



Bridging distances in technology
and regulation

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Too close to kill, too far to talk

Interpretation and narrative in drone fighting and surveillance in public places

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Abstract Like other teletechnological practices, drone fighting as remote fighting gives rise to a paradox with regard to the relation between ethics and distance: on the one hand, it bridges physical distance in the sense that it enables spying on people and killing people in other parts of the world. On the other hand, it seems to increase *moral* distance: if you are far away from your target, it becomes easier to kill. However, based on interviews with drone crew as published in the media, I show that the current surveillance technologies used in drone fighting might mitigate this effect since they allow the viewer to build up a kind of intimacy with (potential) targets. Then I argue that this moral proximity is only possible if we assume that interpretation and the construction of narrative play a key role in the epistemology of surveillance. I compare military surveillance to surveillance in public spaces to elaborate this point and explore the relation between automated surveillance, distance, and interpretation. I also argue that given the lack of shared sociality and communication, moral distance in surveillance and drone fighting can only *partly* be bridged by technology-mediated interpretation and narration. I conclude that we need more reflection on how technologies could create the conditions under which moral metamorphosis and interpretative freedom is not only possible but also probable.

Keywords drones; ethics; surveillance technology; distance; interpretation; narrative

Introduction

Unmanned aerial vehicles, also known as ‘drones’, are increasingly deployed by military organizations all over the world, for example for surveillance but also for killing people. Some argue that drones enable more precision, and that they are therefore better at avoiding killing of civilians. Whether or not this is true, the technology has certainly one important advantage over previous methods: it inflicts damage on the enemy but does not risk the lives of one’s own people and material damage is also limited (see for example Valdes 2012). However, drone fighting also raises many ethical issues (see for example Asaro 2008; Singer 2009; Arkin 2008; Lin et al. 2008; Sparrow 2007; 2009; Sullins 2010). An important and interesting one has to do with the same reason why drones incur less risk for those who deploy them: distance. The worry is that because of the distance, killing becomes easier: it becomes a ‘video game’: “operators sit at game consoles, making decisions about when to apply lethal force” (Sharkey 2012, 113). This claim seems plausible and seems to be illustrative of a paradox that is applicable to all teletechnologies: such technologies bridge physical distance, but at the same time they create (more) moral distance. However, in this paper I will nuance this thesis by focusing on contemporary surveillance technology and its epistemic and moral implications. I will argue that under certain conditions such technology might enable the user to get ‘closer’ – not only in a physical but also in a moral sense. I will show that these conditions have to do with the need for, and our capacity of, interpretation and narration, which may at least *partly* bridge the distance in drone fighting and surveillance. Thus, I will show that the role of the new surveillance technologies is much more ambiguous than assumed in the ‘easy kill-

ing' argument: they create moral distance but at the same time offer ways to mitigate this effect. However, comparing drone surveillance to surveillance in public places, I will also argue that the moral distance cannot be fully bridged due to a lack of a shared physical-social and communicative space. This will lead me to further reflection on ethics, transfiguration, and ambiguity. But let me start with offering support for the 'easy killing' argument.

The phenomenology of fighting and killing: Support for the 'easy killing' view

In fighting, as in other practices, other humans can be experienced and appear in various ways, depending on all kinds of conditions. It is well-known that killing is more difficult at short range. If a fighter can see the other's eyes, if he touches the other's body, if indeed he has 'intimate' knowledge of the other's body, his opponent appears like a human being, a person not too dissimilar to himself. In this case, fighting itself is a personal matter. Because of this proximity, intended killing of the other is difficult. We have psychological barriers to kill at close range. Psychological evidence suggests that there is "a direct relationship between the empathic and physical proximity of the victim, and the resultant difficulty and trauma of the kill" (Grossman 1995, 97). A shorter physical distance means more *moral* distance. Grossman writes:

"At close range the resistance to killing an opponent is tremendous. When one looks an opponent in the eye, and knows that he is young or old, scared or angry, it is not possible to deny that the individual about to be killed is much like oneself. [...] As men draw this near it becomes extremely difficult to deny their humanity. Looking in a man's face, seeing his eyes and his fear, eliminate denial." (Grossman 1995, 118)

In philosophy, a similar point has been made by Levinas, who argued that there is an ethical demand that arises directly in relational situations: the face of the other shows the other's vulnerability, which renders killing impossible. When we see the other's "defenceless eyes", the other's "nudity", we cannot kill (Levinas 1961, 199-200).

