Non-International Armed Conflicts And New Technologies: Reconceptualizing The Intensity Criterion

*Giulia Baj**
PhD in International Law
ORCID 0000-0002-6231-9805

DOI: 10.54103/milanoup.215.c446

Abstract

Technological developments affect every aspect of human life, warfare included, suffices to recall the emergence of the so-called cyber-attacks, unmanned robots, autonomous weapon systems. Consequently, new technologies affect international humanitarian law (IHL) as well. Among the various legal questions arisen by the introduction of new technologies in warfare, their impact on the criterion of intensity required for the classification of a situation as a non-international armed conflict (NIAC) is here assessed. How is the reaching of such a threshold measured, when new weapons are more and more precise? How should this criterion be evaluated, in cases in which there are not casualties – both military and civilians – at all, a situation that may happen in case of cyber-attacks? This problem is conceptually and practically relevant, as a NIAC exists only when the criterion of intensity – together with the criterion of organization – is reached, thus allowing the application of IHL. The development of the criterion of intensity is first assessed, resorting to conventional rules interpreted under the rules of the Vienna Convention on the Law of Treaties and international case law, of the International Criminal Tribunal for the Former Yugoslavia (ICTY) in particular. After this initial assessment, the work of reconceptualization of the criterion of intensity is conducted, submitting an approach based on the protection of human rights. This approach would allow a reconceptualization of the criterion of intensity, in view of the new technological weapons, which complies with the scope of the rules of IHL and is consistent with the development of international law on a more general level.

---

* The views expressed in this publication are solely those of the author and do not represent the positions of any institutions or organizations they have been affiliated with.

Keywords

International Humanitarian Law, Armed Non State Actors, Non International Armed Conflicts, Intensity Criterion, Organization Criterion, Cyber Warfare, Unmanned Weapons

1. Introduction

The evolution of technology affects every aspect of human life, warfare included. In recent years, we have witnessed significant evolutions in this regard, from the usage of more or less sophisticated weaponized robots to the resort to cyber-attacks. These developments have had, and are having, significant impacts on many aspects of International Humanitarian Law (IHL). Among the several emerging issues, the impact of new weapons on the intensity criterion required for the identification of non-international armed conflicts (NIACs[1]), which are those armed conflict that involve at least one non state armed group (NSAG), is here assessed. Indeed, the topic is interesting for several reasons, relating both to the particular method of identification of NIACs, and to the peculiar characteristics of this type of armed conflicts. In addition, given the widespread diffusion of NSAGs and NIACs,[2] the topic appears particularly significant in the present international scenario.

Regarding the issue of the identification, there exists a peculiar method to assess the existence of a NIAC; in fact, the latter must be tested on two criteria, namely the level of organization of the NSAG and the level of intensity of the armed violence.[3] In other words, a situation of armed violence amounts to a NIAC – thus leads to the application of IHL – only if it reaches the required minimum thresholds of organization and intensity. Given this, with specific reference to the intensity criterion, the identification of a NIAC, and the consequent application of IHL, may be severely affected by the development of technologically advanced means of warfare. The issue may become more and more relevant, as the usage of technologically advanced devices in armed conflicts will become more and more common.[4]

1 The term NIACs is here used to refer to protracted armed confrontations occurring between governmental armed forces and the forces of one or more armed groups, or between such groups arising on the territory of a State party to the Geneva Conventions, following the definition provided by the International Committee of the Red Cross (ICRC). See ICRC, 'How Is the Term "Armed Conflict" Defined in International Humanitarian Law?' (ICRC 2008).

2 See, eg, Geneva Academy of International Humanitarian Law and Human Rights, 'Today's Armed Conflicts' <https://geneva- academy.ch/galleries/today-s-armed-conflicts> accessed 29 March 2023.

3 The other one is the level of organization of the NSAGs.

4 For instance, the UN Open-ended working group on developments in the field of information and telecommunications in the context of international security, in its 2021 Final

Second, NIACs have at least one unique feature: they always involve at least one NSAG. This element cannot be ignored, as NSAGs present peculiar characteristics; they often do not have the monetary resources of States, nor the organization and training capabilities of the latter. Given all this, it appears that some types of new weapons and ways of conducting warfare will be more and more frequently used by NSAGs. In particular, drones and cyber-attacks may acquire a more and more relevant role in warfare for NSAGs. Indeed, the former are becoming easy to get and use, as well as cheaper and cheaper; this is particularly true in regard to repurposed, weaponized civilian drones. In addition, cyber-attacks may be conducted also by individuals located in different areas. Given that NSAGs often do not have ample resources and are frequently composed by people coming from different areas, the characteristics of drones and cyber-attacks may appear particularly appealing for NSAGs. On the other hand, the military forces of States may have access to sophisticated, technologically advanced weapons, such as drones specifically created for warfare activities. Moreover, given the ample diffusion of ICTs, they may have specific units dedicated to cyber activities. Despite being deeply different, these means of warfare share a common feature: they are all capable of producing not very intense attacks. Consequently, their usage may affect the concept of intensity, as it has been developed up until now.

These issues may have significant practical impacts. Indeed, the existence of an armed conflict (both international and non-international) leads to the application of a specific set of rules, namely the rules of IHL. This is true for armed conflicts conducted resorting to technologically advanced means of warfare as well.[5] This is particularly relevant, as the IHL legal framework establishes peculiar rules, which may deeply differ from the rules applicable in peacetime. For instance, the regulation provided in case of detention may deeply vary, depending on whether the detention takes place in peacetime or during an armed conflict towards members of the armed forces of the enemy; in fact, in this

substantive record, affirmed that the use of ICTs, both by States and NSAGs, is becoming more likely. Open-ended working group on developments and in the field of information and telecommunications in the context of international security, 'Final Substantive Report' (10 March 2021) A/AC.290/2021/CRP.2.

5 Several position papers submitted by States affirm that international law, IHL included, applies to the cybernetic field and that no specific legal framework is needed. See, eg, Italian Ministry for Foreign Affairs and International Cooperation, 'Italian Position Paper on "International Law and Cyberspace"' (2021). Coherently, r 20 of the Tallinn Manual 2.0 states that '[c]yber operations executed in the context of an armed conflict are subject to the law of armed conflict'. Michael N Schmitt (ed), *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* (CUP 2017) r 20. Even though it is not binding, the Tallinn Manual is a scholarly work of collection and explanation of the rules applicable to cyberwarfare, conducted with the involvement of States and based on the practice, official statements and activities of States, academic research, and multi-stakeholders' initiatives. Hence, despite its non-binding nature, it is a significant instrument to assess the rules applicable in this type of warfare.

second hypothesis the IHL legal framework shall apply.[6] IHL sets specific rules for NIACs as well, thus their identification as equally relevant as the identification of international armed conflicts.
To assess the impact of new warfare technologies on the criterion of intensity, necessary for the existence of a NIAC, a brief overview of the characteristics of the new weapons is conducted. Since NSAGs are a necessary party of NIACs, this assessment focuses on drones and cyber-attacks, which may become the weapons of choice of NSAGs. Particular attention is paid to the limited intensity of the attacks conducted with new means of warfare.
Then, the concept of intensity under IHL is assessed. To do so, the most relevant international provisions are examined and interpreted also resorting to the *travaux préparatoires*, as well as the most important case law on the matter at issue. Last, several theories on the reconceptualization of the intensity criterion considering the latest developments are presented. In this sense, it appears that a return to the original aims of IHL, with a stronger consideration of the protection of human dignity and human rights, may be the best option. However, the evolution of warfare presents several other problems in the application of IHL. Consequently, the call for a wider reconceptualization of IHL taking into consideration the wider role gained by international law of human rights (IHRL) is finally made.

2. State of the art weapons, repurposed devices and current warfare in NIACs

It is a truism that the use of the latest technology in warfare is not a novelty. To mention just one example, dozens of world-renowned scientists, coming from all over the world, took part in the research on atomic energy that led to the production of the atomic bombs, used during the Second World War (WWII)[7]. Present day is no different: new technologies are used for warfare activities. However, current technological developments in the field present original aspects, which may affect the concept of intensity as required element for the existence of a NIAC. Considering technological innovations regarding both the weapons and warfare activities most often accessible to NSAGs and those available to States, it is important to highlight that, despite being deeply different, they may cause only minimal, if any, losses. Some types of unmanned

6 See, in particular, Geneva Convention III Relative to the Treatment of the Prisoners of War (adopted 12 August 1949, entered into force 21 October 1950) 75 UNTS 135.

