ANIME AND DRONE WARFARE: OPERATIONAL IMAGES, DISSIMULATION, AND HYPERCINEMATISM IN *A FAREWELL TO WEAPONS*

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INTRODUCTION

Scholarship on science fiction anime's relationship to war has tended to stress its technological ambivalence: Freda Freiberg's discussion of the "postnuclear sublime" in *Akira* (dir. Ōtomo Katsuhiro, 1988),[1] Ōtsuka Eiji's critique of *mecha* anime's perpetuation of WWII-era technonationalism,[2] or Ueno Toshiya's characterization of animator Oshii Mamoru as a "military otaku" (who nevertheless resists militarist ideology)[3] all point to a tension within anime between its ostensible anti-war message and its fetishistic depiction of war technologies. Running parallel to these explorations of trauma and militarism is the wealth of literature, such as Sharalyn Orbaugh's seminal analysis of *Ghost in the Shell* (dir. Oshii Mamoru, 1995) and *Neon Genesis Evangelion* (dir. Anno Hideaki, 1995-1996),[4] that examines anime's cyborg subjectivities and its aesthetic contributions to posthuman discourse. However, much of the academic enthusiasm about anime's complex relationship to technology and the (post)human subject reached a kind of zenith in the 1990s and 2000s, at a time when "mature" science fiction and cyberpunk anime began to break into overseas markets and otaku theory started to gain prominence in Japan. As a result, anime's philosophical stake in more recent discussions of nonhuman technological agency, spurred in large part by the automation of war, remains understudied.

This essay turns to the anime *A Farewell to Weapons* (*Buki yo saraba*, dir. Katoki Hajime, 2013) to explore the philosophical and aesthetic implications of the technology that has come to define much of 21st century warfare – the drone. *A Farewell to Weapons* is a short science fiction film, included in the omnibus *Short Peace* (2013), which depicts a platoon of soldiers attempting (unsuccessfully) to defeat an

autonomous weapon, the killbot "GONK". It is the final film of the omnibus and was directed by *mecha* designer Katoki Hajime based on the 1981 manga of the same name by Ōtomo Katsuhiro, who also oversaw the omnibus' production. Though *A Farewell to Weapons* is a lesser-known work, its narrative and visual emphasis on unmanned aerial vehicles (UAVs) and lethal autonomous weapons invites a broad range of interpretations and philosophical approaches related to nonhuman perception. The film not only thematises drones, but integrates drone aesthetics into its visual logic through numerous shots from the point of view of missiles, probes, and the camera of its robot antagonist.

In the first part of the essay, I discuss the film's textual resonances with drone theory. Drones and similar military technologies have inspired a broad philosophical reconsideration of cinematic and optic apparatuses. The groundwork for this debate was famously laid by Paul Virilio in *War and Cinema: The Logistics of Perception* (1986),[5] as well as by filmmakers like Harun Farocki. I argue that *A Farewell to Weapons* depicts what Farocki terms "operational images" – images normally captured by technologies like missile cameras, CCTV, or robots, that serve a functional purpose in surveillance and military decision-making and are not produced out of aesthetic intention.[6] I connect the concept of operational images to what Matthew King calls "dissimulation," i.e. the tendency in contemporary conflict toward diffuse technological and computational networks that increase the imperceptibility, but also the impotence, of individual human agents[7] – a theme central to *A Farewell to Weapons* and its portrayal of the soldiers' struggle against the GONK. In the second part of the essay, I discuss the film's depiction of drone vision through its use of 3DCG and hypercinematic movement. Coined by Thomas Lamarre, the term "hypercinematism" describes a type of simulated camera movement that propels the viewing subject into the depth of the image, in a way that defies the physical capabilities of the live-action camera.[8] Hypercinematism emulates the velocity of a bullet, aligning the viewer's gaze with lethal speed and accelerating the ballistic properties of the camera. I argue that by depicting operational images in tandem with hypercinematic movement, *A Farewell to Weapons* focalizes not a virtual cameraperson, but weaponry

as such, in itself dissimulating and de-centring the human as the principal agent of anime's technological assemblage.