Historically, the 'solution' to this 'problem' has been the development of weapons, which can be understood as *teletechnologies*, that is, tools that are intended to increase and bridge physical distance – the idea is that you can strike while minimizing risk for yourself – but also to maximize moral distance: they are meant to render it easier to kill. First stones, spears, knives and swords were used for this purpose, then longer-range weapons such as guns were developed. This meant that the person and the human being became a 'target' – a 'something' one can aim at with one's weapon. To kill a 'target' is much less traumatic to the fighter and the killer, who has now become a 'shooter'. Moreover, the increased distance protects the fighter against being killed, or so he thinks. Sharkey summarizes the point: "attacking from a distance [...] gets around two of the fundamental obstacles that war fighters must face: fear of being killed and resistance to killing." (Sharkey 2012, 111) A typical teletechnological military practice is airstrike: there is a huge distance between bomber and bombed, which renders killing easier, and risk of losing (many) lives is lower than with (ground) artillery. Consider the bombings in World War II, including the nuclear attacks on Hiroshima and Nagasaki in 1945: the immense distance also made the mass killings possible. Drone fighting, then, seems to be the 'ultimate' distance technology for killing (unless one would fight from space), since it maximizes the distance between fighter and opponent, thus maximizing protection of the fighter and rendering killing as easy as it can get.

But is this true for drone fighting? How easy is it really to kill when you are part of a drone crew? In order to find out more, we need to look more closely to drone fighting as a practice and how that practice is mediated by current surveillance technologies.

Interpretation and Narrative in the Drone Cockpit: Questioning the ‘easy killing’ view

What kind of knowledge is generated in the drone fighting practice? What does the drone crew know about their ‘targets’? In order to fine-tune the phenomenology of drone surveillance and fighting we first have to attend to the particular surveillance technologies used by the drone crew. Let us focus on how the images operators see on their screens are produced. Surveillance drones are outfitted with high definition (gigapixel) cameras that enable tracking of many different targets. Drones may also carry infrared cameras, heat and movement sensors, automated license plate readers, etc. Use of this equipment does not only raise obvious privacy issues when it comes to military and non-military use; in so far as the cameras enable operators to see individual people, they also shape how drone crew experience their targets, and this has moral consequences. Let me show why these technologies are neither epistemologically nor morally neutral, and how they mediate and shape the experience of the crew and ‘construct’ the experience knowledge they have of their ‘targets’.

We do not see neutral ‘facts’ or ‘data’. To use these terms is already a particular construction of reality. When drone operators see their ‘target’, the epistemic framing has already been done. To call a particular person a ‘target’ and to experience her *as* a target is *already* a particular kind of construction. The other may also appear as a human being or indeed *as an other*. Which appearance prevails is morally significant. It is also a *moral* framing. If I see a ‘person’, I am less likely to kill than if I see a ‘target’. Thus, how the other appears to the fighter is highly morally significant: it can mean the difference between life and death. What happens in ‘traditional’ airstrikes, it seems, is that the combination of technologies (airplane, surveillance technology, etc.) makes possible that the people on the ground do not appear as people, as human beings, or as others, but as enemies, as objects, as targets that have to be destroyed. The technology does not make possible any other appearance. The moral distance is unbridgeable. In a sense, before the victim is physically killed, he is first killed in thinking, killed with words. He is already ‘dead meat’ before he is ‘slaughtered’. The opponent is never seen in a ‘neutral’ way. To call him ‘opponent’, ‘enemy’, ‘guerrilla fighter’, ‘activist’, ‘terrorist’, etc. is already a particular construction – often a lethal one. The framing is part of the fighting.