7 See, eg, Henry De Wolf Smyth, *Atomic Energy for Military Purposes: The Official Report of the Development of the Atomic Bomb under the Auspices of the United States Government, 1940-1945* (2nd edn, Stanford University Press 1989).

vehicles, as well as cyber-activities, constitute a good example of this type of weapons.

Unmanned vehicles, especially but not only aerial ones[8] (unmanned aerial vehicles will be called drones hereinafter[9]), have been used for military purposes for decades. Today, however, we assist to a two-pronged evolution, ultimately caused by a single phenomenon: technological developments. On the one hand, State armed forces are getting equipped with technologically advanced drones;[10] normally the latter are highly precise and able to kill one particular individual without any other casualty. For instance, in 2022 the Central Intelligence Agency (CIA) of the United States killed the Taliban leader Ayman al-Zawahiri using two Hellfire missiles, launched by a drone. According to the US intelligence, all the other people present in the same building were uninjured.[11]

On the other hand, drones are also becoming a weapon of choice of NSAGs, that usually do not have the economic resources States have. Today there exist various types of drones, which are more or less sophisticated and more or less expensive; given this variety, it appears that when discussing NIACs and NSAGs the most relevant type of drone may be the hobbyist one, as it can be considered as a new type of "cheap" weapons. Hobbyist drones were created and are produced for civilian purposes, and in fact it is easy to have access to them[12] and they are easy to use. However, they can be easily repurposed and weaponized, for instance by installing remotely controlled bombs on them; moreover, as they have small dimensions, they can easily elude radar controls.[13] Because of this disruptive potential, this type of drones has already been used for warfare activities.[14] Undeniably, the drones used by NSAGs may be less effective than more technologically advanced weapons; this means that the intensity level required by international law for rules of IHL to apply may

8 See, eg, Thomas P Ehrhard, 'Air Force UAV's: The Secret History' (Mitchell Institute Press, July 2010) <https://apps.dtic.mil/sti/pdfs/ADA526045.pdf> accessed 30 May 2024; Peter Bergen, Melissa Salyk-Virk and David Sternman, 'World of Drones' (*New America*, 30 July 2020) <https://apps.dtic.mil/sti/pdfs/ADA526045.pdf> accessed 20 February 2023.

9 Ehrhard (n 8).

10 See, eg, Kelley Sayler, 'A World of Proliferated Drones: A Technology Primer' (Center for a New American Security, 2015) <https://www.cnas.org/publications/reports/a-world-of-proliferated-drones-a-technology-primer> accessed 30 May 2024.

11 See, eg, Redazione ISPI Online Publications, 'Uccisione Di Ayman Al Zawahiri' (*ISPI - Istituto per gli Studi di Politica Internazionale*, 2 August 2022) <www.ispionline.it/it/pubblicazione/uccisione-di-ayman-al-zawahiri-35932> accessed 8 April 2023.

12 Given their civilian purpose, many States do not require the registration of hobbyist drones. See, eg, Sayler (n 10).

13 As already happened to the Hezbollah's Mohajer 4, that eluded Israeli radar because of its limited size. See ibid.

14 With regard to NSAGs, both Hamas and Hezbollah have employed midsize, military-grade systems, variants to the Iranian Ababil-1 and Mohajer 4. See, eg, ibid.

not be attained – at least for the time being[15]. To sum up, the acts conducted by both state-of-the-art drones available to states and repurposed drones used by NSAGs may not reach the degree of intensity required for a NIAC to come into place.

Another type of new means of warfare is cyber-attacks. The latter may appeal to NSAGs as well; in fact, members of NSAGs may live in different areas, and NSAGs may not have the necessary structure to organize their activities. Also, cyber-attacks surely require particular skills, but do not require great economic resources. As NSAGs often have limited funds and their members are often scattered in different places, they may consider cyber-attacks as a preferable warfare activity. It should be noted that the resort to cyber-attacks by NSAGs is not such a recent phenomenon: in 2010, Mohamedou Ould Slahi, suspect in a terrorism case, affirmed that Al Qaeda conducted cyber-attacks, also against Israeli governmental computers, in 2001.[16] Also, it can be inferred that, as time went by, NSAGs have only acquired more and more skills.[17]

However, cyber-attacks may not cause losses at all; after all, cyber-attacks do not have the physical component of kinetic warfare activities. However, they may severely affect their target. To provide a few examples, in recent years severe, large-scale cyber-attacks have been conducted against national informatic systems. For instance, in August 2022 the informatic systems of Estonian public and private institutions suffered an impressive cyber-attack,[18] but it did not cause any casualty. 15 years before, Estonia was the victim of another, impactful cyber-attack, as in 2007 a series of cyber-attacks was conducted against the websites of several Estonian organizations and institutions, including banks, ministries, and the Parliament.[19] Allegedly, these cyber-attacks followed the removal of the statue of the Bronze Soldier of Tallinn, a statue posed during the Soviet era to commemorate the Russians died while pushing the Nazis outside

15 The technological development in the field of unmanned vehicles is indeed undergoing a process of rapid evolution. See, eg, Bergen, Salyk-Virk and Sternman (n 8).

16 Christopher D DeLuca, 'The Need for International Laws of War to Include Cyber Attacks Involving State and Non-State Actors' (2013) 3 Pace International Law Review Online Companion 278.

17 See, in this regard, the statement of the UK Secretary of State for the Home Department: 'There will be more cyber terrorism. Groups will continue to benefit from the off-the-shelf technology in planning and conducting attacks, making operations more secure and potentially more lethal. The Internet and virtual space will be strategically vital'. Secretary of State for the Home Department, 'Contest: The United Kingdom's Strategy for Countering Terrorism' (July 2011) 41, in DeLuca (n 16) 292.

18 Pascale Davies, 'Estonia Hit by "most Extensive" Cyberattack since 2007 amid Tensions with Russia over Ukraine War' (*Euronews*, 19 August 2022) <www.euronews.com/next/2022/08/18/estonia-hit-by-most-extensive-cyberattack-since-2007-amid-tensions-with-russia-over-ukrain> accessed 8 April 2023.

19 James Pamment and others, 'Hybrid Threats: 2007 Cyber Attacks on Estonia' (NATO Strategic Communication Centre of Excellence 2019).

the Country at the end of WWII.[20] While the attribution of the responsibility for this attack, and the role of the Russian State in it, has been widely discussed, no unanimous conclusion has been reached.[21] These cyber-attacks lasted for weeks. It has been said that '[i]t was the first time cyber attacks threatened the security of an entire nation'.[22] Moreover, the damages caused by the cyber-attack provoked a series of riots, which led to property damage, several people injured and one death.[23] While these cyber-attacks caused serious denials of service, they did not directly cause any casualty, and indirectly caused only one death.

This brief excursus leads to the conclusion that several new means of warfare may not reach the degree of intensity, which is required today for a NIAC to take place. Weaponized drones often do not have the impact required to satisfy the intensity criterion, and cyber-attacks cannot cause deaths directly. Given all this, when discussing the way to identify a NIAC the impact on the threshold of intensity of these technologically advanced weapons must be discussed.[24]

3. Intensity criterion for the existence in NIACs in IHL and international case law

While the concept of international armed conflicts (IACs) is based on a clear, conventional provision,[25] NIACs do not have a similarly clear definition. Nonetheless, they have been regulated by different provisions of IHL, most notably by the common article 3 to the Four Geneva Conventions on the Law of

20 See, eg, DeLuca (n 16).

21 ibid.

22 Scott J Shackelford, 'From Nuclear War to Net War: Analogizing Cyber Attacks in International Law' (2009) 27 Berkley Journal of International Law 192, in DeLuca (n 16) 286.

23 Shackelford (n 22) 193, in DeLuca (n 16) 286.

24 Given the topic at issue, the analysis considers conducts attributable to NSAGs, and thus not attributable to States.

25 Under common article 2, an IAC is 'a declared war or […] any other armed conflict which may arise between two or more of the High Contracting Parties, even if the state of war is not recognized by one of them'. Geneva Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (adopted 12 August 1949, entered into force 21 October 1950) 75 UNTS 31; Geneva Convention II for the Amelioration of the Condition of the Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (adopted 12 August 1949, entered into force 21 October 1950) 75 UNTS 85; Geneva Convention III Relative to the Treatment of the Prisoners of War (n 6); Geneva Convention IV Relative to the Protection of Civilian Persons in Time of War' (adopted 12 August 1949, entered into force 21 October 1950) 75 UNTS 287 common art. 2. However, it should be noted that the identification of IACs may be affected by the emergence of new technologies as well. For instance, at the moment it is not unanimously accepted under what circumstances cyber-operations fall into the scope of usage of armed force. This affects the application of the rules of IHL, as well as art. 2(4) of the UN Charter.