A FAREWELL TO WEAPONS AND THE DRONE

A Farewell to Weapons opens with an aerial shot of an armoured truck driving toward a post-apocalyptic, desertified Tokyo. It carries a platoon of five soldiers, who are on a mission to retrieve a warhead from an abandoned underground tunnel. They bring with them all manner of advanced military technology, including UAVs, anti-tank weapons, Hellfire missiles, sensors, scanners, and a wide array of firearms. Each soldier also wears a powered suit with an integrated communications system, equipped with small cameras and special visors that enable them to receive real-time data about their environment. Shortly after arriving in the ruined city, the platoon's presence alerts a hostile GONK – an autonomous, tank-like robot sentry, seemingly left amid the rubble to eliminate intruders. The GONK hunts down the soldiers and, after a protracted battle, kills the whole squad save for one member, codenamed Male. Male's powered suit malfunctions, forcing him to eject and expose himself to the hot environment. This desperate act inadvertently saves his life, as the GONK targets and destroys the discarded suit, which it automatically reads as "the enemy," but spares Male himself. In a comedic twist, the GONK identifies Male using a laser scanner and determines that he must be a civilian, as, having shed the suit, he is unarmed and has no protective gear. Enraged, Male hurls a boulder at the GONK, which responds by offering him a pamphlet explaining its (i.e. its operators') "reasonable" motives in the conflict, before finally turning and leaving.

While the basic narrative elements and ironic ending were not altered substantially from Ōtomo's original story, director Katoki has stated that he aimed to adapt the work for contemporary viewers by incorporating new advancements in military and visual technologies since the manga's initial publication in 1981.[9] This is evident in the anime's preoccupation with sophisticated military hardware: while the manga devotes some attention to the squad's powered suits and their various accessories, the equipment

shown in the anime is much more detailed and takes up considerable screentime, each appearance of a rifle or rocket necessitating a meticulously animated sequence of the soldiers preparing it for deployment. The most obvious "update" to the squad's technological capabilities pertains to surveillance and reconnaissance: for example, their visors display the visual feed from their team members' helmet cameras, as well as from cameras mounted on various remotely controlled devices, such as the UAVs, giving them an expanded view of the battlefield. However, we are quickly made aware that the GONK has the ability to return the soldiers' technologically extended gaze with an unblinking camera lens reminiscent of HAL from *2001: A Space Odyssey* (dir. Stanley Kubrick, 1968; Fig. 1). This proliferation of cameras results in a film captivated by drone vision, featuring numerous point-of-view shots animated from the perspectives of both the soldiers' UAVs and the GONK's machine eye. Such shots are distinguished by the digital noise, overlaid data displays, and low fidelity of transmission characteristic of surveillance and military footage (Fig. 2). Whereas the original manga merely mocks the "dumb" indiscriminating vision of the GONK, the anime endeavours to represent it, compelling the viewer to look through the eye of the drone.

