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Domesticating Drone Technologies: Commercialisation, Banalisation, and Reconfiguring 'Ways of Seeing'

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The history of drones is irreducibly a history of military enterprise. The evolution of Uninhabited/Unmanned Aerial Vehicle (UAV) technologies through stages of conflict has seen the drone progress from hobbyist radioplane during the First World War, to battlefield reconnaissance vehicle during the Vietnam War, to fully fledged combat weapon in the present day. Despite their long lineage of military service, it was only in the context of the Global War on Terror and the aftermath of the 9/11 terrorist attacks that UAVs were fitted with missiles for the specific purpose of exterminating designated targets. The deployment of armed drones by the Central Intelligence Agency (CIA) in the hunt for terror suspects resulted in the 2002 covert

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© The Author(s) 2016 H. Randell-Moon, R. Tippet (eds.), *Security, Race, Biopower*, DOI 10.1057/978-1-137-55408-6_8 killing of six al-Qaeda members travelling by motor vehicle in the Marib Desert, Yemen (Whittaker and Burkeman 2002). This event was the inauguration of drones as high profile assault weapon—beginning a trend that would carry on to future US engagements in Pakistan, Yemen, Somalia, and Afghanistan—and coextensively constituted drones in public discourse as the 'signature weapon of the 21st century' (Boussios 2015, p. 43). Yet curiously, despite this brutal reputation, drones have manoeuvred their way successfully into commercial and domestic markets. Rebranded as the Christmas gift du jour, drone sales on eBay during the 2014 American holiday period averaged at 7,600 drones sold each week (Bi 2015). Gimmicky advertising campaigns featuring drones were also on the rise (Overington and Phan 2016) while Amazon (among others) has been fiercely negotiating the trial testing of its conceptual drone-based delivery system.¹

This rapid invasion of drones into civilian territory demarcates a significant moment in the history of drone discourse. Now finding applications beyond the literal battlefield, drones are deployed within the analogical battlefield-the urban city. This war is the 'banal war' whose primary biopolitical technique is banalisation in the service of Empire. By Empire here, we refer to Michael Hardt and Antonio Negri's denotation of the term as descriptor for the contemporary global order in which war is a 'general phenomenon, global and interminable' (2005, p. 3). In this configuration, the terms of war are deployed domestically as a technique to maintain social order. The War on Poverty, the War on Drugs, and the War on Terror are all examples in which the rhetoric of war is applied as a strategic political manoeuvre to regulate activity and maintain social hierarchies. Such discourses, Hardt and Negri argue, legitimate 'total mobilisation of social forces for a united purpose that is typical of a war effort' (2005, p. 13). Exercises of power and state violence are sanctioned under the constant threat of imminent danger, as 'defence' (the protection against external threats) is reconfigured as 'security' (a constant state of martial activity in the homeland and abroad). Subsequently, the distinction between territories of conflict and territories of peace are blurred and, insofar as war becomes a regular procedure and a means to control social life, war constitutes a regime of biopower within the urban city.

It is our contention that the civilian uptake of drones is demonstrative of the banalisation of war within this regime. Banalisation functions as biopolitical technique to further normalise the protocols of war, to legitimise them as not only practical but necessary within a secure society. Through a comparative analysis with Closed Circuit Television (CCTV), we will discuss the banalisation of security as a general phenomenon and also examine the tensions in the decentralisation of security technologies. Further, the configuration of drones as mediating particular 'ways of seeing', which reproduce surveillant paranoias at the level of the body are, in this analysis, coextensive with Hardt and Negri's Empire. In the same way that war as biopolitical regime denies the distinction between territories of conflict and territories of peace, drones deny a distinction between public and private space. Efforts to rebrand and reconfigure drones as banal entertainment are here critiqued as part of the disciplinary efforts within control societies to perpetuate the discourse of global war.

