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# Weaponised Drones: is their use an ethical issue ?

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## Résumé

Les actions des drones sont gérées ou menées par un opérateur de loin (télécommande). Il doit répondre de son comportement au code éthique, à la loi internationale de guerre et doit faire toujours la distinction entre les cibles combattantes et non combattantes. En 2014, à l'ONU, le Saint-Siège déclarait qu'il y avait un risque moral à s'appuyer « sur des machines pour prendre des décisions à propos de la mort et de la vie ». Les systèmes UCAV nécessitent des lois humanitaires (DIH) spécifiques.

**Mots clés** : UCAV, éthique, guerre, droit international, responsabilité personnelle, diplomatie vaticane.

## Summary

The drones' actions are conducted by a remote controller. He must respond of his behaviour to the ethical code and to the International Law of War and must distinguish between combatants and non-combatants targets. In 2014, at the U.N., the Holy See declared a moral risk to rely "on machines to make decisions about death and life". The UCAV systems need specific humanitarian laws (IHL).

**Keywords** : UCAV, ethics, war, International Law, personal responsibility, Vatican diplomacy.

## Introduction

The large use of weaponised drones in the Russian aggression war against Ukraine, is once more raising demands on whether the employment of drones in a theatre of war can be considered ethical<sup>1</sup>. Different opinions and arguments are confronting the issue. Here is proposed a reflection based on International Politics methodology, with references to the Catholic doctrine on the matter.

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<sup>1</sup> The content of the paper was firstly analysed by the author on June 2015, on the occasion of a speech to be given by the Holy See delegate at the U.N. It was reviewed to be published in L. TROIANI, *La Diplomazia dell'Arroganza*, Roma, Edizioni L'Ornitorinco, 2023.

## **1. UCAV: meaning and practice**

Any unmanned airborne vehicle may be defined as a drone. A weaponised drone is an armed drone, ready to operate on the battlefield, or against a certain military or civilian target. A more technical acronym used to identify the drones, UCAV, uninhabited (or unmanned) combat aerial vehicle, makes explicit the meaning of the word. Another way of identifying the subject of this paper, is the “robot planes”.

A drone, or combat drone, is an unmanned combat aerial vehicle, usually equipped with ordnance: missiles in most case. Several countries have drones able at delivering missiles, even though operational armed drones appear everywhere, confirming the golden rule of armaments: the technological gap between two or more fighters, tends to be inevitably overcome by governments and insurgents. They copy, or steal, or buy, and finally equip themselves with up-to-date weaponry.

The use of drones appeared during the Cold War years, in the 1960s, when the US Navy installed thousands torpedo-launching helicopter drones on many of its destroyers. Subsequent technological developments allowed the drone industry to diversify between combat vehicles and observation/spying vehicles. The first are intended to destroy and kill. The latter are supposed to fly patrols over hostile territories or suspected places, for short periods or continuously, fitted with sensors and cameras to certify behaviours and/or infrastructures destined to become possible targets of strikes.

After decades of scarce direct use of UCAVs, taking stock of the positive use of drones experienced by Israel and US in their Middle East wars between the 1970s and 1990s, with the new century the aerial robots initiated to become a common arm of attack, when the war against terror and terrorism came to the agenda of international politics. It appeared that drones allowed to selectively strike and kill in any situation, even though the unjustified casualties and the collateral effects were difficult to be controlled. It also appeared that less soldiers were needed to fight, which seem to be good in terms of budget, human fatigue, loss of lives.

The combat capabilities of attack drones acquired esteem and appreciation in NATO and in any National staff. UCAVs allowed to chastise the enemy without any human loss on the side of the attacker. With respect to the manned aircraft and to the costs of cruise missiles, the purchase and operating costs of drones appeared to be lower. The

same applied to the training costs, provided that training would have been given through simulations. UCAVs were also smaller and stealthier than the usual manned planes, opening unexpected opportunities to the strategists.