But do ‘targets’ in drone fighting always appear as ‘targets’, as ‘enemies’, as ‘people-to-be-killed’? Contemporary surveillance technology as used by drone crews, in combination with information gathered by (other) intelligence services and their technologies, enable the drone fighters to get much closer to the persons they are supposed to follow and perhaps kill. Today, the drone crew sees particular people on the ground and what they are doing. They see ‘people’, ‘persons’, ‘human beings’. Colonel Brenton, who flies a Reaper drone in Afghanistan, told a New York Times journalist that he and his team often watch people and their family for weeks:

“I see mothers with children, I see fathers with children, I see fathers with mothers, I see kids playing soccer”
(Brenton quoted in Bumiller 2012)

This does not render it easier to kill, on the contrary, it becomes harder. This is due to the technology: the cameras “bring war straight into the pilot’s face” (Bumiller 2012). The technology supports what we may call an ‘epistemic’ bridge and a ‘moral bridge’: it does not only mediate remote killing; it is also at the same time a condition of possibility for bridging the physical and moral distance initially created by the drone system. How does this work?

A drone crew is not always busy with fighting and killing. Most of the time, they watch people, they watch (potential) targets. But as the term ‘target’ already indicates, what they see is never epistemically or morally neutral. There is always already *interpretation*. The technological practice makes possible the active interpretation and – given the longer timeframe of days or weeks – the construction of *narratives*. Because the cameras enable such ‘close’ observation, the crews do not only see people but also people with *lives*. Combining what they see through the camera with other information (also brought to them via contemporary information and communication technologies), they make up stories about the people they monitor. But this does not happen ‘afterwards’, after they get ‘information’. Framing already takes place when they observe the people. They do not see ‘data’ but ‘enemies’ or indeed people of flesh and blood. At the moment when they see something or someone ‘on the ground’, they have already interpreted it or him/her. And because they can see “details as fine as individual faces” (Brooks 2012), one kind of framing is more likely to happen and it is no longer easy to kill. The crew members watch people similar to themselves. They see people who have families, people who “wake up in the morning, do their work, go to sleep at night” (an Air Force major quoted in Bumiller 2012). Moreover, in contrast to old-style bombing, the crew now sees the consequences of a strike for the people. They see the suffering of people. A CIA drone operator told a journalist:

“I dropped bombs, hit my target load, but had no idea who I hit. [With drones], I can look at their faces... see these guys playing with their kids and wives... After the strike, I see the bodies being carried out of the house. I see the women weeping and in positions of mourning. That’s not PlayStation; that’s real.”
(drone operator quoted in Brooks 2012)

Thus, whereas there is a process of de-personalisation and indeed moral distancing made possible by the remote surveillance and remote fighting technology, there is also a process of re-personalization and indeed *humanization* of the ‘target’. The ‘target’ turns into a human being, a particular person. This creates a moral bridge between drone fighter and target, which makes it more difficult to fire a missile. But this humanization and moral bridging should not be understood as a kind of ‘built-in’ psychological response (i.e. an empathic response) to stimuli, to the data of the camera. The construction of knowledge, the shaping of the experience, is an active epistemic process that involves a hermeneutic exercise involving different stories. Feelings of empathy or sympathy may occur, of course, but they are linked to this interpretative and narrative work. What the crew sees is interpreted in the context of a larger narrative about the person and perhaps also about oneself, and at any time this narrative can also be revised on the basis of what one sees. For example, it is likely that the drone operator has a story about the target such as ‘This is a father of four children and soon he will be alone since the rest of the family will go out to the market’ and about himself, for example ‘I am not the kind of person that kills women and children’. This is a contextual, situated perception and understanding; what the drone operator sees and experiences

is not 'camera data' but lives, people, persons that are not only 'identifiable' but also have identities.