War (CA3) and by the Additional Protocol II to the Four Geneva Conventions on the Law of War (APII). Thus, the relevant provisions on the material field of application of CA3 and APII, which are contained in CA3 itself and art 1(2) APII shall be taken as a starting point for the assessment of the intensity criterion. The matter has then been further clarified by international courts, especially by the International Criminal Tribunal for the former Yugoslavia (ICTY) in its case law. All this led to the development of a dual test for the existence of a NIAC, based on the presence of a minimum level of organization and intensity.

The concept of NIAC itself and the scope of the criteria have been developed over time. Consequently, it appears useful to start the analysis from the interpretation of conventional provisions on NIACs, with the support provided by authoritative doctrine; in this sense, reference to the International Committee of the Red Cross (ICRC) Commentaries in particular is made. Then, the analysis moves to the most relevant international case law. Last, the most significant issues relating to the concept if intensity, and the approaches submitted to solve them, are presented. This analysis, however, leads to the conclusion that this concept does not have a strictly determined scope.

The examination of the conventional law dedicated to NIACs and the concept of intensity regards two provision in particular, CA3 and art 1 APII. Even though CA3 established the minimum set of rules applicable in case of conflicts not of an international character,[26] it does not provide a definition of this type of conflicts. In fact, it only establishes its application in case of 'armed conflict not of an international character occurring in the territory of one of the High Contracting Parties'.[27] This provision thus appears quite tautological, as it establishes that, for it to apply and regulate NIACs, it is necessary for a NIAC to occur. It does not provide any other indication of what a NIAC is. However, the interpretation of this article, taking into consideration also its *travaux préparatoires*, leads to the conclusion that a minimum level of intensity was considered as a necessary requirement to identify a NIAC, and ultimately to apply the other provisions of CA3. In order to correctly frame CA3, first, the motivation and the consequences of such a limited definition are briefly provided, then its established interpretation is presented.

It has been affirmed that this laconic provision has to be connected to the reluctance of States, that participated in the Diplomatic Conference which led to the adoption of the Geneva Conventions, to regulate with rules of international

26 Geneva Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (n 25); Geneva Convention II for the Amelioration of the Condition of the Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (n 25); Geneva Convention III Relative to the Treatment of the Prisoners of War (n 6); Geneva Convention IV Relative to the Protection of Civilian Persons in Time of War (n 25) common art. 3.

27 ibid.

law (as rules of IHL) non-international armed conflicts have always been perceived as falling within the domestic realm.[28] Indeed, CA3 was the first international provision to deal with non-international conflicts. It should be noted that this laconic provision ran the risk of producing unexpected, unwanted consequences. In fact, it was stated that such a 'vague'[29] provision constituted a threat to States that feared 'it might be taken to cover any act committed by force of arms – any form of anarchy, rebellion, or even plain banditry',[30] ultimately compressing their sovereignty on domestic issues. Undeniably, the text of CA3 does not offer a clear definition of what a NIAC is.

Nonetheless, it is possible to reconstruct the relevance of the intensity criterion even from this laconic provision. This can be done applying the criteria for treaty interpretation set in the Vienna Convention on the Law of Treaties, in particular resorting to a systematic interpretation, and thus reading the provision in the context of the whole convention,[31] and to the *travaux préparatoires*, as a supplementary means of interpretation in case of an obscure interpretation of a provision.[32]

Under the systematic interpretation, CA3 should be first of all interpreted taking into consideration common article 2 to the Four Geneva Conventions (CA2). The latter sets the application of the Geneva Conventions 'to all cases of declared war or of any other armed conflict which may arise between two or more of the High Contracting Parties', thus IACs.[33] Therefore, CA3 may be

28 See, eg, ICRC, Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field. Commentary of 2016' (2016) para 416 <https://ihl-databases.icrc.org/en/ihl-treaties/gci-1949/toc/commentary/2016> accessed 17 April 2023. See also Schmitt (n 5) r 23 para 16.

29 See, eg, Jean S Pictet, *Commentary on the Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field* (ICRC 1952) 49.

30 See, eg, ibid.

31 Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331 art 31(1), 31(2). 'A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose. The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes: (a) any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty; (b) any instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty'.

32 ibid art 32. 'Recourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, in order to confirm the meaning resulting from the application of article 31, or to determine the meaning when the interpretation according to article 31: (a) leaves the meaning ambiguous or obscure; or (b) leads to a result which is manifestly absurd or unreasonable'.

33 Geneva Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (n 25); Geneva Convention II for the Amelioration of the Condition of the Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (n 25); Geneva Convention III Relative to the Treatment of the Prisoners of War (n 6); Geneva

interpreted *a contrario* as applicable in cases of armed conflicts that did not arise between two or more High Contracting Parties, but rather a High Contracting Party and one or more NSAGs, or two or more NSAGs against each other in the territory of one High Contracting Party. This interpretation appreciates the differences between the two articles, that address both the same issue, namely the scope of material application of the rules of IHL established in the Geneva Conventions.[34]

Assessing the *travaux préparatoires*, it should be noted that already the 1952 Commentary by the ICRC referred to the discussion that led to the final draft of CA3 and this discussion has been recalled ever since in the following ICRC Commentaries on the Four Geneva Conventions.[35] Thus, it appears that, in its commentaries, the ICRC has being resorting to these preparatory documents for decades. In particular, the 1952 ICRC Commentary included a list of 'convenient criteria',[36] which were discussed as a list of amendments while drafting CA3 as not obligatory but useful to identify a NIAC. In particular, these criteria may help distinguishing NIACs 'from a mere act of banditry or an unorganized and short-lived insurrection'.[37] From the latter expression it emerges that the ICRC believes that a minimum degree of intensity is necessary for a NIAC to take place. This is consistent with the content of these 'convenient criteria', as they include, among others, that NSAGs should have the ability to engage in conflicts with the State authorities,[38] and that NIACs should include the cases in which 'the legal Government is obliged to have recourse to the regular military forces against insurgents'.[39] It can thus be inferred that, according to these criteria, NIACs differ from acts of banditry and short-lived insurrections as the former must present a higher degree of intensity. Despite its brevity, the interpretation of CA3 under a systematic criterion and considering the *travaux préparatoires* leads to the conclusion that this article implicitly requires a necessary minimum level of intensity for a NIAC to take place.

Convention IV Relative to the Protection of Civilian Persons in Time of War (n 25) common art 2.

34 International Committee of the Red Cross, Convention (III) Relative to the Treatment of Prisoners of War. Commentary of 2020 paras 427ff (*International Committee of the Red Cross*, 2020) <https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/Comment.xsp?action=openDocument&documentId=E362C510EB54A83FC12585B500590D0F> accessed 16 September 2022.

35 See, eg, International Committee of the Red Cross, 'Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field. Commentary of 2016' (n 28) para. 419.

36 Pictet (n 29) 49.

37 ibid 50. Cited in following Commentaries, eg, International Committee of the Red Cross, Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field. Commentary of 2016' (n 28).

38 Pictet (n 29).

39 ibid 49–50.

Last, the presence of a minimum requirement of intensity appears coherent with the already mentioned reluctance showed by States during the process of adoption of CA3. In this regard, the demand of a minimum level of intensity appears as the way to dispel such fears. Indeed, 'Common Article 3's radical nature necessitated strict constraints – including the intensity threshold – to alleviate state concerns […] States' reluctance to recognize the existence of a NIAC necessitated a clear means of distinguishing NIACs from internal disturbances of lesser severity. Accordingly, from its inception, Common Article 3 was understood to apply only once an internal conflict reached a certain level of intensity'.[40] In conclusion, despite the limited text, it appears that CA3 already set the necessity of a minimum level of organization as a necessary element for the existence of a NIAC, and the consequent application of the rules of IHL.

