

Völkerrechtsblog

Der Blog des Arbeitskreises junger Völkerrechtswissenschaftler*innen

≡ Navigation



DISCUSSION

Identifying even more Common Ground: Autonomous Weapons must not be Exploited to their Full Potential!

FELIX BOOR — KARSTEN NOWROT — 1 June, 2015



0 f t g+ p

A response to [Sebastian Wuschka](#) and [Rebecca Crootof](#)

Felix Boor and Karsten Nowrot

In order to avoid the undesirable consequence of becoming outmoded by newly invented methods and means of combat, the normative regime of the *ius in bello* has always been and

is currently even more so dependent upon the ability to anticipate future technological developments in the area of weaponry. Against this background one can indeed readily agree with the widely shared perception that it is the significant present and future potential of autonomous combat systems that gives rise to a number of at least equally momentous legal challenges.

Sebastian Wuschka and Rebecca Crootof have rightly drawn renewed attention to the question of the legality of autonomous weapons. Can these comply with the overarching obligation incumbent upon combatants to undertake quite complex assessment decisions and value-judgments prior to and in the course of launching a legitimate attack? Wuschka convincingly argues that and illustrates why autonomous combat systems cannot, at least in light of the current state of technology, be pre-programmed in a way that would make them capable of human-like reasoning as being a necessarily prerequisite for launching a military attack in compliance with the *ius in bello*. Consequently, it appears to be legally precluded to delegate the respective value assessments to these types of “non-human combatants” themselves. In our opinion, Wuschka’s line of legal reasoning as well as the conclusions he is drawing are in line with an emerging general consensus on this issue among international legal scholars. To mention but one example, William H. Boothby stated already in the present context in his treatise “Weapons and the Law of Armed Conflict” published in 2009: “There is, however, at present no known mechanical decision-making technology that can address essentially qualitative factors, such as risks to civilians. Those functions in the article 57 precautions require evaluations that can in practice only be made by a person.”

In light of this finding it seems hardly surprising that also Crootof starts her response to Wuschka by expressing her general agreement with this perception. Subsequently, we want to focus on two aspects. First, she confronts the reader with two relatively unknown weapon systems already currently in use that are indeed operating autonomously or – to be more precise (and a high degree of accuracy appears to be particularly important also in the present context) – have apparently the technical potential to function as autonomous combat systems.

Blessings and Curses of Modern Weapon Systems

In this regard, recourse to the non-stationary Israeli Harpy intended to target radar sites seems to require – as rightly indicated also by Crootof – a very cautious pre-programming of the respective parameters and thus calls for sufficient intelligence information about the targeted area prior to launching the attack. In addition, we feel compelled to add that even if these general requirements are met in a specific combat situation, certain doubts might justifiably remain whether from the perspective of international humanitarian law there is really much room in practice for a lawful use of such an independently operating advanced version of the well-known “fire and forget”-weapons, considering the fact that radar sites are evidently not only used for military purposes and thus ample opportunity exists to (accidentally) strike civil installations or also for example mobile military radar stations operating close to a hospital or a grammar school.

Quite to the contrary, the second potentially autonomously operating combat system introduced to us by Crootof, the stationary South Korean SRG-A1, can very well be

considered as belonging to the class of innovative weapons that even offers enhanced opportunities for compliance with the law of armed conflict and thus illustrates once again that new technological developments in this field should not necessarily be exclusively considered as a danger to but rather also as a chance for the effective implementation of international humanitarian law. In order to illustrate this perception, one only needs to compare the SRG-A1 with a mine, one of the traditional weapons to secure respective borders or front lines. On the one side it can be assumed that the “smart” autonomous combat systems – or rather the human combatants supervising it – will be able to recognize a group of children playing in these dangerous areas or a group of refugees (admittedly unlikely scenarios in the demilitarized zone between North and South Korea where these systems are currently primarily employed) and will let them pass unharmed. On the other side it is certain that a “stupid” mine does not possess the ability to react in such a flexible way. Consequently, the SRG-A1 has from the perspective of the law of wars certain clear advantages over alternative traditional weapons; at least as long as it is only operated in a semi-autonomous and human-supervised mode.

More Common Grounds

This last-mentioned qualification brings us to the second aspect of Crootof’s post. The two weapons she is referring to in order to rebut Wuschka’s argumentation may admittedly have the potential to operate in an autonomous mode but are currently in practice (and presumably not only for practical but also for legal reasons) operated in a manner that she rightly qualifies as semi-autonomous and thus with the necessary human oversight. Having carefully read

Wuschka's post, we do not presume that he would consider this current use of these weapons in practice – a use that does not live up to the full technical potential of these combat systems – to be per se a violation of the law of wars.

Rather, against this background, there really appears to be considerably more common ground between Wuschka and Crootof. And if one wants to be brief, this wider common ground can indeed be summarized in one sentence to which we also fully subscribe: Autonomous weapons must not be exploited to their full potential.

With regard to weapon systems of the future, we think that a certain semi-autonomous or automatic mode is from a technical perspective unavoidable. A system operating in an area far away from the operator must be capable to react on an imminent attack and can therefore not wait for the satellite signal. But nevertheless the decision to launch an attack must be made by a human being him- or herself.

Felix Boor is Lecturer and Researcher at the Department of Law at the School of Socio-Economics of the Faculty of Business, Economics and Social Sciences at the University of Hamburg, Germany. Karsten Nowrot is Professor of Public Law, European Law and International Economic Law as well as Head of the Department of Law at the School of Socio-Economics of the Faculty of Business, Economics and Social Sciences at the University of Hamburg, Germany.

ISSN 2510-2567

Tags: *Autonomous Weapons Systems, International Humanitarian Law, Proportionality*



Related

Autonomous Weapon
Systems and
Proportionality
15 April, 2015
In "Discussion"

Autonomous Weapon
Systems and
Proportionality
27 May, 2015
In "Discussion"

Proportionality
Assessments under
IHL – A Human Thing?
13 April, 2015
In "Discussion"

PREVIOUS POST

◀ Autonomous Weapon Systems and Proportionality

NEXT POST

The struggle for legislative powers ▶

No Comment

Leave a reply

Logged in as ajv2016. Log out?

SUBMIT COMMENT

Notify me of follow-up comments by email.

Notify me of new posts by email.