Moreover, because of the interpretative and narrative possibilities supported by the new surveillance technologies, it is also likely that the drone operator has to deal with two conflicting, morally relevant narratives: one that concerns the life of the potential 'target' that turned out a human being like oneself, and one that concerns the story of a professional military officer trying to do what she considers to be her duty (and what others tell her that is her duty), trying to obey order, trying to justify the killing, etc. There may be even a third story line, one that concerns the private life of the crew member. When the pilot goes home, there is another life waiting, with other expectations and other appearances and meanings. Thus, the crew members find themselves in an epistemic web they at the same time actively construct, and with which they have to cope. They have to try to weave together the different lines. They have to act and take responsibility for their action, but they also have to cope with moral-epistemic frictions. There are different stories and there are different and dynamic appearances: the 'target' that becomes a 'kid', the control room that becomes a living room, the professional that becomes a father, etc. There are different 'worlds'. Sometimes 'faces' appear and at other times there is only a 'target'.

These hermeneutic processes and dynamics are not only present in drone surveillance and drone fighting. We can also find them in other surveillance practices.

Zooming out: Surveillance in public places, distance, and interpretation

Interpretation and narrative are also relevant to ethics of surveillance in general, especially if we keep in mind the issue of moral distance. Consider first the case of 'traditional' surveillance in public places, that is, surveillance without the use of video surveillance – let alone 'smart' video surveillance that would recognize faces or behavioural patterns. Usually security personnel or policy officers would walk around in, say, a shopping street, an airport or a train station, and try to spot 'suspect' behaviour. Because of the task they perform, they already produce moral and social distance between them and the people around them. In defining themselves as standing outside the sociality of the public space, they are no longer 'fellow travellers'. Of course public spaces are also about watching others and being seen by others, and with Sartre we could say that the gaze of the other can make us into an 'object' (see also Patton 2000, 183-184) rather than a 'fellow', but even if this happens there is a certain kind of symmetry, whereas with surveillance this symmetry is broken. There is a gap, a distance, between the spectator and the 'crowd'. Moreover, from the point of view of the surveillance officer, the appearance from people in the crowd can always change from 'traveller' or 'customer' or 'man' or 'woman' to 'suspect', 'target', 'terrorist', etc. Let me suggest that the way this works is again through interpretation and narration. The epistemic background of the surveillance is formed by stories: known stories about a 'terrorist' who entered a train and blew it up, on the one hand, and a story about the particular individual that is being watched at a given time ('he is carrying a suitcase which could contain a bomb, now he takes the stairs, he seems a little nervous', etc.). The latter story has to be actively (but not necessarily consciously) constructed by the security or policy officer. Does what this person is doing and *how* (s)he is doing it fit into a story of a criminal, terrorist, etc.? If the spectator achieves a hermeneutic integration between these two stories, then it is time for *alarm* and action. However, in non-automated surveillance, there is still a lot of room for proximity – both in a physical and in a social and moral sense. In case of

doubt (and humans *can* doubt), the security officer can get closer or 'even' *talk* to the 'suspect' or 'potential terrorist', and in the course of the interaction the status of the 'suspect' may change into 'fellow human being' again. (Verbal communication helps here: once you talk to someone, that chances are high that that person is no longer is an 'object' that is subject to your gaze; he becomes a *subject*.) If this is the case, it means that the interpretation changes and that the story is re-written, so to speak. Now the 'suspect' becomes again 'a woman making her way to the train' or the 'terrorist' becomes 'a man with a present for his wife'. Again this hermeneutic play is highly morally significant: it changes the moral status of the person being watched (from 'bad' to 'good', from 'terrorist' to 'innocent citizen' etc.) but it also changes an entire *scenario*, it changes the (potential) actions of security people and police and it changes what happens and what will happen to the other people in the public space.