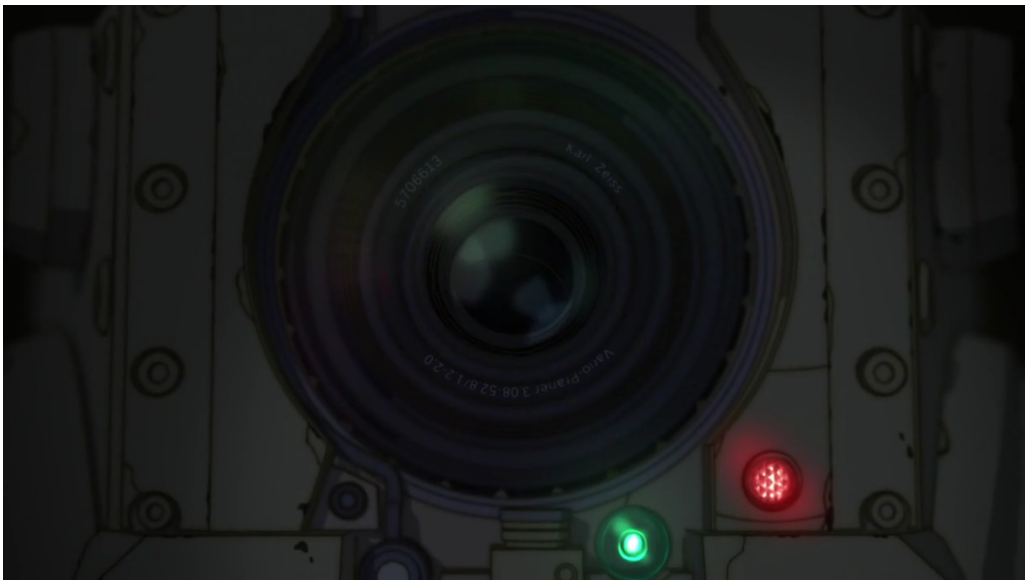

Fig. 1
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Fig. 2
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Citing a glossary published by the U.S. Department of Defence, philosopher Grégoire Chamayou defines "drones" as any "land, sea, or air vehicle that is remotely or automatically controlled […] either from a distance by human operators (remote control) or autonomously by robotic means (automatic piloting)."[10] The term gained prominence in the early 2000s due to the United States' extensive use of combat UAVs like the MQ-1 Predator and the MQ-9 Reaper during and after the war on terror. The circulation of drone strike footage has provoked considerable philosophical discussion of the military gaze and its capacity to inflict violence at ever-greater distances from its target, with critics like Chamayou proclaiming that the history of drones "is that of an eye turned into a weapon."[11] Derek Gregory, drawing on visual theorists Christian Metz and Martin Jay, argues that drone warfare takes place within a specific "scopic regime" – "a mode of visual apprehension that is culturally constructed and prescriptive, socially structured and shared" – which reconstitutes the relationship between the observer and the observed.[12] Rather than simply making the war zone more visible or accessible (as proponents of combat drones might claim), the drone privileges the perspective of its operator, creating a "one-way mirror" through which drone pilots enjoy intimate proximity to the battlespace without the associated risks to their lives.[13] The video feed produced by combat UAVs has also shaped what Beryl Pong and Michael Richardson refer to

as the "canonical drone aesthetic": "grayscale environments seen from above, punctuated by the white intensity of body heat as figures move beneath the targeting reticule."[14] The prevalence of this aesthetic in *A Farewell to Weapons* suggests not only that surveillance, recon, and targeting technology has advanced since Ōtomo's manga, but also that a specific kind of image had come to emblematise modern warfare as it entered into the 21st century – an image taken from a vantage point no longer occupied by humans, and augmented by data outputs from the sensorium of an unmanned machine.

Such images have been described by Harun Farocki as "operational" rather than representational: intended neither to inform nor to entertain, operational images form part of an operation, such as missile guidance or the visual-based navigation of self-driving robots.[15] In his film *Eye / Machine I* (2001), Farocki remarks that the "human scale" is often absent from operational images, as their incessant calibrations and categorisations of the environment bear little resemblance to everyday visual experience. At the film's conclusion, he invites the viewer to "[i]magine a war of autonomous machines – wars without soldiers – like factories without workers," linking the operationalisation of vision with the eventual total automation of conflict. Paul Virilio makes this link even more explicit, tracing the automation of war back to the simple act of taking aim (and thus of "geometrifying" one's view of the world, reducing it to a target), which, he claims, prefigures automated perception and the inevitable capability of intelligent "sight machines" to make combat decisions on behalf of human analysts.[16] In other words, machine vision is not a disruption in the history of warfare, but derives from the rationalisation of the act of seeing for military purposes, which predates any individual technological invention.