Drone Terminologies

Although today they are officially referred to in military discourse as Uninhabited/Unmanned Aerial Vehicles (UAVs) or Uninhabited/ Unmanned Combat Aerial Vehicles (UCAV), a quick probe into the continued popular use of the term 'drone' also provides a convenient insight into the history and evolution of drone technology. The term 'drone' is often construed as a reference to the low humming sound produced by most early aircraft; however in this instance, it is taken as a reference to male stinger-less honeybees whose primary role is to mate with a fertile queen. These 'drones' do not contribute to hive life and are often dispensed with after mating. In its earliest applications, drone aircraft were primarily used as radio-controlled targets for training antiaircraft gunners (Zaloga 2012). Like drone bees, they were unarmed, expendable, and usually controlled remotely from another, larger aircraft nearby. The term is also a homage to the earliest models of target drones produced by the United Kingdom's Royal Navy, specifically the Kettering Bug and the DH82B Queen Bee-the most commonly used target drone from 1934 to 1943 (Zaloga 2012, p. 7). Later reconnaissance models developed during the Cold War seemed to also reference these entomological roots with names such as Firebee and Lightning Bug drones. Lightning Bugs

particularly dominated during the Vietnam War, with the US deploying over 1000 of these drones to fly a total of over 3,400 sorties over China, North Vietnam, and North Korea (Zaloga 2012, p. 15). This was the first ever large-scale use of drones in combat and interest in their surveillant capacities quickly spread internationally.

The current terms UAV and UCAV emerged in the 1980s and are often used to describe the more technologically sophisticated endurance models, such as the RQ-4A Global Hawk (the US military's largest spy drone, capable of intercontinental flight and endurance over two days without refuelling) and the RQ-1 Predator and MQ-9 Reaper (hunterkiller drones equipped with both remote and autonomous piloting capabilities). Whereas the name Global Hawk is a neat juxtaposition to the term drone signifying an evolution from tiny insect to bird of prey, the names Predator and Reaper are alarming departures that bluntly communicate their status as harbingers of death.

Civilian drones belong to a separate taxonomy altogether. Originally developed for military applications, these drones are classified as miniature UAVs and are generally designed to be 'man-portable', that is, small enough to be carried by infantry personnel. Like their larger counterparts, miniature UAVs are usually divided into two categories-those that are used for reconnaissance and surveillance purposes, and those that are designed to carry payloads (Boussios 2015, p. 43). Although the traditional wing and tail models dominate in both categories, the more recent quadcopter models are finding increasing utility in the reconnaissance and surveillance category. The advantage of quadcopters is that they have vertical take-off and landing capacity (VTOL) meaning that they require no launch equipment, can be mounted with gimbals to carry high-precision cameras, can hover in a fixed position, and are often controlled through a tablet interface rather than joystick control, which means they require minimal training to operate. It is for these reasons that quadcopter drones have found wide appeal outside of the military and have smoothly entered the civilian market.

In 2014, global expenditure on drones was estimated at US\$6.4 billion with annual expenditure expected to double within the next decade (Bi 2015). Although civil expenditure accounts for a relatively small portion (11 per cent), this number was still great enough to generate a total of \$16.6 million in civil drone sales between March 2014 and January 2015 on eBay alone (Bi 2015). Sales were given an extra push during the holiday period with the growing popularity of drones as Christmas gifts officially launching civil UAVs into the mainstream market. While beginner hobbyist drones can cost as little as \$50, serious fliers equipped with Global Positioning System (GPS) guided flight-plans, on-board High Definition (HD) cameras, specialised software packages, and stability systems can cost upwards of \$2000. Most mid-to-high range quadcopters cost between \$400 and \$1000, and like their military counterparts, these drones often have a mix of remote and autonomous piloting systems, camera rig, and the strength to carry various payloads—albeit on a much smaller and less destructive scale.

In this chapter, we will continue to use the term 'drone' in reference to UAVs/UCAVs. This is for two reasons. Firstly, 'drone' continues to be the most popular and identifiable term in public discourse. Less sanitised than the acronyms UAV and UCAV, drone connotes the ominous undertones implicit in phrases such as 'Drone Warfare'² and 'Obama's Drone War'. Secondly, drone is the term used colloquially by commercial UAV developers in branding their own products. The conscious choice to borrow directly from military jargon is demonstrable of the banalisation of military terminologies within the context of the urban city. That there is no verbal distinction between these two spheres is a crucial point of entry into our analysis, which argues that as there are no caesurae delimiting military or commercial drones, neither are there caesurae delimiting spaces of war and non-war within the discourse of global war in Empire.