With automated surveillance technology, however, the situation is different. In case of half-automated surveillance, there is still a human person watching screens with images delivered by cameras. This already increases the physical and social distance, and limits the possibilities for interpretative work, since the person who watches the screen cannot be in the social space at the same time. When one watches the screen, it is not possible to be *part* of the story – a *common* story – and to link one's own story to the stories of others. It is no longer possible to write a story *together*, to arrive at a shared understanding. The removal of the surveillance-subject from the social space is now definitive. Of course, the operator can decide to go in the social space or send someone in – then there is a different situation. But if and in so far as the operator's experience is mediated by the screens, he or she remains a *spectator* and has a less rich understanding of what is going on. Moreover, the spectator can still see 'a man going to work' rather than a 'terrorist', there is still a range of possible interpretations and stories. But the construction of the story as a *realistic* story is hindered by the distance. It becomes more likely that the faces and bodies on the screen become only that – faces and bodies. There is no longer a person, no longer a face in the Levinasian sense of the world; there is a 'target'. This distance is even further increased in the case of automated surveillance, where computer algorithms are used to discern 'suspect' behavioural patterns. In the extreme case, if surveillance were to become fully automated, this would mean a disruption of interpretation and narration, since during that process, there would be no *human* surveillance. In interpretation and narration there is always room for what I called 'hermeneutic play'. The 'status' of a particular person in the crowd is not calculated in terms of probabilities but is constructed by a meaning-giving human subject. Automated surveillance relies on statistics and meanings *fixed* by the programmers. The computer cannot use the hermeneutic richness of stories (histories and present, on-going stories). At that point, the space of meanings is limited and closed. This is why we tend to use semi-automated surveillance, which lets the hermeneutic process continue after its disruption by automation: first the cameras and the computers 'do their job', then it is up to humans to do the interpretative work. But since a selection has already been made by the computer instead of a person present in (and part of) the social space, the condition of possibility for a full understanding of the situation has already been lost. The point is not that we have less information; we always have to select. The point is about the way the selection is made and about who or what made the selection: not a human person present and interacting in the social space of the public place, not even a human person watching screens.

Perhaps this is also exactly what is still problematic in the case of drone surveillance (in general and in military contexts), in spite of the hermeneutic possibilities created by the new technolo-

gies. It seems plausible that, as I have argued in the previous section, interpretation and narrative can bridge the moral gap between drone operators and the people they spy on and perhaps kill. Yet this bridging is always only partial since the hermeneutic work is still hindered by the physical distance. There is still a qualitative difference between on the one hand the knowledge gained by someone who walks around 'on the ground', in the local place, in the country, someone who interacts and talks to people or at least *could* do so, and the knowledge gained by someone who sits in a drone cockpit at a military base thousands of miles away. The qualitative difference that is morally relevant lies in the restriction of hermeneutic resources that comes with *not being there* and *not being with* the people. A shared physical-social and physical-communicative space is lacking. The spheres of sociality do not overlap and hence the appearances and stories are still too poor in meaning. Of course given what I said in the first section about the psychology of fighting, a cynic may retort that people who want to kill do not *want* to close the moral gap, do not *want* to blur the distinction between 'us' and 'the enemy', do not *want* to humanize their target. I concede this point. But we should also keep in mind that military professionals do not generally kill because they enjoy killing. They – or those who command them – kill or order to kill if they think that they have good reasons for doing so. Whether or not there are good reasons in a particular case, and whether or not there can be good reasons at all to kill *anyone*, requires judgment, moral judgment. Exercising that moral judgment and responsibility requires, among other things, taking all measures to make sure that, if one decides to kill at all, one knows what one is doing and to whom one is doing it. On the basis of the discussion offered in this paper, we can conclude that contemporary surveillance technology may assist a drone operator in fulfilling this moral-epistemic duty in so far as it supports interpretation and the construction of narrative, but that this is still morally and epistemologically inferior to conditions that make the transfiguration from 'target' to 'human being', from 'militant' to 'father', from 'suspect' to 'fellow traveller', from 'terrorist' to 'someone who is also trying to get back to her children', from object to subject not only *possible* but also more *likely* to occur. It seems to me that there is a general moral and political duty to create such conditions, and to prevent the emergence of situations in which such a moral metamorphosis becomes impossible, situations where 'targets' can no longer appear *other-wise* and killing or other violent action becomes the only option.