Though *A Farewell to Weapons* superficially portrays a binary "human vs. robot" conflict, the film continuously parallels the operational images captured by the soldiers' recon and targeting systems with those of the GONK, likewise suggesting a more fluid relationship between human and machine perception. In one particularly dizzying sequence of the platoon fighting the GONK, the action is interspersed with three different targeting POVs: overhead shots from the soldiers' UAVs and Hellfire missiles (Fig. 3), shots of the GONK taking aim at the soldiers (Fig. 4), and reverse shots of the team sniper (codename Rum)

aiming back at the GONK through his scope (Fig. 5). This initial confrontation with the killbot plays out favourably for the squad: while Male and Rum engage the GONK on the ground, the other team members use the combined visual feed from the aerial drones to triangulate its position and successfully strike it with a missile. This marks a significant departure from Ōtomo's manga, which only depicts the squad launching comparatively crude aerial probes that ultimately fail to detect the GONK. The anime, on the other hand, narrows the technological gap between the GONK and the soldiers, giving them more opportunities to resist its attacks while making the battle sequences more complex. The squad's technologically mediated vision enables them to confront the GONK on the same computational plane that the machine uses to interpret its physical environment. This triumph is only temporary, however, as the GONK later reemerges and ambushes the squad in an underground railway, where the warhead they were tasked with retrieving is located. The soldiers temporarily slow down the robot with a grenade, but they struggle in the crumbling subway system and are forced to launch the warhead, collapsing the tunnels. Male and his commander find their way to the surface, but the GONK quickly locates them, killing the commander and abandoning the site of the battle after its comic interaction with Male.

Fig. 3
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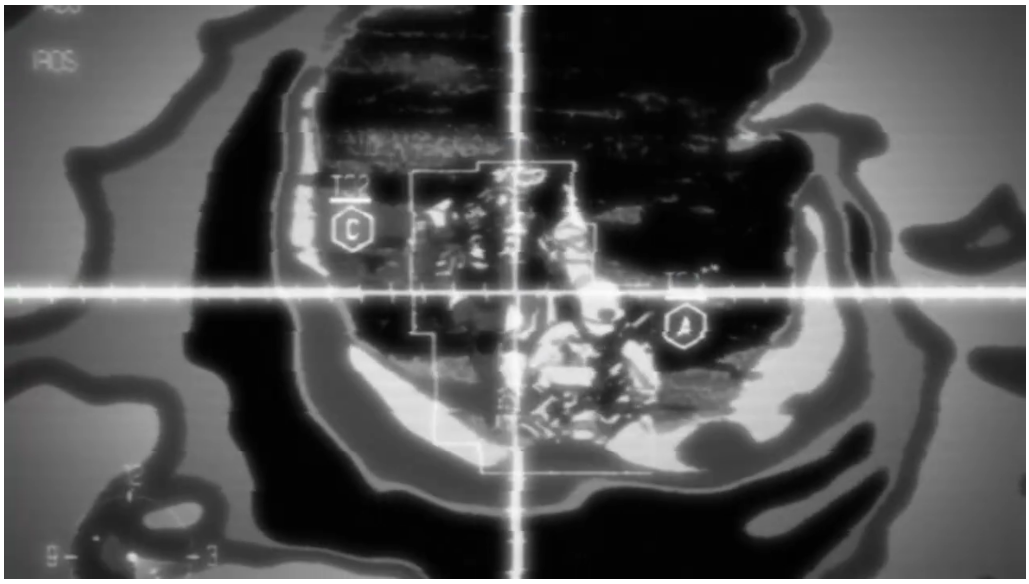