The matter of the criterion of intensity was more explicitly addressed in APII. This Protocol regards the protection of victims of NIACs, consequently its field of application strictly depends on the definition of NIACs. Accordingly, its art 1, titled 'Material field of application', clarifies the circumstances in which APII shall apply. Before its assessment, it should be noted that this article affirms that it 'develops and supplements Article 3 common to the Geneva Conventions of 12 August 1949 without modifying its existing conditions of application'; thus, even though this article differs, in some parts, from CA3,[41] it is an expansion of the provision set therein. Relevant for the matter at issue, art 1(1) APII states it shall apply to those armed conflicts 'which take place in the territory of a High Contracting Party between its armed forces and dissident armed forces or other organized armed groups which, under responsible command, exercise such control over a part of its territory as to enable them to carry out sustained and concerted military operations and to implement this Protocol'.[42] Moreover, in its final part art 1 APII affirms that it 'shall not apply to situations of internal disturbances and tensions, such as riots, isolated and

40 Oona A Hathaway and others, 'Consent Is Not Enough: Why States Must Respect the Intensity Threshold in Transnational Conflict' (2016) 165 University of Pennsylvania Law Review 1, 12.

41 In particular, APII shall apply 'to all armed conflicts which are not covered by Article 1 of the Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) and which take place in the territory of a High Contracting Party between its armed forces and dissident armed forces or other organized armed groups which, under responsible command, exercise such control over a part of its territory as to enable them to carry out sustained and concerted military operations and to implement this Protocol". Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (adopted 8 June 1977, entered into force 7 December 1978) 1125 UNTS 609 (Additional Protocol II) art 1. Therefore, APII introduces a new requirement: the armed conflict must occur between one or more NSAGs and the armed forces of a State.

42 ibid art 1(1).

sporadic acts of violence and other acts of a similar nature, as not being armed conflicts'.[43] Later, this provision has been included in the Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict.[44] Thus, the intensity requirement is established both by reference to the characteristics of the relevant military operations, and in a negative manner, as art 1 APII explicitly establishes what cannot be considered a NIAC because of its not intense enough nature.

While the two main conventional provisions of IHL on the topic at issue do not present the same definition of NIAC, some common conclusions on the intensity required for the existence of a NIAC can be drawn. In particular, both require the reaching of a minimum level of intensity, in order to distinguish a NIAC from internal riots or disturbances, or other acts which do not fall into the scope of NIACs. Therefore, and with particular reference to CA3, it can be inferred that the degree of intensity has been a requirement for the existence of a NIAC since the first post-WWII regulations on the matter. Such a requirement has been confirmed and clarified in subsequent international case law, as will be shown in the following paragraph.

Over time, the concept of NIAC has been assessed by international case law as well. In this regard, the jurisprudence of the ICTY should be recalled, its *Tadić* case in particular. In it, the ICTY had to identify what a NIAC is, in order to evaluate whether or not an armed conflict was taking place when the alleged offences object of the case were committed. In this regard, it affirmed that 'an armed conflict exists whenever there is a resort to armed force between States or *protracted armed violence between governmental authorities and organized armed groups or between such groups within a State*' (emphasis added).[45] This definition has been confirmed not only by the ICTY in subsequent cases, but also by other international courts, such as the International Criminal Tribunal for Rwanda,[46] and the International Criminal Court.[47] Regarding the latter, it should be also recalled that the Statute of the International Criminal Court adopted the *Tadić* approach in the formulation of NIACs in art 8(2)(f).[48]

43 ibid art 1(2).

44 'This Protocol shall not apply to situations of internal disturbances and tensions, such as riots, isolated and sporadic acts of violence and other acts of a similar nature'. Second Protocol to The Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict (adopted 26 March 1999, entered into force 9 March 2004) 2253 UNTS 172 art 22 (2).

45 *The Prosecutor v Dusko Tadić (Appeals Chamber, Decision on The Defence Motion for Interlocutory Appeal on Jurisdiction)* [1995] International Criminal Tribunal for the former Yugoslavia IT-94-1-I para. 70.

46 *Prosecutor v Akayesu* (Judgement) ICTR-96-4-T, T Ch I (2 September 1998).

47 See, eg, *Prosecutor v Lubanga Dyilo* (Judgement) ICC-01/04-01/06 (14 March 2012); *Prosecutor v Al Mahdi* (Judgement and Sentence) ICC-01/12-01/15 (27 September 2016).

48 'Paragraph 2 (e) [applying to NIACs] applies to armed conflicts not of an international character and thus does not apply to situations of internal disturbances and tensions, such as

The evolution of the concept of NIACs here briefly presented led to the definition provided in 2008 by the ICRC: 'Non-international armed conflicts are *protracted armed confrontations* occurring between governmental armed forces and the forces of one or more armed groups, or between such groups arising on the territory of a State [party to the Geneva Conventions]. The armed confrontation must reach a *minimum level of intensity* and the parties involved in the conflict must show a *minimum of organisation*'[49] (emphasis in the original text). This definition has been widely accepted. For instance, Rule 23 of the Tallinn Manual states that '[a] non-international armed conflict exists whenever there is protracted armed violence, which may include or be limited to cyber operations, occurring between governmental armed forces and the forces of one or more armed groups, or between such groups. The confrontation must reach a minimum level of intensity and the parties involved in the conflict must show a minimum degree of organization'[50].

In conclusion, the test of the existence of a NIAC continues to rest on the reaching of a minimum threshold of two requirements, one of them being the criterion of intensity. However, the rapid evolution of warfare due to the more and more frequent usage of technologically advanced weapons, both by States and NSAGs, may be deeply affect this criterion. To tackle this issue, the concept of intensity should be assessed first.

4. Defining the scope of the concept of intensity

Taking into consideration both the conventional and case law, as well as the definition provided by the ICRC in 2008, a series of conclusions can be drawn. First, the involvement of State armed forces is not considered as necessary for the existence of a NIAC; this consistent with CA3 but contrary to art 1 APII. It may thus be inferred that APII has a more limited material field of application, consequently the legal framework of APII may apply to a limited series of circumstances, the ones able to reach the higher threshold set in its art 1. Second, the two criteria of intensity and organization are required for a NIAC to take place, However, the presence of two criteria requires the balance between the two. Third, and the element of novelty, the armed violence must be 'protracted'. This latter element was introduced by the ICTY and led to many debates

riots, isolated and sporadic acts of violence or other acts of a similar nature. It applies to armed conflicts that take place in the territory of a State when there is protracted armed conflict between governmental authorities and organized armed groups or between such groups'. Rome Statute of the International Criminal Court (adopted 17 July 1998, entered into force 1 July 2002) 2187 UNTS 3 (ICC Statute) art 8(2)(f).

49 ICRC, 'How Is the Term "Armed Conflict" Defined in International Humanitarian Law?' (n 1) 5.

50 Schmitt (n 5) r 23.

on its scope. Last, the *Tadić* case itself, as well as subsequent ICTY judgements, mentioned a series of factors to take into consideration when assessing whether a certain situation amounted to a NIAC or not. Nonetheless, the exact scope of these factors has been object of discussion. These issues are now discussed, before attempting at the reconceptualization of the criterion of intensity in the light of new technological developments applied to warfare.

Since the relationship between the adjective 'protracted' and the concept of intensity is one of the debated issues, it appears useful to assess whether the two are related – in other words, whether the intensity has to be protracted to reach the level required for the existence of a NIAC. First of all, it has to be noted that from a lexical point of view, the adjective 'protracted' cannot be considered as a synonym of 'intense', as the former has a time-focused connotation the latter does not possess.[51] Therefore, it refers to the duration of the armed violence, rather than to its intensity. It should be highlighted that the element of duration does not correspond even to the concept of continuity. As noted by the Commentary to Rule 23 of the Tallinn Manual, the armed violence to reach the required degree of intensity 'need not to be continuous in nature'.[52] Consistent with this semantic approach, it has been affirmed that the expression 'protracted armed violence' may infer that duration should be considered as part of the evaluation of the requirement of intensity; however, as already said it is only *part* of this evaluation, thus the two concepts are not the same. On the contrary, it is feasible to imagine situations of armed violence in which the intensity threshold is reached, even without the requirement of the duration. In this sense, the ICRC affirmed that '[t]he duration of hostilities is thus appropriately considered to be an element of the assessment of the intensity of the armed confrontations. Depending on the circumstances, hostilities of only a brief duration may still reach the intensity level of a non-international armed conflict if, in a particular case, there are other indicators of hostilities of a sufficient intensity to require and justify such an assessment'.[53] The thesis submitting that the duration of the armed violence is only one part of the concept

51 "Protracted: lasted for a long time or made to last longer than necessary". Merriam-Webster, 'Protracted' (2022); "Intense: existing in an extreme degree". Merriam-Webster, 'Intense' (2023).