Banality and CCTV

Drone technologies now fulfil a multitude of uses within private commercial contexts. These uses permeate a range of industries, from agriculture to real estate, emergency services, and border control (Popper 2015). Indeed, the very expansion of discussions about the utility of the drone demonstrates a general acceptance of the technology's existence within a high capitalist society. However, the ongoing connection that drone technologies have to security and surveillance warrants further investigation. Lessening the critical awareness of drones as they move across the sky, regardless of their intention, may absolve the public's attention to drones as they continue to play a dominant role in the Global War on Terror, or indeed as they become a greater enabler of regulating and controlling populations within state borders. Examining the banalisation process of CCTV cameras in city spaces offers one possible insight into the future biopolitical implications of normalised drone technologies. While traditionally it remains fixed within its environment, the purpose of CCTV can still be likened to the purpose(s) of domestic drones in that it also often revolves around the concept of seeing and being seen.

The rapid proliferation of CCTV within city spaces across Western countries-namely the UK, Australia, and the US-has been well documented. While this growth is inextricably linked to local political and cultural contexts (Lyon et al. 2012), that CCTV has rapidly transformed from 'novelty to ubiquity' within these environments is in itself indicative of a broader social acceptance of security technologies (Goold et al. 2013, p. 977). Looking to the UK (where the majority of CCTV studies has been focused), CCTV has become a 'common feature of public life' (Brown 1995, p. 1), but it was not always a presumed figure on or for the street. Assisted by the death of James Bulger (a two year old boy murdered by two teenage boys), CCTV footage of the toddler as he walked hand-in-hand with his killers out of a shopping mall near Liverpool in 1993 produced a socio-political environment wherein the footage did not simply affirm itself as crucial evidence to the case, it also illustrated the need for further CCTVs to be installed in order to prevent future crimes (Coleman and Sim 2000, p. 627). The expansion of publicly owned CCTV networks is thus considerably influenced by public attention to violent crimes, which then legitimates the use of this technology as a public good for preventing crime.³ As Goold et al. argue, '[f]ew protective devices start life as banal. They at first appear unusual, innovative, exciting or scary' (2013, p. 979). In the case of CCTV, its installation is often preceded by a perception of its transformative ability: to make cities safer and more secure.

While the vociferous approval of CCTV as a 'friendly eye in the sky' sits comfortably within the scope of the risk society⁴ (Beck 1992; Wilson and Sutton 2004), its disappearance into the architecture of the city and

the general apathy associated with its presence (when it is not actively deterring or resolving crime) is better explained by Goold et al.'s term, the 'banality of security' (2013). CCTV initially attracted attention both in its approval and critique (civil libertarian movements were especially critical of the perceived encroachment on the right to privacy in public spaces); however, it has since transformed into a banal security technology. CCTV in contemporary public discourse is 'rarely subject to attention or concern'; the existence of both public and privately owned CCTV networks are regarded as 'mundane, commonplace, scarcely worthy of comment' so they exist 'largely beyond public discourse of contestation' (p. 978). For Goold et al., CCTV should be described as banal not simply because of its invisibility or taken-for-granted presence in the city, but also because this normality enables 'goods' (commercial objects) to gently condition populations to act 'appropriately' (p. 978). While presently drones attract attention regarding their transformative practices, the debate regarding their impact on the cityscape is already diminishing.

The concept of the 'banality of security' draws inspiration from Hannah Arendt's work on the banality of evil. In her book Eichmann in Jerusalem, which documents Arendt's reporting of the trial of Nazi SS officer Adolf Eichmann, Arendt describes Eichmann as 'not Iago and not Macbeth', but rather a man with no motives other than 'extraordinary diligence in looking out for his personal advancement' (1994, p. 287). For Arendt, precisely what was striking about Eichmann in the trial was not a 'diabolical or demonic profundity' but the 'lack of imagination which enabled him' to be part of the genocide of Jewish people during World War Two (p. 287). By not necessarily realising the "evil" of his actions and justifying it as a part of advancing a cause or personal success, Eichmann demonstrated how the normality of actions within particular contexts enables tragic and harmful outcomes, often without critical reflection or attention (p. 287). While an important starting point for understanding how the banalisation of security objects such as drone technologies may enable the normalisation of "evil" practices (or expansion of the battlefield into the city), Goold et al. offer an important extension of Arendt's concept. Firstly, they argue that the 'banality of security is a double-edged notion' in that banal security objects can serve as a 'basic social good' whilst at the same time potentially 'undermining that security' (2013, p. 993).

