZUNG

Wenn man an Waffen denkt, denkt man für gewöhnlich an ihre letale Technologie. Heutzutage aber wird eine Fülle nicht tödlicher Waffen, welche eine Person oder ein militärisches Ziel kampfunfähig machen aber sie nicht töten sollten, sowohl innerhalb als auch außerhalb des Rahmens eines bewaffneten Konfliktes benutzt. Da der Einsatz nicht tödlicher Waffen trotzdem tödliche Konsequenzen haben kann und oft zu schweren Wunden oder zu unnötigem Leiden führt, ruft die Verwendung solcher Waffen große Sorgen im Bereich des humanitären Völkerrechtes und der Menschenrechte hervor.


Schlüsselwörter: humanitäres Völkerrecht, Menschenrechte, Abrüstung.
Riassunto

ARMI NON LETALI: IL PRINCIPIO DI PROPORZIONALITÀ NEI CONFLITTI ARMATI ED IL DIRITTO ALLA SALUTE NELL’USO DELLE FORZE DELL’ORDINE

Solitamente quando si pensa alle armi, si pensa a tecnologie belliche letali. Tuttavia, un’abbondante quantità di c.d. armi non letali derivanti dallo sviluppo di tecnologie non volte all’uccisione, bensì alla mera neutralizzazione di obiettivi umani od obiettivi militari, viene dispiegata nel contesto di conflitti armati, come anche al di fuori degli stessi. Posto che le armi non letali non implicano necessariamente una chance pari a zero di mortalità, bensì spesso comportano ferite gravi e sofferenze atroci, l’uso ed il dispiego di tali armi provoca serie preoccupazioni sul piano umanitario e dei diritti umani.

Il divieto di causare ferite inutili e sofferenze non necessarie, come pure il divieto di attacchi indiscriminati rappresentano, tra le molte, le disposizioni più rilevanti che potenzialmente potrebbero sortire un’influenza sul dispiego delle armi da tecnologie non letali nei conflitti armati. Pernoto, il richiamo al principio di proporzionalità può indurre alla giustificazione dell’uso di armi non letali sulla base della motivazione che il vantaggio militare realizzato sia maggiore rispetto alla sofferenza umana causata. Benché uno debba interrogarsi se ci sia una “linea rossa”, come pure dove l’inflazionato richiamo al principio di proporzionalità possa battere l’oggetto ed il fine delle Convenzioni di Ginevra e per l’effetto rendere il dispiego e l’uso della tecnologia non letale illegale.

Lasciando in disparte il campo di battaglia, le armi non letali vengono altresì dispiegate in interventi delle forze dell’ordine, dove i diritti umani hanno un ruolo predominante. A tale proposito, non si deve guardare esclusivamente al divieto di torture e di sofferenze inumane o degradanti rispetto al diritto alla vita, bensì anche al diritto alla salute, e cioè un diritto presumibilmente sottostimato forgiante e formativo dell’uso di tecnologie non letali fuori dall’ambito dei conflitti armati.

Parole chiave: diritto umanitario, diritti umani, Disarmamento.