Anything but 'drone': Why Naming Matters

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On the 14th of September 2016, the Associated Press ran a headline that stated "drone kills 5 suspected al-Qaida fighters".[1] As a headline, it is far from unique, but the journalist who penned it is catastrophically wrong and ultimately misleading.

The actor in this scenario is the "drone": it is the drone that "kills". This is patently untrue. Such an insinuation misinforms the reader, spreading a cloud of negativity over the discussion of an aircraft that is controlled by a human operator and is unmatched in its ability to observe a potential target for extended periods of time, which can minimise, and potentially prevent, human casualties and collateral damage.

Similar characterisation of weapons as 'actors' has occurred elsewhere, notably IEDs and 'car bombs', with similar potentially misleading headlines such as "Baghdad car bomb kills at least 48", a title used by the BBC in February 2017.[2] While the explosives in the car caused the casualties, the article goes on to discuss "suicide attacks", making the human component of the action clear. The situation for 'drones' is unique due to the connotations of a 'robot' performing the 'killing': the IED and car bomb may be characterised as the device that caused casualties but, unlike them, the 'drone' itself is perceived to select its targets.

Referring to 'drones', the Associated Press title used at the top of this brief is not unique. In September 2016, for example, the BBC also fell into a similar trap, using the headline "US to pay drone victim's family" to lead a story about recompense from the U.S. government to the families of two aid workers killed in an air strike.[3] The specificity of the type of aircraft used in this attack also puts it at odds with the catch-all phrase of "air strikes" that appeared in the title of another article published in September 2016 alongside an image of Royal Air Force Tornados and discussed the lack of civilian casualties in the latest round of attacks against ISIS.[4]

The crux of the problem is the ill-informed impression that 'drones' operate autonomously; flying, targeting, and striking adversaries without human input. The term 'drone' evokes this image, and it is this terminology that must change if we are going to accurately appraise remotely-piloted military technology.

In a military context, 'drone' refers to a 'remotely controlled aircraft' that carries advanced sensors

and, in certain versions, also provides the capability to employ weapons. In military doctrines, this equipment is commonly referred to as an Unmanned Aerial Vehicle (UAV), Unmanned Aerial System (UAS), or Remotely Piloted Aircraft (RPA). The etymology of the word 'drone' can be traced back to the Old English *drān*, which described a male bee that performs no function following the fertilisation of the Queen.[5] This original use was related to the noise that the bees make, and from this 'drone' was popularised to mean a "monotonous low dull sound", particularly where it is ongoing or unending.[6] There is thus an otherworldliness about a 'drone'; it is an unstoppable and relentless presence without intelligence, emotion, or passion.

It is through this linguistic prism that we should consider the use of 'drone' to refer to aerial weapon systems. The Oxford English Dictionary provides a definition of 'drone' as a "remote-controlled pilotless aircraft or missile".[7] There is an immediately apparent contradiction: if the aircraft or missile is "remote controlled", how can it also be "pilotless"? Simply because the aircrew is not on board, this does not nullify the fact that they are controlling its manoeuvres and possible weapons employment. This sloppy use of language adds to the mystique of military 'drones' and the image engendered is of a system that represents the unthinking robots of science fiction that move unflinchingly towards their target, regardless of the entreaties of its opposition.

Militaries have not been blameless in the misconceptions due to a lack of terminology standardisation, despite the fact that remote controlled aircraft have been in military use since the mid-1930s.[8] Industry periodicals used 'Drone' to describe remote controlled aircraft from around 1945, partly due to the fact that most were used to provide gunnery practice against an airborne target and thus, like the 'drone bee', had limited function.[9] Many militaries still use 'drone' to refer to similar 'dumb' equipment that lacks advanced sensors and is used as an airborne target. As the differentiation in language indicates, these rudimentary aircraft are categorically different from the UAVs / UASs / RPA that are used in military operations. Nevertheless, from the standpoint of public perception, the non-autonomous nature of UAVs / UASs / RPA appears to be widely misunderstood and leads to discomfort about the systems' use. Rectifying this requires the provision of education about the fact that humans control UAVs / UASs / RPA, and by preventing 'drone' being used to describe these aircraft.