Part of feeling secure is the 'taken-for-granted confidence in the human and non-human infrastructure' surrounding citizens, indicating that not all banality is entirely evil, but rather something that requires vigilance to continue the 'quality and reach of democratic governance' (p. 993). Secondly, their focus incorporates the camera itself. As they argue:

[O]bjects matter—in terms of the ways they both shape relationships and obscure the exercise of state authority. When objects—particularly security objects—cease to be noticed—these effects can be significantly heightened. (p. 979)

It is this second point through which the potential impact of domestic drones on city spaces can be marked. Drones themselves are not "harbingers of death" but rather enable the expansion of that which is already acceptable. Just as CCTV becomes banal through its attachment and extension of the "beat cop", so too are drones presented as something that enhances already existing desires or practices.

Reflecting the prevalence of CCTV networks within city spaces, most drone technologies and their applications are driven not by public but rather by corporate agencies. Significantly, the number of privately owned and operated CCTV cameras substantially outweighs the number of publicly installed cameras (Reeve 2013). This already has implications regarding the ability to effectively regulate a segregated industry, with many CCTV networks governed loosely by voluntary codes of conduct. The same public/private disparity may be said to exist for the expanding UAV market. While an increasing majority of drones are used in the commercial sector (Popper 2015), the US government also deploys Predator drones to patrol the Mexican border (Associated Press 2014) and US police agencies invest in drones for their policing practices (Pilkington 2014). The influence of the state therefore cannot be dismissed, as evidence of drones enabling population management in some way is already demonstrable. Indeed, the fact that the US Federal Aviation Administration (FAA) has yet to authorise the commercial operation of UAVs for 'nongovernmental' purposes-combined with the explosion in companies approved to sell the technology-gestures towards an intimate relationship between state and non-state actors in the drone industry (Federal

Aviation Administration 2015; Popper 2015). Robert Carr's work on the expanding political economy of CCTV illustrates a similarly complex and intimate relationship between state and non-state actors, achieved through the banality of CCTV as a security object (2014). Significantly, as the prevalence and variety of drone applications in cities expands, the threshold of "appropriate" uses will become blurred. With the acceptance of CCTV in city spaces for example, there has been a documented 'shift-or creep-of urban surveillance' (Fussey and Coaffee 2012, p. 201). CCTV now serves a raft of functions in multiple countries, from crime prevention through to improving perceptions of safety; acting as an evidentiary tool through to managing and removing "problematic" populations (Williams and Johnstone 2000; Anderson and McAtamney 2011; Goold 2004; Porter 2009; Norris and Armstrong 1999).⁵ Reassembling and expanding its purpose within city spaces, regardless of the effectiveness in its new utility (or the consequences of its new uses), the banality of CCTV enables much of this creep with little sustained critical analysis in public conversation (Goold et al. 2013, p. 983). Indeed, the cliché, "if you've got nothing to hide, you've got nothing to be afraid of", effectively sums up the acceptance of CCTV as being part of the city, along with a demonstration of how difficult it is to meaningfully engage with the impact of security technologies on the basis of the "right to privacy".