In case of destruction, the economic and political costs involved appeared to be absolutely lower than the ones coming from the loss or downing in battlefield of any top gun. In confront to the drone use, long years of training and schools were not needed, no insurance or pension had to be paid to a wounded survivor, or to widows and/or children, no claim from the parliamentary opposition would have be raised on the destiny of pilots killed wounded or taken prisoner during an action, no newspaper or TV channel would have raised its critical voice for the loss of "our" boys or girls.

## **2. Ethics and International Law on Drones**

The main element of differentiation between a manned and an unmanned combat aircraft is that the latter's actions are conducted by an operator who is not hosted in the flying aircraft. He supervises the drones thanks to a high speed digital data link, without interfering in the programmed action of the robot, totally capacitated to realize by itself the mission it has been planned for. During the operational phase of a specific UCAV system, the human role varies in line with the levels of autonomy given to the aircraft and the data communication requisite: in any case the drone is under real time remote control of the operator.

The operator, whether he is a soldier or a civilian taken aboard for his technical skills, has to respond of his behavior to International Law of War and Geneva Conventions, establishing the rules of conduct of the combatants. In accordance with the International Law of War, civilians deaths and injuries have to be limited through appropriate procedures, intended to clearly identify targets and distinguish combatants and non-combatants. Accountability and precautions are demanded to the governments in order to make them not guilty of civilian deaths or injuries.

At this respect, the weaponised drones present two levels of not totally resolved questions :

- ✓ the civilian engineer operating in remote has to be considered ad eventually judged by a Court like a soldier, even though he did not wear a uniform when attending a strike?

- ✓ who is the ultimate responsible of the civilian casualties provoked by a UCAV system, given the high level of autonomy of the robot vis-à-vis its remote human controller and the long chain of command and responsibilities governing the striker UCAV?

The two questions are of particular relevance when a “collateral damage” of civilians, i. e. innocent not combatant civilian victims, is provoked by a UCAV. At this respect a series of ethical questions can be raised.

a) When the evidence shows that civilians have unjustly been killed by drones, and/or buildings like hospitals, schools, religious and historical sites have been destroyed by drones, excuses come from the responsible authority, confirming that the casualties were accidental and that no order to kill/destroy civilian targets had been issued. Compensation and reparation for damages may come afterward. The assumption of the wrong behavior and responsibility by the killer implies the avowal of the violation of Geneva Conventions with all the expected judicial consequences, or are we confronted with an avowal of a “human” error which pretends to exclude the violation of the laws of war?

In ethical terms, the killing of innocents looks unacceptable. In legal terms it helps the position expressed at the United Nations by the Special rapporteur on extrajudicial, summary or arbitrary executions, Philip Alston on 28 October 2009. In the report presented to the Third Committee (social, humanitarian and cultural) of the General Assembly, he defended the thesis that in adopting UCAVs for “targeted killings” a government should be aware that it is violating the international law, unless it shows that proper safety measures and responsibility mechanisms were adopted.

It is the case to make clear that, technically speaking, the drones system should reduce the risk of having innocent victims. In principle, more information implies less mistakes, i.e. less innocents to die or being victimized, and no unneeded destruction. UCAVs facilitate up-to-the-minute data, in-deep scrutiny and inspection of the ground before the decision to strike is confirmed. Furthermore, the remote control allows the unmanned machine to approach the target at a proximity which was not even thinkable with manned vehicles. This adds a lot in terms of precision and makes the final human decision to release or not the shooting more rational and ethical in respect to the traditional air bombing, because provides much more time and information to the

final human decision in respect to the traditional airplane and missiles systems strikes. Still mistakes happened and will happen, innocents were killed and will be killed by UCAVs.

b) How the distinction between combatants and non combatants may apply when the fighting is against the Islamic oriented terrorism, using a war technique which tends to be “inclusive” of all the believers with no distinction of age gender and military status. The Islamic state and Al-Qaeda theorize to enrol the entire community sharing the same faith in the “jihad” against everyone and all of non believers. The logical and juridical scheme combatants v. non combatants, i.e. the basis of the Humanitarian Laws of War, was a product of the “classical” wars where the states and their armed forces were the main, if not the exclusive, players. Here the subject which declares war is fighting cultures, societies, religions, moods of life as an all, more than states or political regimes. In fact they combat preferably certain categories of civilians: journalists artists and communicators, tourists, prayers of different faith, students and scholars, girls and women.