52 Schmitt (n 5) r 23 para 9.

53 ICRC, 'Convention II for the Amelioration of the Condition of the Wounded, Sick and Shipwrecked Members of Armed Forces at Sea, Commentary of 2017' (2017) para 462 <https://ihl-databases.icrc.org/en/ihl-treaties/gcii-1949> accessed 17 April 2023. The Commentary makes reference to the *Tablada* case, in which the Inter-American Commission on Human Rights, generally applying the criteria of intensity and organization, came to the conclusion that an attack by 42 armed persons against an army barracks, leading to combat lasting about 30 hours, had crossed the threshold of a non-international armed conflict'. ibid note 148. Citing *Abella v Argentina (Tablada)* Inter-American Commission on Human Rights 11.137, OEA//Ser/L/V/II.98 (18 November 1997).

of intensity is supported by case law as well. In this regard, other ICTY cases that clarify that the concept of intensity cannot only be based on the duration requirement should be recalled. As reported in the *Boškoski & Tarčulovski* case, '[v]arious indicative factors have been taken into account by Trial Chambers to assess the 'intensity' of the conflict'.[54]

Consequently, it has been submitted that '[t]he thumbnail version is that on its face the key textual formulation requires armed violence to be sufficiently long, but in jurisprudence that duration dimension is often incorporated into a broader analysis of the intensity of hostilities as but one criterion concerning the existence (or not) of a non-international armed conflict'[55]. It can thus be deduced that international case law has developed the concept of the requirement of intensity, which has to be 'protracted' in order to distinguish common riots and disturbances from armed conflicts, while at the same time not requiring a long duration of the hostilities. This position is also supported in the Tallinn Manual, as the commentary to Rule 23, 'Characterization as non-international armed conflict', states that '[s]poradic cyber incidents, including those that directly cause physical damage or injury, do not […] constitute non-international armed conflict'[56]. After all, a rigid requirement of duration would impair one of the goals of IHL. If the application of the guarantees of IHL and the possible intervention of international organization such as the Red Cross depends on the existence of a protracted armed violence, interpreted on a time-focused criterion, then there would be a period of uncertainty regarding the application of the rules of IHL, especially at the beginning of the hostilities.[57] However, it should be noted that, despite the ample recognition in international case law, the sharp distinction between intensity and duration has not gained unanimous support.[58]

The flexibility in the process of evaluation appears also in the relationship between the two criteria of intensity and organization, with particular reference to the balance of the two. In this regard, discussing the topic at issue in its 2020 Commentary to the Geneva Convention (III), the ICRC affirmed that 'the criteria of intensity and organization must be present *cumulatively* in order

54 *Prosecutor v Boškoski and Tarčulovski* (Trial Judgement) IT-04-82-T (10 July 2009) para 177.

55 Dustin A Lewis, 'The Notion of "Protracted Armed Conflict" in the Rome Statute and the Termination of Armed Conflicts under International Law: An Analysis of Select Issues' (2019) 101 International Review of the Red Cross 1091, 1099.

56 Schmitt (n 5) r 23 para 5.

57 See Marco Sassòli and Julia Grignon, 'Les Limites Du Droit International Pénal et de La Justice Pénale Dans La Mise En Oeuvre Du Droit International Humanitaire' [2012] Le droit international humanitaire face aux défis du XXIe siècle 133.

58 See, eg, German Ministry of Justice, 'Code of Crimes against International Law (CCAIL)' 26 June 2002, cited in ICRC, Convention II for the Amelioration of the Condition of the Wounded, Sick and Shipwrecked Members of Armed Forces at Sea, Commentary of 2017 (n 53) note 148.

for a situation of violence to reach the threshold of a non-international armed conflict' (emphasis added).[59] Since the adjective 'cumulative' means 'made up of accumulated parts',[60] without any reference to the percentage of the components, it may be inferred that the threshold necessary for a NIAC may be reached when the two criteria combined are reached. It is not required for the two criteria to reach the same degree. This conclusion is supported by the ICRC, which even affirmed that '[d]epending on the circumstances, however, it may be possible to draw some conclusions from one criterion for the other. For example, the existence of highly intense armed confrontations between State authorities and non-State armed groups, or between several non-State armed groups, may indicate that these groups have reached the level of organization required of a Party to a non-international armed conflict'.[61] Consequently, the degree of intensity may depend also on the level of organization reached by the NSAGs. This relationship between the criteria is an application of the flexible approach used to evaluate the two, ultimately to assess the existence of a NIAC.

Last, the practice of international courts to provide a list of factors to evaluate whether a situation of armed violence amounts to a NIAC or not further complicates the issue of the identification of the intensity requirement. Indeed, in the already mentioned *Boškoski & Tarčulovski* case the ICTY Trial Chamber affirmed that the factors to take into consideration to evaluate the intensity 'include the seriousness of attacks and whether there has been an increase in armed clashes, the spread of clashes over territory and over a period of time, any increase in the number of government forces and mobilisation and the distribution of weapons among both parties to the conflict, as well as whether the conflict has attracted the attention of the United Nations Security Council, and whether any resolutions on the matter have been passed. Trial Chambers have also taken into account in this respect the number of civilians forced to flee from the combat zones; the type of weapons used, in particular the use of heavy weapons, and other military equipment, such as tanks and other heavy vehicles; the blocking or besieging of towns and the heavy shelling of these towns; the extent of destruction and the number of casualties caused by shelling or fighting; the quantity of troops and units deployed; existence and change of front lines between the parties; the occupation of territory, and towns and villages; the deployment of government forces to the crisis area; the closure of roads; cease fire orders and agreements, and the attempt of representatives

59 ICRC, Convention III Relative to the Treatment of Prisoners of War. Commentary of 2020' (n 34) para 468.

60 Merriam-Webster 'Cumulative' (2023).

61 ICRC, Convention III Relative to the Treatment of Prisoners of War. Commentary of 2020' (n 34) para 468. See also Jann K Kleffner, 'The Legal Fog of an Illusion: Three Reflections on "Organization" and "Intensity" as Criteria for the Temporal Scope of the Law of Non-International Armed Conflict' (2019) 95 International Law Studies 161, 169.

from international organizations to broker and enforce cease fire agreements. At a more systemic level, an indicative factor of internal armed conflict is how organs of the State, such as the police and military, use force against armed groups'.[62]

This flexible approach has been reaffirmed by the ICTY also in other cases. Indeed, it has been noted that '[s]uch an assertion reflects an acute awareness by the various tribunals that have addressed the issue that the application of an abstract definition of the factual situation of a NIAC, which centers on the two cumulative requirements of organization and intensity and their further refinement through a list of factors, is – far from surprisingly – a context-specific exercise'[63]. Significantly, in the judgement of the *Haradinaj* case the Trial Chamber of the ICTY explicitly stated that 'Trial Chambers have relied on *indicative* factors relevant for assessing the "intensity" criterion, none of which are, in themselves, essential to establish that the criterion is satisfied' (emphasis added).[64] This approach can be tracked down in the case law of the International Criminal Court as well.[65] Despite its wide recognition, this flexible approach to the evaluation of the criteria of intensity and organization has not gained unanimous support. In this regard, the position of Jann Kleffner should be recalled; indeed, the author does not believe that all the factors should be considered as merely indicative,[66] and argues that some factors should be considered as determinative, 'whose absence ipso facto defeats the existence of a NIAC'.[67] Regarding intensity, the approach submitted by Kleffner is compatible with the characteristics of intensity as defined by relevant rules of IHL; in fact, it is suggested that 'one can distill the essence that the armed violence leads to the loss of life, injury, and destruction, or damage of objects, while taking the form of "fighting" – understood as armed confrontations of a military nature – between opposing parties. While this is not to suggest that one-sided armed violence – for instance, the killing of civilians or destruction of civilian objects – cannot also feature in the intensity analysis for determining the existence of a NIAC, fighting between the parties is a quintessential precondition, and as such, a determinative factor'.[68] It can thus be inferred that, even though differing doctrinal positions exist, the prevailing thesis on the evaluation of the criterion of intensity, supported by significant international case law, relies on flexibility and on a case-by-case approach.

62 *Prosecutor v Boškoski and Tarčulovski* (n 54) paras 177–178.