This is what fully automated surveillance (and of course also with fully automated killing based on it) would also do: it would reduce the appearances and the options since it would destroy interpretation and remove the possibility of common stories. It also strikes me that in automated surveillance there is no room for hermeneutic play, there is also no room moral ambiguity. The status is zero or one, 'enemy' or 'we', 'terrorist' or 'innocent person', but there is no room for different meanings. A particular 'target' is either 'a terrorist' or 'an innocent person', but *there is no place for doubt*. But certainty is the enemy of mature moral reflection. If situations and the status of people are (pre-)defined by a machine, by those who programmed the machine, and by those who defined the rules used in the programming, then we can no longer interpret and no longer discuss our interpretation. Then talking is replaced by following rules. This is a great moral danger – inside and outside surveillance contexts. In fact, in ethics itself and indeed in approaches to ethics there is a clear tension between on the one hand ethics by *regulation*, understood as the design of rules and laws to govern conduct, and on the other hand a kind of ethics that seeks to keep an open space for interpretation, discussion, and communication. I have no room to further discuss this issue, but my remarks on automated surveillance technology suggest that we can evaluate particular tech-

nologies and practices by investigating if and how they contribute to regulatory-technological closure or rather help to keep the ethical space open.

Conclusion

In this paper I have reflected on the relation between teletechnologies and moral distance by discussing the cases of drone fighting and surveillance in public places. I have argued that the physical distance created by drone technology indeed seems to make killing easier, but that this effect is mitigated by the moral proximity made possible by contemporary surveillance, at least in so far as it supports interpretative and narrative moral-epistemic work that lets appear the ‘target’ as a person with a face, with family, with a life. Of course as we know when it comes to action the “family” or “person” narrative does not usually prevail over other narratives, for example a narrative of “duty”; but at least the technology makes it possible that the former narrative can be constructed. Discussing surveillance in public places, I have also argued that the moral distance in surveillance and drone fighting can only partly be bridged by remote, technology-mediated interpretation and narration given the lack of shared sociality (being-present-with-others) and communication, which limits the interpretative possibilities and, in the case of automated surveillance, threatens the possibility of interpretation as such – including the moral ambiguity and the open ethical space that comes with it. I conclude that we need more reflection and research on how technologies could create the conditions under which moral metamorphosis and interpretative freedom is not only possible but also probable.

To end let me say more about what kind of research is needed for this purpose. Next to further conceptual work on the relations between technologies, distance, epistemology and morality, which would need to engage for example with literature on “teletechnologies” and on “teleepistemology” in philosophy of technology (e.g., Goldberg 2000), we also need to study the technologies and technological practices in more detail and we need empirical work that includes for example interviewing drone teams and operators of surveillance systems. This may enable us to more fully disclose various narrative spaces (e.g. military narratives of “duty” and narratives about “fathers, mothers, and children”) and to say more about the relation between specific features of the technological artefacts and the phenomenology and hermeneutics of remote fighting. Moreover, the issue concerning the relation between technologies, distance, and morality is not unique to drones and surveillance devices, but is relevant to many “digital” or “electronic” technologies as “teletechnologies”. We need to explore this problem in several domains and also think about it at different levels of analysis and generality. We need both “zooming in” and “zooming out” to take this further.

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