Daesh and al-Qaeda combatants and leaders used to hide themselves in civilian houses, mosques, nurseries, open markets. They like to be part of religious events, popular gathering, wedding parties and other social and religious events. To stay in the midst of people and of a crowd means to install security and devotion in the followers and make those sentiments to grow. It is also an effective technique of camouflage, given that it confuses the enemy and abide his strike. How can the terrorist groups on the ground be searched and beaten if they cannot be struck when are together with civilians, who at least formally appear to be “non combatants”? At the same time how can be morally and legally acceptable to kill and wound dozens of common persons surrounding the target of the strike?

Recently, in a distinct scenario, similar “inclusive” tactic was adopted by Hamas as its fighting technique, when Gaza strip was invaded by the Israeli forces. How to allow the scheme of Geneva to survive when this “inclusive” method prevails, has still to meet a juridical and ethical convincing rule universally acceptable.

c) The ethicality and honorability of the persons acting as the “guide & manager” of the drones operating on the ground are under a severe scrutiny. It has already been examined the question whether they should be legally considered combatants together with the position that from a moral point of view they certainly are “authentic” combatants even though their legal status was that of a civilian.

In addition to that it should be noted that the military culture is historically rooted in the “cavalry” rules and in that culture looks unacceptable the overwhelming and incomparable unbalance of force and risk between the two parties of the strike: whereas the attacker is comfortably seated in front of a screen and buttons, the designated victim has no way to escape and/or combat. He has no one in front of him, and he is destroyed by an anonymous who is non fightable. Such a huge asymmetry has nothing to do with the “honourability” of the “confrontation” on ground, which the traditions of the soldiers pretended to preserve through the millennia, notwithstanding the horrors and carnage of any war. On one side no risk is existing any more, and the doubt of whether the scenario can still be considered as a war or instead it is a truly killer’s operating technique appears licit, and that hurts the conscience of the controller. The above explains part of the psychological fatigue, stress disorders and mental diseases which appear among the operators of weaponised drones lethal strikes. A post traumatic stress disorder (PTSD) is a common symptom among the remote controllers of drone actions.

d) Another part of the syndromes which are associated to the job of a controller, derives from the detailed and real time observation of the most crude details of the events resulting from the drones actions, allowed by the screen in a remote controlled operation. The victims are often followed on the screen during long periods: they may be observed in high definition by the drone operator for days and nights. It may happen that the operator looks at his destined victim while he or she is with family, with children, and becomes psychologically intimate to him/them. With this in mind, it can be better understood the witnessing of three operators on how devastating the killing experience through the terminal can be : “But the weirdest thing for me – with my background (as a fast-jet pilot) – is the concept of getting up in the morning, driving my kids to a school and killing people. That does take a bit of getting used to. For the young guys or the newer guys, than can be an eye opener”<sup>2</sup>.

But flying a drone, [the pilot] sees the carnage close-up, in real time—the blood and severed body parts, the arrival of emergency responders, the anguish of friends and family. Often he’s been watching the people he kills for a long time before pulling the trigger. Drone pilots become

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2 R. BLACKHURST, *The air force men who fly drones in Afghanistan by remote control*, Daily Telegraph, 24 September 2012. Quotations of an interview. Accessed 12 July 2024. Available at [www.telegraph.co.uk/news/uk-news/defence/9552547/The-air-force-men-who-fly-drones-in-Afghanistan-by-remote-control.html](http://www.telegraph.co.uk/news/uk-news/defence/9552547/The-air-force-men-who-fly-drones-in-Afghanistan-by-remote-control.html).

familiar with their victims. They see them in the ordinary rhythms of their lives—with their wives and friends, with their children. War by remote control turns out to be intimate and disturbing. Pilots are sometimes shaken. The smoke clears, and there's pieces of the two guys around the crater. And there's this guy over here, and he's missing his right leg above his knee. He's holding it, and he's rolling around, and the blood is squirting out of his leg ... It took him a long time to die. I just watched him<sup>3</sup>.