63 Kleffner (n 61) 168.

64 *Prosecutor v Haradinaj et al.* (Trial Judgement) IT-04-84-T (3 April 2008) para 49. See also para 60.

65 See, eg, *Prosecutor v Lubanga Dyilo* (n 47) esp. para 538.

66 'It appears doubtful, however, that *all* factors produced in the jurisprudence by the ad hoc tribunals are no more than indicative'. Kleffner (n 61) 168.

67 ibid.

68 ibid 169.

This brief analysis of the emergence, characteristics, and methods of evaluation of the intensity criterion leads to the conclusion that the latter does not have a precisely defined scope. On the contrary, the exact scope of this criterion is still unclear, and its assessment is based on a case-by-case analysis. However, it appears that this element of unclarity may be an advantage: in fact, it guarantees a flexible approach. Such an approach should be sought-after when applying the criterion of intensity to situations of warfare conducted employing new, technologically advanced weapons. In fact, it allows the identification of NIACs to evolve and adapt, following the developments of warfare. Given all this, it is now possible to reassess the concept of intensity, to accommodate the features of modern warfare.

5. Reconceptualizing the threshold of intensity in the light of new means of warfare

The emergence of new weapons can, in many cases, affect the criterion of intensity, whose perimeter has been left – arguably on purpose – unprecise. Given the growing diffusion of new weapons, it appears that it is time to reconceptualize the concept of intensity, to allow the application of the rules of IHL even in cases in which new technological weapons are employed.

First, it has to be analyzed whether there exists a limitation in means of warfare able to reach the threshold of intensity required for a NIAC to come into existence. The answer is negative; indeed, there is not any limitation to the means of warfare employed for IHL to apply. As argued in the Tallinn Manual 2.0, '[a]pplication of the law of armed conflict does not depend on the type of military operation or on the specific means and methods of warfare employed'.[69] Coherently, 'cyber operations alone, in the absence of kinetic operations, can bring a non-international armed conflict into existence'.[70]

It is true that international case law has suggested that the type of weapons used may be taken into consideration when assessing whether the criterion of intensity has been satisfied. In this regard, in its *Boškoski & Tarčulovski* case the ICTY affirmed that '[t]rial Chambers have also taken into account […] *the type of weapons used, in particular the use of heavy weapons, and other military equipment, such as tanks and other heavy vehicles*' (emphasis added).[71] In other words, the ICTY stated that the type of weapons used, with particular reference to heavy weapons and military equipment, should be taken into consideration to assess whether the intensity criterion had been reached or not. Intuitively, one would conclude that armed violence conducted with the usage of light weapons could not reach the

69 See, in this regard, Schmitt (n 5) r 23 para 2.

70 ibid rule 23 para 2.

71 *Prosecutor v Boškoski and Tarčulovski* (Trial Judgement) (n 54) para 177.

required level of intensity for a NIAC to come into existence. However, this statement should be rejected for at least two reasons, ultimately coming to the conclusion that this cannot constitute an obstacle in the reconceptualization of the intensity criterion in the light of the development of new weapons. First, as already noted the ICTY itself affirmed that the factors submitted for the identification of a NIAC are indicative. Even considering the approach suggested by Kleffner, who argues for the existence of mandatory and indicative factors, the type of weapons employed does not appear to be a necessary element for the assessment of the degree of intensity. Second, although relevant, case law is always case law, addressed to specific cases, occurring in particular circumstances; as facts change, case law may become outdated. In this sense, the presence of heavy weapons and military equipment may be not considered as a relevant element for the assessment of the degree of intensity anymore. This is particularly true, taking into consideration the evolution of warfare, which is less and less relying on conventional heavy weapons and more and more prone to resort to remotely controlled light weapons.[72] In conclusion, the type of means of warfare employed do not constitute an obstacle to reach the required degree of intensity.

Having clarified that it is possible to satisfy the intensity criterion employing any sort of means of warfare, another issue raised by these new means of warfare should be assessed. Given the relatively low impact these means produce, observers may ask themselves whether the minimum level of intensity required for the existence of a NIAC has been reached or not. In this regard, it has been affirmed that '[i]n view of the intensity threshold, cyber operations alone can trigger a non-international armed conflict in only rare cases'[73]. Similar conclusion can be made when considering the usage of sophisticated drones. In this regard, it must be noted that the possibility to conduct this reconceptualization has already been suggested in recent years, taking into consideration the general

72 The definition of 'light weapon' can be found in the 'International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons', adopted by the UN General Assembly on 8 December 2005. In it, it is said that '[f]or the purpose of this instrument, "small arms and light weapons" will mean any man-portable lethal weapon that expels or launches, is designed to expel or launch, or may be readily converted to expel or launch a shot, bullet or projectile by the action of an explosive, excluding antique small arms and light weapons or their replicas. […] (b) "Light weapons" are, broadly speaking, weapons designed for use by two or three persons serving as a crew, although some may be carried and used by a single person. They include, inter alia, heavy machine guns, hand-held under-barrel and mounted grenade launchers, portable anti-aircraft guns, portable anti-tank guns, recoilless rifles, portable launchers of anti-tank missile ad rocket systems, portable launchers of anti-aircraft missile systems, and mortars of a calibre of less than 100 millimetres'. UNGA, 'Report of the Open-ended Working Group to Negotiate an International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons' (2005) A/60/88, Annex para 4.

73 Schmitt (n 5) r 23 para 7.

development of warfare. Among the several theories submitted, two are here presented, chosen because of their strong differences, which may ultimately lead to dramatically diverse results; the first theory is based on quantitative elements, whereas the second one is based on the behavior of State forces involved.

The first, quantitative-based theory, relies on the number of battle-related casualties to identify the threshold to be reached for a NIAC to come into existence.[74] Applying this theory to assess situations of armed violence characterized by the usage of new means of warfare (eg, drones or cyber-attacks), one has to conclude that often the minimum threshold of intensity required for a NIAC to exist is not reached. In fact, normally these means of warfare do not cause a high number of casualties. Thus, on the basis of this theory the number of battle-related casualties provoked by drones and cyber-attacks may not be sufficient to reach the minimum degree of intensity. However, several reasons lead to the conclusion that this theory should be rejected. First, it has to be noted that it has not gained wide support. Second, this approach may be too rigid; this indeed can be considered a shortcoming, taking into consideration that, as already noted, it is widely accepted that the intensity criterion has to be assessed with flexibility. The other two shortcomings of this approach regard its practical application. In fact, the exact number of casualties in contexts of armed violence may be difficult to assess, and not all the casualties due to an armed conflict are battle related.[75] Moreover, the quantitative approach may lead to the late recognition of the existence of a NIAC, thus compromising the effectiveness of the guarantees offered by the rules of IHL. Not only, if the armed conflict is characterized by a low number of battle-related casualties, such a rigid quantitative approach may lead to the conclusion that the threshold of intensity is never reached, and consequently that the rules of IHL can never be applied. This last issue is particularly relevant, as the technologically advanced means of warfare often do not produce a high number of casualties. In conclusion, the theory which conceptualizes the intensity criterion based on a quantitative approach linked to the battle-related deaths presents practical and theoretical shortcomings.

The second theory takes into consideration the behavior of States involved in the armed violence; when the state authorities have to resort to military force to combat armed violence, using methods which are incompatible with the right to life, the threshold of intensity is reached, thus a NIAC has come

74 For instance, the *Yearbook* of the Stockholm International Peace Research Institute stated that the number of 1,000 battle-related deaths is the threshold necessary for IHL to apply. The Uppsala Department of Peace and Conflict Research set the threshold at 25 battle-related deaths. See Anthony Cullen, 'Key Developments Affecting the Scope of Internal Armed Conflict in International Humanitarian Law' (2005) 183 Military Law Review 66.