CCTV and drone technologies explicitly exist in some form in the city as part of the security and surveillance apparatus of the state. While CCTV continues to illustrate a direct relationship with the state, the proliferation of drone technologies demonstrates a further decentralisation of this surveillance and security assemblage. CCTV, even with its urban security creep, still has some of its primary security functions definitively observed. Exactly what purpose drones serve in the city is harder to articulate, particularly when 'drones designed for use on the battlefield [are] now making their way into less intense civilian applications' for varied purposes beyond strict surveillance or annihilation (Popper 2015). Though their relationship to the state cannot be divorced, it is less distinct than that of CCTV. Drones, as they expand into domestic settings, may not continue as a centralised practice to manage—or destroy—"deviant" and "criminal" groups. Working instead within a broader surveillant and security assemblage, drone technologies within city spaces 'exercise power at multiple sites and through diverse elements that work in conjunction but may also encounter friction' (de Goede 2012, p. 28). In other words, the primary functions of the drone may vary while the net effect remains biopolitical. As in a modern surveillance society, 'power over life and the species' body is not the exclusive attribute of the state, but can be achieved anywhere by any organisation through information gathering and data-management processes and tools' (Ball et al. 2012, p. 38). As drones expand into multiple commercial markets, they continue to collect and store data or enable more efficient movement of capital. As each of these practices becomes more commonplace within the structure of the city, the influence of the technology on these interactions of the everyday becomes less visible, again highlighting the potential consequences of the banalisation of security technologies within cities. Beyond the direct impact of security's banalisation, what becomes of data (which is inevitably created) and how it is used in new contexts or in relation to other information, is less certain. How we interact with the technology though—how it changes our practices in city spaces and how it manages our bodies—is likely to become less visible.

Drones and 'Ways of Seeing'

The way in which the drone moves across city spaces is symbolically significant.⁶ However, as many drones in city spaces utilise some form of visual recording, *how* they reproduce city spaces through their own seeing—and how we may be managed by this through the banality of drones in cities—is the focus for this section. Each time we see what a drone sees, we see surveillantly. John Berger's 1972 book *Ways of Seeing* offers a point of entry into understanding the productive impact of the image produced through surveillance, particularly photographs. While photos may at first appear to be a mechanical record that outlasts the object they initially capture, Berger critically argues that every image in fact 'embodies a way of seeing' (p. 10). As Henri Lefebvre infers, 'people look, and take sight, take seeing, for life itself' (1991, p. 75). The image—how it is produced ('we are aware, however slightly, of the photographer selecting that sight from an infinity of other possible sights' [Berger 1972, p. 10]) and how it is consumed—thus represents rather than replicates reality, producing with it expectations of visual order and discourse. That which has been captured is determined to be important, as is the way it has been captured. Represented as something synonymous to or enhancing lived experience, then, 'as consumers we hope to experience that which we never would have been able to without the [drone] technology' (Finn 2012, p. 67). Drones are a technology with a new perspective that allows us to ostensibly see more, to see it all. The perspective that the drone adds something of value within the city, in these perceivably banal aspects of everyday living, continues to inform desires to utilise the technology in new and expanding ways. Recording and storing drone-captured data is ultimately part of what Kevin Haggerty and Richard Ericson (2000) term the 'surveillant assemblage';⁷

Surveillance is no longer to be conceived as a technology employed by the state in the control of dangerous populations or a tool used by corporations to serve the interests of global capital, but is something that we encounter in advertisements and corporate communication, in video footage for news broadcasts and in our favourite (and least favourite) television programmes and films. Importantly, it is not just something we see—but is something that we do when we post photos and videos to the myriad websites that call for our participation. (Finn 2012, p. 77)

The broad banality of drone technologies, in both their security applications and inherent surveillance functionality, looks set to amplify the problematic de-differentiation between the city space and the war zone, and ongoing critical scrutiny of the drone-produced image is essential. When recording from the sky, drones allow us to see more only by seeing less detail. Their facilitation in more effectively flattening the image of the city from an aerial perspective may therefore be sinister, as the intended functions of a drone do not need to be implicitly related to surveillance or security. Drones will still be part of a biopolitical extension, continually reasserting control through the reproduction and management of city spaces and desire via its securitised ways of seeing.

To reiterate, this technology, as it moves across dynamic city spaces, cannot be bound by one purpose; it will capture all within its frame of

reference. Through its expansive purpose of commercial successes, drones become a more prominent 'way of seeing, understanding and engaging with the world' (Doyle et al. 2012, p. 71). The image produced by these cameras becomes authoritative and a representation of truth. Drawing together the discursive power of the image, the assumed benevolence of the banal security apparatus and its legitimation by state and criminal justice processes—approved by the FAA and simultaneously used in police operations for example—these perspectives retain a sense of "premium" representation. Images produced by CCTV cameras are increasingly represented as 'ideal witnesses' in moments of disorder (Evans 2015), and it is not implausible to suggest the same conditions may be met for drones, particularly as they are used in moments of political conflict. By providing new ways of seeing, the practices and populations within cities will also be seen in this "new" light.