The pilots striking from high in the sky have less contact with the victims, than the operator on a terminal. They usually fly to a mission hundreds if not thousands of miles far from their aerial or marine basis, arrive on the target, shoot, have a U-turn and go back home, without any particular perception of the tragedies they caused with their bombing.

Hugo Ortega, a military psychologist, finds meaningless confessions at the ones quoted above. He studied the stress of the operators and he confirms the stress, specifying that its roots are not in the consciousness of being a mouse-click killer. According to him the factors of stress are long shifts and duties, unpredictable working times, personnel scarcity, the awful day by day boring surveillance [... ] Nurses working the night shift, everyone working rotating shifts say the same things<sup>4</sup>.

e) With evidence, the summing up of the above emotional and moral stress, lowering consideration among the colleagues, difficulties in career advancing, are setting up conditions for a shortfall in the availability of operators at the drones' guidance chain, seen as a "dead end job".<sup>5</sup> There is also a general feeling of cowardice and culpability spreading around the Country most used to strike with drones, the United States, when UCAVs use by American Navy and Air Forces are discussed. Instead of glorifying themselves for the technological supremacy allowing to search and destroy the enemy without losing lives, Americans suffer the blow to their own cultural, religious and political identity, coming from an excessive and never stopping use of drones.

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3 M. POWER, *Confessions of a Drone Warrior*, GQ, 22 October 2013. Accessed 30 June 2024. Available at [www.gq.com/story/drone-uav-pilot-assassination](http://www.gq.com/story/drone-uav-pilot-assassination).

4 A. HALL, *Why Working The Night Shift Has Major Health Consequences*, The Huffington Post, posted 1 Jun 2015. Accessed 1 July 2024. Available at [https://www.huffpost.com/entry/rotating-shift-work-health\\_n\\_6417644](https://www.huffpost.com/entry/rotating-shift-work-health_n_6417644).

5 A. C. ESTES, *Nobody Wants to Fly Air Force Drones Because It's a Dead End Job*, Gizmodo, 21 August 2013. Accessed 10 July 2024. Available at <https://gizmodo.com/nobody-wants-to-fly-air-force-drones-because-its-a-dea-1179733596>.



It could be quoted the study of professor Faysal Kutty of Valparaiso University Law School, based on statistics from the Bureau of Investigative Journalism, Amnesty International and Human Rights Watch, and the reports issued by Henry L. Stimson Center and a joint report issued by Stanford Law School and New York University School of Law, through panels which included a retired US Army general and former chief of US Central Command, previous legal counsellor to CIA and White House National Security Council. The conclusions state the evidence that the long-term killing programs based on secret rationales do not fit with the culture of American democracy, and that beside being legal in terms of US law and justifiable under international law, they are not consistent with “more basic rule-of-law principles that are at the core of the American identity and that we seek to promote around the world”<sup>6</sup>.

f) Much more serious psychological disorders the drones generate on the victims. Peter Schaapveld, a forensic psychologist, examined the issue during a fact-finding mission to Yemen from 9 to 16 February 2013. He found that 92 percent of the population was suffering from post-traumatic stress disorder. By no surprise, the researcher affirmed that children were the most affected <sup>7</sup>.

### 3. Catholic Position on the Issue

A comprehensive Holy See statement on the issue was given in Geneva, on 13 May 2014, by H. E. Archbishop Silvano M. Tomasi, Permanent Representative of the Holy See to the United Nations and Other International Organizations, at the Meeting of experts on

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6 See comment of Bellinger J., Targeted Killing, Report of the Stimson Center Task Force on Drone Policy, *Lawfare*, 26 June 2014. Accessed 11 October 2017. Available at <http://www.lawfareblog.com/report-stimson-center-task-force-drone-policy>. See also STIMSON, Recommendations and Report of The Task Force on US Drone Policy, Second edition. Accessed 12 July 2024 Available at [https://stimson.org/wp-content/files/file-attachments/recommendations\\_and\\_report\\_of\\_the\\_task\\_force\\_on\\_us\\_drone\\_policy\\_second\\_edition.pdf](https://stimson.org/wp-content/files/file-attachments/recommendations_and_report_of_the_task_force_on_us_drone_policy_second_edition.pdf). See also the COUNCIL OF EUROPE position on the issue: Resolution 2051 (2015): Drones and targeted killings: the need to uphold human rights and international law, 23 April 2015. Accessed 12 July 2024. Available at <https://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=21746>.