Fig. 4
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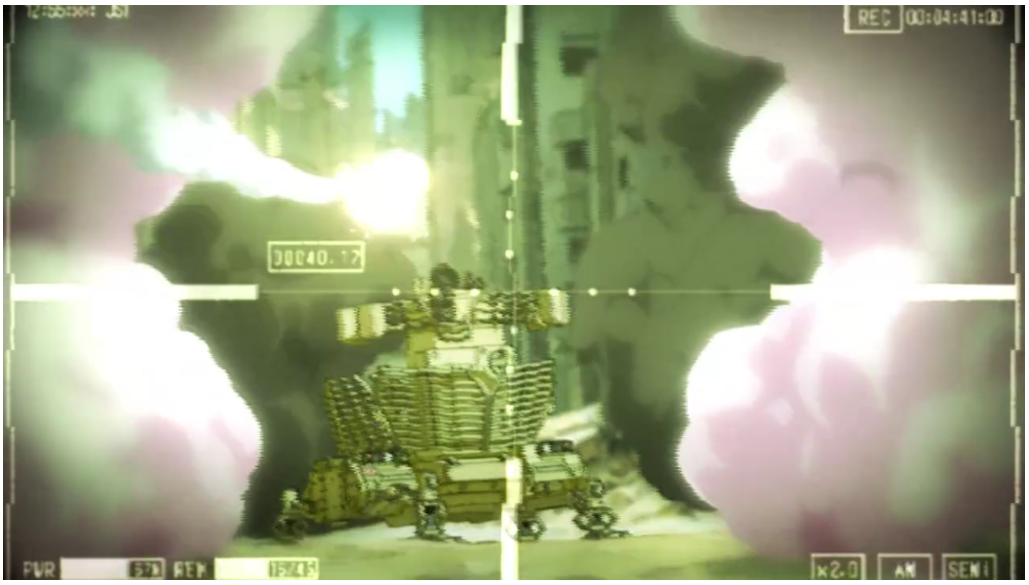

Fig. 5
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While the GONK's slavish adherence to data inputs is a source of both terror and dark amusement, the anime relativises the operational images the robot so rigidly uses to make decisions with the drone images that enable the human squad to temporarily resist its attacks. This frames their battle not only as one between relative technological peers, but also between two closely related modalities of dissimulated

warfare. Matthew King uses the term "dissimulation" (concealment) to describe how contemporary war blurs the distinction between the "war zone" and the "peace zone," and between virtual and actual states, through technologies such as drones that are capable of entering civilian areas and assimilating them into remote conflict operations.[17] Dissimulation creates not only "grey areas" in terms of combat space, but also grey areas of attribution and agency. The increasingly complex networks of people and technics involved in remote-controlled military operations obscure the position and responsibility of individual agents. Those who tout the "precision" of combat drones present them as instruments of intentional human action – in opposition to this, King proposes that the dissimulating effects of drone warfare arise from the innate agency of technical objects themselves, "which humans are wrong to believe they control."[18] The use of drones and artificial intelligence in threat detection, surveillance, and lethal action eventually leads the human subject to itself be "dissimulated (concealed) into the abyss of interconnected networked systems, the higher-level view of which is also dissimulated beyond the possibility of the power to intervene in it, or so it seems."[19] Michael Richardson makes a similar, anti-anthropocentric argument in his analysis of the Agile Condor, an AI targeting system for drones that autonomously processes, sorts, and tracks visual and other data before transmitting it to the operator, with the goal of reducing latency. The Agile Condor "siphons off human agency in the name of efficiency. No longer will human analysts be concerned with discerning the figure of threat against the ground of life, but only with the array of figures presented as actionable."[20] According to Richardson, because such systems analyse the environment with the express purpose of identifying enemies, they tend toward violence (rather than toward neutral, scientific observation) and are endowed with the nonhuman agency to instigate violent outcomes. The drone's opaque, "black-boxed" apparatus, along with its contingencies and errors, undermines the presumption of human agency even before the decision to kill is fully ceded to the machine. The ambiguity of whether the term "drone" refers to a human-controlled or a fully automated, autonomous weapon reflects the diminishing relevance of this distinction.