75 ibid 87.

into existence.[76] Doing so, the governmental forces apply the military doctrine instead of the police doctrine; thus, the conducts must be assessed under the rules of IHL, which is applied as *lex specialis*.[77] At first glance, this theory does not present any issue in its application with situations of armed violence where technological means of warfare are employed. Indeed, this theory has several positive aspects. First, compared to the theory based on a quantitative approach, it is consistent with international practice. In fact, in addition to international doctrine,[78] in the *Boškoski & Tarčulovski* case the ICTY mentioned 'any increase in the number of government forces' as one of the various factors to be taken into consideration to assess the intensity criterion. Even though this factor should probably be considered as indicative, it surely implies the support of the ICTY for the evaluation of the State behavior. Second, its application limits the possibility for States to deny the existence of an armed conflict, while they are actively taking part in it. Consequently, applying this theory it is not possible for a State to be actively involved in an armed conflict, while publicly denying its existence. This would solve the long-standing issue of the recognition of an armed conflict: in fact, the resort by State to the use of the military doctrine makes the rules of IHL automatically applicable. In addition, this theory is sufficiently flexible, thus it is consistent with international law and case law.[79] Last, and unlike the theory based on a quantitative approach, it is compatible with the characteristics of warfare conducted with new weapons. In fact, the intensity threshold is reached when the governmental authorities apply the military doctrine to combat the armed violence, notwithstanding the type of warfare conducted. However, this theory suffers a practical problem difficult to overcome: it is based on the behavior of States. Given the rules that establish the applicability of IHL, this limitation does not constitute a problem for the application of the rules of APII, as the latter only applies in cases of armed conflicts taking place between the armed forces of the state and the NSAG ones.[80] However, NIACs, on the base of CA3, can occur also between NSAGs only, without any involvement of the state and its armed forces. Indeed, a NIAC can occur in cases in which 'several factions [confront] each other without the involvement of the government's armed forces'[81]. In addition, looking at current in-

76 Arne Willy Dahl and Magnus Sandbu, 'The Threshold of Armed Conflict' (2006) 45 Military Law and Law of War Review 369.

77 See ibid esp. 376–377.

78 See, eg, ibid.

79 See, eg, the already mentioned *Prosecutor v Boškoski and Tarčulovski* (n 54).

80 Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II) (n 41) art 1.

81 Yves Sandoz, Christophe Swinarski and Bruno Zimmermann, *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949* (ICRC 1987) para 4461, cited in ICRC, 'How Is the Term "Armed Conflict" Defined in International Humanitarian Law?' (n 1) 4.

ternational reality, there exist states without any effective control over certain areas of their territory and without the ability to resort to the use of military force.[82] Therefore, even though it has gained wide support and presents positive elements, namely its flexible nature, independence from the formal recognition of armed conflicts by states and compatibility with new, technologically advanced means of warfare, this theory is too limited in its application, and does not cover all the possible hypotheses of NIACs.

In conclusion, the theories based on a quantitative approach and on the behavior of States do not offer a solution to the issue related to the reconceptualization of the criterion of intensity required for the identification of a NIAC. However, the shortcomings of each approach may be useful to assess the elements that a reconceptualization of the criterion of intensity should have. Considering the first theory, the approach should not be rigid, and based on abstract measurements; considering the second, the approach should apply also in case of NIACs not involving governmental forces. This conclusion, as well as the unprecise scope of the criterion itself, should be kept in mind continuing the reassessment of the intensity criterion considering the development of drones and cyber activities as new means warfare.

6. Intensity: flexible approach and human rights

To conduct the operation of reconceptualization of the intensity criterion reconcilable with the new means of warfare, it appears useful to return to the origin of IHL itself. It seems indeed a logical necessity to identify the original and fundamental aims of IHL and then to reconstruct the intensity criterion in the light of the latest developments in warfare. Before starting the reconstruction of the aims and purposes of IHL, a statement of the ICRC Commentaries to the Four Geneva Conventions should be recalled: CA3 'should be applied as widely as possible'.[83] Therefore, it can be inferred that the concept of NIACs should be interpreted in an extensive manner.[84]

---

82 The traditional example is provided by Somalia, see, eg, Ken Menkhaus, 'Governance without Government in Somalia: Spoilers, State Building, and the Politics of Coping' (2007) 31 International Security 74; Nicole Stremlau, 'Governance Without Government in the Somali Territories' (*Columbia Journal of International Affairs*, 9 January 2019) <https://jia.sipa.columbia.edu/> accessed 16 September 2022; Michael Schoiswohl, *Status and (Human Rights) Obligations of Non-Recognized De Facto Regimes in International Law: The Case of 'Somaliland' - The Resurrection of Somaliland Against All International 'Odds': State Collapse, Secession, Non-Recognition and Human Rights* (Brill Nijhoff 2004). But see, also, UN Peace and Security, 'Former "Failed State" Somalia on Fragile Path to Progress: A UN Resident Coordinator Blog' (*UN News*, 2021) <https://news.un.org/en/story/2021/12/1108302> accessed 16 September 2022.

83 Pictet (n 29) 50.

84 U.K. Ministry of Defence, 'The Joint Service Manual of the Law of Armed Conflict' (2004). Cited in DeLuca (n 16) 302.

Looking at the IHL legal framework as a whole, it appears that its general aim is the protection of individuals taking part in the hostilities or living in places where hostilities take place; it seeks to limit the effects of armed conflicts[85] and it is based on the concept that victims of armed conflicts must be protected.[86] This protection is usually framed in terms of injury, death, or property damage or destruction.[87] For instance, the ICRC affirmed that the Four Geneva Conventions and their Additional Protocols "contain the essential rules of humanitarian law protecting civilians, persons who are *hors de combat* and medical and religious personnel, as well as a range of protected objects such as civilian objects and medical units and transports'.[88] Going even further back in time, the three fundamental principles of IHL, namely the principle of distinction, the prohibition of unnecessary suffering and the principle of proportionality, were already established in the so-called Saint Petersburg Declaration of 1868,[89] and then so widely accepted that they have become customary rules of IHL.[90] The relevance of these principles when considering the purposes of IHL emerges clearly when assessing their content. The principle of distinction requires that '[t]he parties to the conflict must at all times distinguish between civilians and combatants. Attacks may only be directed against combatants. Attacks must not be directed against civilians'.[91] Under the prohibition of unnecessary sufferings, '[t]he use of means and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering is prohibited.'[92]. Last, the principle

85 ICRC, 'What Is International Humanitarian Law?' <https://www.icrc.org/en/doc/assets/files/other/what_is_ihl.pdf> accessed 21 February 2023.

86 ibid.

87 In this regard, it has been affirmed that 'fundamental principles of IHL provide that armed conflict occurs when a group takes measures that injure, kill, damage, or destroy'. DeLuca (n 16) 302.

88 ICRC, Convention I for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field. Commentary of 2016 (n 28) para. 1.

89 Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight (signed 11 December 1868, entered into force 11 December 1868) 138 CTS 297 (Saint Petersbourg Declaration).

90 *90* The legal body composed by rules of customary IHL 'derives from "a general practice accepted as law". To prove that a certain rule is customary, one has to show that it is reflected in state practice and that the international community believes that such practice is required as a matter of law'. ICRC, 'Customary International Humanitarian Law' (*IHL Database. Customary IHL*, 29 October 2010) <https://www.icrc.org/en/document/customary-international-humanitarian-law-0> accessed 21 February 2023.

91 ICRC, 'Rule 1. The Principle of Distinction between Civilians and Combatants' (*IHL Database. Customary IHL*) <https://ihl-databases.icrc.org/en/customary-ihl/v1/rule1#:~:text=international%20armed%20conflicts-,Rule%201.,not%20be%20directed%20against%20civilians> accessed 17 April 2023.

92 ICRC, 'Rule 70. Weapons of a Nature to Cause Superfluous Injury or Unnecessary Suffering' (*IHL Database. Customary IHL*) <https://ihl-databases.icrc.org/en/customary-ihl/v1/rule70> accessed 17 April 2023.

of proportionality establishes that '[l]aunching an 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 anticipated, is prohibited'[93]. On one hand, these principles regulate warfare, regardless of the means to conduct such actions; on the other, they pursue aims of protection of individuals involved in wars – again, irrespective of the type of weapons employed. Consistently, it has been submitted that they should apply in cyber-wars as well.[94]

In addition, the so-called Martens provides that '[u]ntil a more complete code of the laws of war is issued, the High Contracting Parties think it right to declare that in cases not included in the Regulations adopted by them, populations and belligerents remain under the protection and empire of the principles of international law, as they result from the usages established between civilized nations, from the laws of humanity and the requirements of the public conscience'[95]. Even though it dates back to 1899, the Martens Clause was considered 'an effective means of addressing the rapid evolution of military technology'[96] by the International Court of Justice in its Advisory Opinion on the legality of the threat or use of nuclear weapons issued on 8 July 1996, and the Tallinn Manual 2.0 affirmed that it 'reflects customary international law'[97]. Therefore, the Martens Clause can be considered as relevant in relation to the topic at issue. Having clarified its importance, for the purpose of the present work it should be highlighted that the Martens Clause ultimately 'provides authority for looking beyond treaty law and custom to consider principles of humanity and the dictates of the public conscience'[98]. This conclusion was supported by the International Law Commission[99].