The need to expend resources on what is essentially a point of semantics may seem strange, but it is very real. First, by facilitating the misconception that these aircraft deploy weapons without human control, we are pre-emptively muddying the debate that is required around fully autonomous weapons systems. In technological terms it is not inconceivable that an aircraft could operate without human oversight, including identifying a target and deploying weapons, and there are ethical and legal questions that this poses that require further exploration. By allowing no linguistic distinction between this form of aircraft and the currently operational UAVs / UASs / RPA, we inure the public and potentially prevent active and informed engagement in this discussion. The UN Convention on Conventional Weapons has conducted three 'Meetings of Experts' to discuss the implications of

artificial intelligence being used in weapons systems. However, as the U.S. delegation stated at the 2015 Meeting, "we are here to talk about future weapons...we are not referring to remotely piloted aircraft, which as their name implies are not autonomous weapons".[10]

Furthermore, the negative connotations that surround the word 'drone' leads to unfair stigmatisation of UAVs / UASs / RPA. Public opinion is an important driver of policy, and by turning a population against these aircraft we risk stripping the military of a critical tool. Remotely piloted systems, particularly those such as the *Predator* and *Reaper*, have made a positive contribution to combat operations in the Middle East. Against a technologically-limited opponent, they provide a degree of situational awareness that gives human decision makers an unprecedented degree of intelligence on the target, thereby ensuring that damage to the surrounding area and civilian population is minimised to the greatest possible degree. This is in contrast to strike aircraft with a human on-board where, in the majority of cases, the aircrew has a matter of seconds to validate the target or perform a last-minute collateral damage estimate before deciding whether or not to launch weapons.

This is not to say that UAVs / UASs / RPA are perfect. Like any weapon, they can be used in a manner that breaches the Law of Armed Conflict. However, for this to occur it requires human action. Maintaining a 'human-in-the-loop' remains central to current military doctrines, except in anti-projectile defence systems which require a reaction speed and accuracy of operation that would be impossible for a human. Consequently, human errors can occur and

the sensor information relayed via the UAV / UAS / RPA is only as valuable and accurate as the human that interprets it or confirms a 'fire' solution provided by the system. Nevertheless, the contribution of these aircraft has been of huge value in military operations, saving lives both through their ability to degrade the military assets of the opposition and through facilitating the situational awareness that leads to more informed decision-making.

Agreeing on standardised terminology would ideal, with 'RPA' the most appropriate given the potential that 'unmanned' is misconstrued to mean that the aircraft are operating autonomously. However, given that there is currently little standardisation amongst western militaries, such a wish may be a pipe-dream. Consequently, every effort must be made to ensure that the general public understand, when they see any of the three acronyms, that the aircraft is piloted and, where a decision to deploy weapons is made, a human remains responsible.

It is also the responsibility of those involved in the discussion, whether practitioners or academics, to ensure that the media are given a framework that allows them to provide accurate information to the public. Those who appreciate the human control of the remotely piloted aircraft currently in military operation should make a concerted effort to stress their non-autonomous nature and, as far as possible, standardise terminology with regard to aircraft with no on-board commander, canonising 'UAS', 'UAV', and 'RPA'. We must use every possible opportunity to encourage their use in political rhetoric, public dialogue, and media representation, while castigating those who persist in 'droning on'.

Endnotes

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3. BBC News, "US to pay '$1.2m' to Italian family of drone strike victim," September 16, 2016, http://www.bbc.com/news/world-europe-37385989.

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8. Aviation Week, "The Strange History of the Word 'Drone'," *AviationWeek.com* April 22, 2016, http://aviationweek.com/defense/strange-history-word-drone.

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