7 All Party Parliamentary Group on Drones, *Psychological Terror? Lessons from Pakistan and Yemen on the Psychological Impact of Drones*, 5 March 2013. Accessed 21 June 2024. Available at <http://appgdrones.org.uk/appg-meetings/psychological-terror-lessons-from-pakistan-and-yemen-on-the-psychological-impact-of-drones-5-march-2013/>.

Lethal autonomous weapons systems of the *High Contracting Parties* to the convention on “Prohibitions or Restrictions on the use of certain Conventional Weapons which may be deemed to be excessively injurious or to have Indiscriminate Effects”<sup>8</sup>.

The statement assumes as the centre of the position it expresses the relationships between humanity of our society and the use of technology in war. The risk involved in the *robotisation* of wars is to rely “on machines to make decisions about death and life”.

Tomasi recalls that the Holy See delegation had had occasions to express “deep concern” on drones use and “the troubling ethical consequences for users and victims alike”. The statement echoes the fear that warfare will more and more become a too “rational” game where emotions, sense of fear and morality of humans using the technological advantage and robots will no more be involved. As a consequence, many restraints related to the use of force will fall apart, first of all the toll of death and casualties to be paid to the enemy reaction in case of an attack.

Tomasi requests the practice of the principle of precaution and the adoption of “a reasonable attitude of prevention”. He also demands that autonomous weapon systems should pass the IHL examination, in order to make them fit with the obligatory respect for international law, human rights law and humanitarian law.

Furthermore, the Holy See consider that autonomous weapon systems have, like drones, a “huge deficit” which does not only rely upon the compliance or not compliance with IHL, being the inherent lack of human qualities the fundamental limit they denounce. To dehumanise warfare behind any limit, implies to cut the traditional loop of war and change the fundamental equation of war where life and death are confronted by all the warriors at the same time. In case the decision of striking against humans is given to armed robots as UCAVs takes one part of humans involved in warfare “out of the loop” and that is a situation which “presents significant ethical questions, primarily because of the absence of meaningful human involvement in lethal decision-making”.

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8 Quotations from S. M. TOMASI, *The Vatican in the Family of Nations, Diplomatic Actions of the Holy See at the UN and Other International Organizations in Geneva*, Cambridge University Press, 2017.

The Holy See representative examines the case that algorithms and programmes confide to the artificial intelligence of the flying robot abilities for appropriate use of armaments in compliance with international law and certain humanitarian prerogatives. Still, he notes, the robot will not have emotion and an ethical frame of reference, for judging the situation and make a choice, because these are exclusive human activities and liberties. The practise of rules of distinction and proportionality, for instance, belongs exclusively to humans.

Whether the zero casualties and dead of the attacker through drones is morally positive, this very fact is certainly fuelling the animal spirits of war, providing an overwhelming potential advantage to the nations having UCAVs at their disposal. This may diminish the search of peaceful solutions and compromise among the nations. The second argument is related to the previous one. The warfare history says with clarity that no arm can be preserved in the exclusive hands of the inventor. Proliferation of robots and drones has to be expected. This will make higher the risks of war, being lower the risks of victims on the side of the attacker.

The sense of urgency and concern for an immediate action characterize the last part of Archbishop Tomasi speech at United Nations. There is a clear request of a multilateral approach able to question the development and implementation of autonomous weapon systems. There is a push to act as it has been done with the protocol on “Blinding Laser Weapons”, in order to intervene before technology and proliferation go too far.