Through their flight path, drones seemingly take a step back, to provide the "bigger picture". They are used to capture the spectacular enormity of events and geographies. In doing so, drones reduce the visibility of the micropolitical-of multiple stories-within city spaces, as they can only capture one perspective. Rather than seeing individual bodies in alignment in a protest, drones instead see a mass population, something to be contained or managed. Filming from above, droneslike CCTV cameras-assume a single and authoritative narrative of the space. There is only one "true" story. Through these reproductions, cities are presented as a smooth surface, literally captured by the drone, enclosing it as definable and measurable. As Alison Young contends, expanding on Michel de Certeau's (1984) philosophical account of creative resistance through practices of everyday life in the street, an aerial representation of the city may silence these conflicting narratives: 'the lines of law tend to coincide with the lines of cartography and of timetabling, resulting in the image of the city as smooth, compartmentalised, organised around boundaries and functional, although such a legal assemblage is based on a desire to control the city's perceived unruliness and fecklessness' (2014, p. 42). The desire to see what the drone sees and to participate in the reproduction of these images demonstrates a complicity in the biopolitical desires of the state to control and manage populations within the city.

Drones and the Prosthetics of Empire

The smooth transition of drones from military apparatus to banal object is indicative of broader trends towards the banalisation of security objects within the city. Deployed not only by the state but citizens themselves as part of the rituals of consumption, this kind of quick adoption can be understood as coterminous with what Hardt and Negri (2000) have referred to as 'Empire'. For Hardt and Negri, Empire is representative of a new global order in which traditional notions of sovereignty are complicated by the globalisation of economic, political, social, and cultural exchanges. In particular, the globalisation of capitalist production has altered economic relations so they are increasingly detached from the political control of the nation state. The result is a decline in traditional modes of sovereignty associated with the state, as they write:

The sovereignty of the nation-state was the cornerstone of the imperialisms that European powers constructed throughout the modern era. By 'Empire,' however, we understand something altogether different from 'imperialism.' The boundaries defined by the modern system of nation-states were fundamental to European colonialism and economic expansion [....] In contrast to imperialism, Empire establishes no territorial center of power and does not rely on fixed boundaries or barriers. It is a *decentered* and *deterritorializing* apparatus of rule that progressively incorporates the entire global realm within its open, expanding frontiers. (2000, p. xii)

Empire is thus symptomatic of a decentralised, deterritorialised 'network power'. But Empire not only describes the reconfiguration of subjectivities at the level of global order, but also the individuation of these subjectivities at the level of the body.

Indeed, Empire functions through the biopolitical production of surveillance techniques as not only normal but also necessary. Taking cues from Foucault, Hardt and Negri have referred to these as the 'productive dimensions of biopower' (2000, p. 27). They argue that Empire is a control society, which produces not only discourse and ideology (a function indebted to the culture industries), but 'agentic subjectivities'—relations, needs, bodies and minds—and embedded within these subjectivities is

a language of self-validation and legitimation of authority (pp. 27-33). To aid in this process of legitimation, Hardt and Negri have argued that Empire promotes constant states of global war. War is applied metaphorically by authority, and deployed in domestic as well as foreign contexts. The Global War on Terror is certainly the prime example of this practice-interminable, deterritorialised, substituting a procedural activity for the regulation of bodies within the city. All sites, whether officially classified as 'at conflict' or not, are cast as sites of war insofar as they are structured under the same regime of control. Cities thus become analogic battlefields, with the enemy broadly defined under the label of "terrorist". The banalisation of war is essential in this configuration as war is celebrated as an 'ethical instrument'. Banalisation assists in the biopolitical reproduction of the terms of war as military apparatuses, such as covert surveillance and police repression, are routinised and the enemy is absolutised-cast as 'extremist' and strictly opposed to the existing ethical order (Hardt and Negri 2000, p. 6).

