Autonomous systems, superior orders and manifest unlawfulness

Brendan Walker-Munro

The recent development of the next generation of 'drones' featuring some form of artificial intelligence or machine learning – the autonomous military system or AMS – has fuelled speculation about who the law ought to hold responsible for misuse. Do military personnel have an obligation to disobey unlawful orders where an AMS is involved? This brief considers examines the superior orders defence and the duty to disobey in relation to orders involving AMS.

Orders, disobedience and criminal liability

Military service is reinforced by the issue of orders, both in written and oral form. These orders must carry both "moral" and "legal" weight because the nature of military operations involves the possibility of using (and receiving) lethal force against others. As the High Court of Australia has said "service in the Air Force, as in the naval or military forces, involves in its most absolute form the right of a member superior in rank to give lawful orders to a member inferior in rank, and the obligation of the member inferior in rank to obey those orders".

In practice however, both the moral and legal authority behind orders can be changed. Not all orders need to be obeyed, and not all types of orders do either. An order to 'walk my wife's poodle' may be rightly seen to fall beyond a superior officer's moral authority, and could be ignored as it does not invoke the member's professional competence. Further, an order issued in 'operations against the enemy' requires that a soldier or officer engage in their 'utmost exertions' to carry those orders into effect. However, orders not issued in combat operations do not require that same level of exertion.

Further, acts which are unlawful are not rendered lawful merely because a superior officer orders that it be done. Military personnel are not obliged to comply with orders that are not lawful (as opposed to those orders which might be merely negligent, in that they might carry a high degree of risk), which requires the person receiving the order decide whether an order was 'necessarily' or 'manifestly' illegal, or compelled conduct 'obviously improper or contrary to law'. In Australia, this position is contained in the *Defence Force Discipline Act 1982* (Cth):

A person is not liable to be convicted of a service offence by reason of an act or omission that: ...

    (b) was in obedience to:

        (i) a lawful order; or

        (ii) an unlawful order that the person did not know, and could not reasonably be expected to have known, was unlawful.

What does this mean in practice? First, military members are permitted a legal presumption that, where an order lacks any measure of clear or manifest illegality and is issued by a superior officer within the ambit of that officer's professional competence, the order is lawful. Secondly, a soldier or officer has an obligation to seek clarification of orders which are ambiguous, and in the absence of clarification, to operate in accordance with the laws of armed conflict. This includes refusing orders that contain some ambiguity but nevertheless clearly contemplate illegal conduct in their execution.

This means that in some cases, military personal may have a 'duty to disobey' where they have good reason to believe an order is unlawful: there must be a mistake of fact rather than a mistake of morality. The duty to disobey therefore requires two things on the part of military personnel. The first is awareness that an unlawful order might be issued (especially in AMS operations), and second is a willingness to enquire as to the legality of the order. In doing so, there must be an acknowledgement of the rank and experience of the member, as well as whether the situation involves an emergency or not.

AMS and the duty to disobey

The duty to disobey in an age of AMS requires military personnel to trust the software and hardware in the AMS is making correct decisions or giving accurate advice. In those circumstances, how are we to instil trust in AMS among frontline operators of the technology, who ultimately might face criminal responsibility for making the wrong decision?

Military personnel do not necessarily need to have a deep understanding of how an AMS works to trust it – humans can make value judgements if they accord with other experiences of similar value. For example, when we fly in a plane, we inherently place our trust in the use of autopilot systems because they are highly reliable, even if we don't understand how they work. Yet training military personnel in how an AMS reaches its decisions will permit those personnel to have a greater ability to trust that system is making the correct recommendations.

Military personnel must, before an order is issued, be able to take reasonable steps to validate what an AMS may be telling them. Military commanders and their subordinates considering deploying their weapons must have sufficient information about

their target to be capable of discharging their legal obligations under both domestic and international law.

It is crucially important that the involvement of AMS in intelligence analysis, target validation and attack decisions are attended by procedures where the data supplied from AMS can be questioned with sufficient robustness. Observations of an uncrewed system can be supplemented with on-the-ground, aerial or satellite surveillance to achieve that level of trust.

In circumstances where an order does not involve the application of kinetic force to an enemy, the duty to disobey becomes less urgent, but still forms part of a soldier's duty. In such situations there may be more time and latitude for an order to be questioned, and for information supplied by an AMS to be verified. Decisions should never be made solely by an AMS, and information supplied by an AMS as part of a military appreciation process should be verified to the maximum extent possible. The humans on the ground and the officers in command of them should be constantly vigilant that the recommendations made by an AMS might be wrong – the consequences of which (for example, by allowing civilians to drown in a flooded river) might be no less dire in a humanitarian or rescue situation.

Conclusion

AMS present a fundamental change to the way that conflicts will be fought, now and in the future. The literature, particularly that focused on international law, has been largely in response to concerns as to whether the use of such systems will be compliant with legal regulation, or even amenable to it. Such literature has yet to fundamentally examine how existing military institutions – such as the law surrounding orders issued by superior officers – will control the use of AMS as well as the behaviours of military members in using them.

Though the thought of disobeying orders may be anathematic to most military minds, the duty will abide even the deployment of AMS – though AMS are unlikely to significantly change the duty, they will mutate it into a new form. Pragmatically, members will need to inform themselves as to how these AMS operate, how they interpret information and how they make recommendations. Equally, commanders will need to ensure that when orders are issued, the involvement of AMS has been subject to a sufficient detail of 'trust' and 'verification'. Previous reliability or predictability of AMS is no surety for future performance, and blind reliance on AMS in issuing or complying with orders is more than likely to result in tragedy. ●

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