The experience of the following decade showed that the *caveat* of the Archbishop Tomasi was appropriate. Drones are a fundamental tool of the present day wars and they are contributing to raise the toll of life and destruction the conflicts among nations provoke. The continuous progress in Artificial Intelligence applications will further increase the “self-deciding” ability of UCAV and provide opportunities for further increase in drones’ usage by the parties in war.

At this respect, an interesting analysis appeared in the specialised magazine *Difesa online*<sup>9</sup>. Having reference to the large use of drones in the Ukrainian battlefield, it is affirmed that the direct active human

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9 P. DEL MONTE, *Some reflections on Drones: towards Abandoning Human-In-The-Loop*, *Difesa online*, 2 July, 2024. Accessed 6 July 2024. Available at <https://en..difesaonline.it/mondo-militare/alcune-riflessioni-sui-droni-verso-labbandono-dello-human-loop>.

participation and interference in UCAVs operations is expected to dramatically lower, thanks to the growing artificial intelligence mechanisms. The so called &quot; Human-In-The-Loops&quot; strategy - i.e. the drone acts through a model where the final decision to hit a target or not belongs to the soldier or operator - is near to be abandoned. Florian Seibel, CEO of the German-Ukrainian company &quot; Quantum Systems&quot;, aiming at designing and producing AI-driven combat drones, says :

In the near future it is not certain that we will not choose - and reflections on the ethical implications behind this choice are already numerous - to allow drones to hit enemy targets autonomously, through processing and decisions directly taken by artificial intelligence in the event that it is impossible to communicate with human decision makers<sup>10</sup>.

### **Conclusion: Looking to the Aftermath**

It results from human experience and history that the technological progress and inventions proceed through inertia to following development and steps. Our times need to be aware that any UCAVs' operational single use entails a human role in the process ending with life or death, destruction or survival of the targets.

It is a matter of technical and ethical consideration whether the above human role is still significant and decisive, or it has already been given to technology the overwhelming factor on the battlefields where UCAVs play their deadly job.

What is perceived as likely, is that in near future technological progress will put at disposal of warfare more advanced UCAV systems, presumably being totally free from human interferences, i.e. moral evaluations. This is an extremely risky scenario. Quoting a famous motto: if war is too serious to be left to generals, how could we imagine to leave it to robots?

In the present conditions, automation is related to the flying of vehicles more than to the shooting systems, but it is easy to forecast that the technological progress will inevitably present the warfare strategists the opportunity to automate the adoption of decisions related to the use of lethal force.

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<sup>10</sup> *Ibid.*

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Good arguments in favour of the above option will not lack. As it is going on with trains, metro, cars, cranes, mine-clearers, space vehicles, in UCAV affair the software will pretend a superior reputation in relation to the human abilities, and the Armed Forces will be pushed to adopt it. Algorithms will be said to be more precise and less mistaking, to have a longer operability, more resistance to stress and fatigue, and, why not ?, more proclivity to objective judgments and decisions.

Here the comments, preoccupations and demands raised by Archbishop Tomasi on behalf of Holy See appear still valid and meaningful and acquire all their urgency. Where the human responsibility will be located in that scenario? Where the duty for the last instant moral decision about the lethal shooting? Who will be morally blamed and legally guilty of actions which will be considered wrong? Who will pay for the mistakes and the human toll involved? Were the person or the group of persons to be put under judgment and in case declared as culpable in legal and/or ethical terms ? The politicians ? The technicians ? The operators ?

Control, restraint and accountability belong to humans: they can never be delegated to machines. To make fully and totally autonomous the deployment of ammunition, to assign the brain of a robot the decision on life and death would negate the moral human responsibility in the conduct of a warfare.

This is not a position against artificial intelligence and algorithms. It is the total and full autonomy of a likely automated UCAVs system to call for a moral and political steady opposition. The human role of supervision and ultimate decision on the shootings from drones is not negotiable, because it deals with the intimate relation between human kind and its way of being and surviving on the planet. The above is not a position against technological advancement, it is a position against the human regression.