Drones appear in this configuration as part of the iconography of war and, insofar as they are subject to the techniques of banalisation, they too are part of this biopolitical reproduction of global war. In his own analysis of drone technologies in sites of conflict, Joseph Pugliese (2013) has articulated a similar argument for assault drones in service of US military and political interest. In his terms, drones function as part of the 'prosthetics of empire':

[T]hey extend the imperial power of the state through prosthetic weaponry predicated on violent asymmetries of power. These violent asymmetries of power pivot on an invulnerable/vulnerable axis: while US military personnel can conduct their prostheticised campaigns of militarised violence from the safety of their civil home-sites, the citizens of the countries that are targeted by drone strikes are exposed to a violence that works to obliterate the very difference between civil and military; between civilian and terrorist/soldier. (Pugliese 2013, p. 184)

Like Pugliese, we too see drones as an extension (prosthetic) of interests. But whereas Pugliese's prosthetic is in service of empire (the modernist notion connected to the sovereignty of the nation-state) we see prostheticised drones functioning in service of Empire (the new global order that reproduces subjectivities locked in interminable war). The smooth articulation of one to the other is yet another reflection of the smooth transition of drones across sites that are no longer defined in terms of "war" or "peace".

Conclusion

The invasion of drone technologies into commercial and domestic markets does not demonstrate a fundamental shift in drone functionality; they still continue to work as surveillance and security apparatuses, and are likely to continue to inflict violence, albeit in a more subversive way. This is for a number of reasons. As discussed in this chapter, not only does the appearance of commercial drones within city spaces illustrate how the urban has become the new zone of war in Empire-a space of the ongoing battle for control through "security"—it is likely to enhance these securitisation methods at work within the city. Appropriating discourse and technology, the drones that continue to act as the prosthetics of empire (Pugliese 2013) in distant countries are increasingly present for the Empire within the city. Yet, rather than being perceived as "death from the skies", the same UAVs are celebrated as convenient, entertaining, or enhancing in some way the lived experience of the consumer. Through these applications, drones enable biopolitical impulses of the state to disperse themselves within a greater number of institutions and networks in the city. We are set to become not only accustomed to the presence of drones, but welcoming. By assuming their banality or benevolence rather than engaging critically with drones' transformative agency as they record and reproduce the city through flattened images, the sinister implications of yet more everyday urban surveillance go unchallenged; 'more than a material or technical apparatus-more than a camera-surveillance has become a way of seeing' (Doyle et al. 2012, p. 67). The consequences of this are likely to be profound, as we become complicit in the organisation and management of biopolitically delineated groups. Unlike other banal security technologies within cities, drones are even more decentralised in their applications. Their development and future applications remain to be seen, but domestic drones are likely to be complicit in the biopolitical

organisation of populations to enhance neoliberal agendas in capitalist development, accumulation, and domination.

Notes

- 1. See Sy Taffel this volume for a discussion of Amazon and other corporate uses of surveillance technology to reduce labour, delivery, costs, and time.
- 2. Often used in news headlines to describe what Joseph Pugliese calls the new paradigm of 'killing-at a distance' (2013, p. 185). See also Pugliese's chapter in this volume.
- 3. Other prominent examples of CCTV being linked to crime prevention after a crime has occurred include the death of Jill Meagher in 2012 in Melbourne, Australia (Carr 2014), and the September 11, 2001, terror attacks in the United States (Lyon 2004).
- 4. The risk society, a term developed by Ulrich Beck, describes the way in which modern economic practices have resulted in new and global risks, which are responded to in distinctively modern ways, including a desire to calculate and mitigate (1992).
- 5. This expansion sits alongside the more generalised emergence of 'precrime', a practice relating to the increasingly pre-emptive nature of crime prevention policies—a desire to mitigate and remove potential risks before they become 'real' (McCulloch and Pickering 2009).
- 6. See, for example, our critique of the way in which drones immobilise different social groups within the #cokedrone ad (Overington and Phan 2016).
- 7. The term surveillant assemblage builds on Deleuze and Guattari's concept of assemblage, applying it to current understandings, practices, and discourses of surveillance. Haggerty and Ericson's paper is key for expanding discussions surrounding Orwellian or Foucauldian understandings of surveillance, which traditionally focus on surveillance as a centralised practice or specifically targeting "deviant" groups, to explore how various apparatuses work both collectively and individually (and with multiple—sometimes conflicting—objectives) to produce an environment whereby surveillance is a generalised and normalised part of the everyday.

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