Given all this, it appears that a reconceptualization of the criterion of intensity given the emergence of new means of warfare may take into consideration the protection of human rights. It is true that armed conflicts necessarily lead to a compression of human rights, however, as already recalled, IHL aims at striking a balance between military necessities and the protection of individuals. In

93 ICRC, 'Rule 14. Proportionality in Attack' (*IHL Database. Customary IHL*) <https://ihl-databases.icrc.org/en/customary-ihl/v1/rule14> accessed 17 April 2023.

94 Harold Hongju Koh, 'International Law in Cyberspace' (2012) 54 Harvard International Law Journal 1.

95 Convention II with Respect to the Laws and Customs of War on Land and Its Annex: Regulations Concerning the Laws and Customs of War on Land' (adopted 29 July 1899, entered into force 4 September 1900) Preamble (so-called Martens clause).

96 *Legality of the Threat or Use of Nuclear Weapons* (Advisory Opinion) [1996] ICJ Rep 1996 226.

97 Schmitt (n 5) r 20 para 10.

98 Rupert Ticehurst, 'The Martens Clause and the Laws of Armed Conflict' (1997) 37 International Review of the Red Cross (1961-1997) 125.

99 ILC, 'Report of the International Law Commission on the Work of Its 46th Session' (2 May–22 July 1994), UN Doc A/49/10, 317.

this sense, the assessment of the intensity criterion, conducted under a flexible approach, may take into consideration whether the armed attacks compromise the enjoyment of fundamental human rights, that cannot be protected by law applicable in peacetime. This conclusion appears to be consistent not only with the ultimate and original aims of IHL, but also with the current development of international law in general. In this regard, it appears that in the last decades, human rights have gained more and more relevance, and the branches of IHL and IHRL are more and more merging, leaving the sharp separation in their application behind. These two issues are now further developed.

First, the relevant role gained by IHRL in recent years has been recognized both in practice and doctrine. The adoption of several international conventions on human rights,[100] and the institution of several regional courts dedicated to the protection of human rights (notably the European Court of Human Rights), prove the relevance gained by IHRL after the Second World War. Second, the different application between the two legal frameworks is not considered as blunt as in the past. It used to be submitted that IHRL and IHL were two alternative legal frameworks, IHRL being applied in peacetime, IHL in wartime. This theory, however, is not unanimously endorsed today, and an approach which takes into consideration the necessities of human beings even in case of armed conflicts is gaining more and more strength. In this sense, it is worth mentioning an excerpt by the ICTY decision on the defense motion for interlocutory appeal on jurisdiction given in the *Tadić* case: 'the impetuous development and propagation in the international community of human rights doctrines, particularly after the adoption of the Universal Declaration of Human Rights in 1948, has brought about significant changes in international law, notably in the approach to problems besetting the world community. A State-sovereignty-oriented approach has been gradually supplanted by a human-being-oriented approach'.[101]

Besides the compatibility of the human-rights based approach to the ultimate aim of IHL and to the more and more central role of IHRL, the approach

100 Such as the International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171; International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3; Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3; Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (adopted 10 December 1984, entered into force 26 June 1987) 1465 UNTS 85; Convention on the Rights of Persons with Disabilities (adopted 13 December 2006, entered into force 3 May 2008) 2515 UNTS 3. On a regional level, see the Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention on Human Rights, as Amended) (adopted 4 November 1950, entered into force 3 September 1953) 213 UNTS 221; American Convention on Human Rights (adopted 22 November 1969, entered into force 27 August 1979) 1144 UNTS 123.

101 *The Prosecutor v Dusko Tadić (Appeals Chamber, Decision on The Defence Motion for Interlocutory Appeal on Jurisdiction)* (n 45) para 97.

that takes into consideration human rights presents the flexibility required in the assessment of the elements required for a NIAC to come into existence. Given the rapid technological developments in methods of warfare we are witnessing today, this flexibility may be a quality, as it may render the approach suitable to assess the intensity criterion notwithstanding the methods of warfare employed.

Another positive aspect of this approach is that it may be consistent also with the rules on technologically developed forms of warfare. In particular, the thesis arguing that cybernetic attacks should be conceptualized on the basis of their correspondence to kinetic ones should be analyzed. In the Tallinn Manual 2.0 it is stated that '[a] cyber attack is a cyber operation, whether offensive or defensive, that is reasonably expected to cause *injury or death to persons* or damage or destruction to objects' (emphasis added). When the harm produced by the former corresponds to the one produced by the latter, it is possible to have a cybernetic attack.[102] In addition, the notion of attack may be expanded beyond injuries and death, comprehending serious illnesses and severe mental sufferings.[103] For instance, a cyber-attack that compromises the correct functioning of a dam, thus causing a flood that kills several persons and destroys the houses in the area nearby, may be considered as reaching the level of intensity required. Similar conclusions may be reached considering the hypothesis of a dam similarly compromised by the attack of a drone. While it is true that drone attacks are kinetic in nature, it is also true that the attacks conducted employing them normally have low-intensity impacts. However, when taking into due consideration human rights, the assessment of whether the intensity criterion has been reached or not becomes possible. Using the same example, drone attacks that compromises the correct functioning of a dam may be considered as reaching the level of intensity required.

It can be concluded that the issues on the assessment of the intensity criterion required to identify the existence of a NIAC caused by the more and more widespread usage of modern, technologically advanced weapons, may benefit from the reference to a human-rights-based perspective. This is consistent not only with the ultimate purpose of IHL, but also with the general development of international law. In addition, it is also consistent with international case law. On a practical level, a human-rights-based may provide a suitable, flexible approach, apt to assess new types of armed violence, characterized by the resort to rapidly evolving means of warfare.

102 Schmitt (n 5) r 30 para 5. See also, eg, Gabriele Della Morte, *Big Data e Protezione Internazionale Dei Diritti Umani. Regole e Conflitti.* (Editoriale scientifica 2018) esp. 186 ff.

103 Schmitt (n 5) r 30 para 8.

7. Conclusions

The evolution of armed violence towards the usage of more and more technologically advanced means of warfare may create problems in the application of IHL. One of the main issues regards the field of NIACs, which are, today, spread worldwide. To identify the existence of a NIAC, a minimum threshold of intensity must be reached; however, new means of warfare, e.g., attacks using drones and cyber-attacks, may never reach the level of intensity required. Of course, this may constitute a problem: if a situation of armed violence would not be considered as a NIAC, the rules and guarantees provided by IHL would not apply.

Given all this, the intensity criterion should be reconceptualized. To do so, it is necessary to examine the concept of intensity as it has been developed and interpreted up until now. In this sense, it emerges that it has not been strictly defined by both international law and practice. However, its unprecise scope does not appear as a shortcoming: on the contrary, it appears that relevant international case law left it unclear on purpose, in order to leave it enough flexibility to apply in different circumstances.

While several theories, aimed at reconceptualizing the criteria necessary for the identification of a NIAC, have been submitted, it appears that a case-by-case approach, keeping into consideration the instances of protection of human rights, should be preferred. Indeed, even though the assessment required applying this approach is lengthy and complex, the latter appears the most suitable to assess current armed violence while being consistent with IHL and international law in general, as well as apt to assess new forms of armed conflicts with new methods of warfare. However, such a flexible approach needs a stable point anyway, and the focus on the protection of human rights seems the most suitable, both because of the ultimate goal of IHL and because of the relevance gained by IHRL in recent decades.

Arguably, the reconceptualization of the criterion of intensity should be object of further studies. Indeed, two main issues emerge: first, while providing enough flexibility to be compatible with international case law on the issue, the inquiry required to evaluate whether the intensity criterion has been reached or not may be long; second, it may be submitted that the violation of not all human rights may lead to the reaching of the minimum threshold of intensity required for a NIAC to come into existence. Besides being compatible with the list included in the Tallinn Manual 2.0, this may be compatible with the widespread classification of human rights into several categories. However, given that it has been submitted that IHL should be reformulated as a whole to

accommodate new means of warfare[104], the issues presented may be tackled during this wider process of reconceptualization.

104 See, eg, Michael N Schmitt, 'Classification of Cyber Conflict' (2012) 17(2) Journal of conflict and security law 245.