The ability of weapons not only to detect but to *produce* their targets through a series of impenetrable calculations is part of what makes the ending of *A Farewell to Weapons* so unsettling, despite

the humorous tone of the scene. The fact that the GONK mistakes a combatant (Male) for a civilian is a reversal of our usual expectations of drone warfare, wherein civilians are more often mistaken for combatants. As authors like Virilio suggest, however, the automated vision of machines like the GONK is not an isolated development, but part of a broader genealogy of the "logistics of perception," which organises vision as such around the requisites of war. *A Farewell to Weapons* alludes to this genealogy by juxtaposing the GONK's operational images with those of the squad, highlighting the similarities between the human characters' and the nonhuman killbot's rationalised relationship to their environment. This places the GONK not so much in opposition to the squad, but at the logical endpoint of a technological condition of their own making.

Technologically mediated vision is not in itself novel subject matter for anime. Operational images are equally prevalent in Oshii Mamoru's *Patlabor 2: The Movie* (1993), on which Katoki worked as a member of the mechanical design team. In the film, mech pilots are repeatedly shown observing the world via screens, targeting systems, and other electronic tools of visual enhancement. More radically, *Patlabor 2* includes shots positioned from the point of view of media objects, such as television sets. As Christopher Bolton writes, "[b]y forcing us to look from the perspective of the monitor, or the media itself," the film suggests "a viewing body that is radically different from the human, not only in its optics but in its interests, its logic, and its concerns."[21] Released not long after the 1991 Gulf War, it is perhaps unsurprising that *Patlabor 2* would pursue questions of mediatized warfare using similar visual strategies to *A Farewell to Weapons*. What sets the latter film apart, however, is its distinct relationship to animated movement, distinguished by the use of 3D computer graphics and a heightened sense of hypercinematism.

HYPERCINEMATISM

A Farewell to Weapons' depiction and montage of operational images is not simply a means of "modernising" the combat or of evoking contemporary anxieties about autonomous weapons. Rather, as a

work of animation, the film is also formally constructed according to the logic of militarised perception, with the virtual camera often hurtling through space like a missile, itself defying the presumed "human scale" of live-action camerawork. Returning to Katoki Hajime's suggestion that the anime adaptation needed to account for thirty years of technological development, including advancements in animation, since the publication of its source material, it becomes clear that the inclusion of drones was not merely a way to incorporate new military hardware into the narrative, but also a justification to maximise camera mobility. In one interview, Katoki recalls that he received little instruction from Ōtomo while making the film, save for a suggestion to replicate the camera movements of contemporary action cinema:

> Mr. Ōtomo is someone who doesn't say much once the production is underway, so we have to go with what little input he gives us in the beginning. He said: "Today's action films are incredible. The camera moves in such a way that you can't convey through storyboards." […] I figured that was the request he was making, so I made sure to keep the camera moving, based on that initial remark.[22]

Ōtomo's comment about the inadequacy of storyboards (static drawings that eventually become an anime's keyframes) for conveying momentum indicates a desire to pursue techniques outside of conventional cel-style animation. His reference to "today's" (*imadoki*) action films further implies that other visual media have adopted more versatile means of making the camera move through cinematic space.

To achieve its accelerated camera movement, *A Farewell to Weapons* combines 2D cel-style animation with 3DCG. Traditional cel animation involves hand-drawing figures onto transparent celluloid sheets, layering them over a background, and alternating between them to create frames and motion. Though most anime studios had digitised this process by the 2000s, the outward appearance of digital cel-style animation remains recognisably two-dimensional and consistent with the aesthetics of "analogue" animation methods.[23] By contrast, 3DCG animation uses software to create character models within a three-dimensional coordinate space, enabling a wider range of camera movements, as the animator is no longer confined to the flat planes of layered cels. *A Farewell to Weapons* utilizes both styles: the squad members are initially rendered in 2D animation while chatting in the back of their truck but appear notably three-dimensional as soon as they don their powered suits. 3DCG is particularly useful for depicting mechanical

objects, such as the suits or robots like the GONK, as the models retain visual detail across many frames and shots regardless of the speed or range of their movements. The promotional pamphlet for *Short Peace* expounds on the extensive research that went into the weaponry in *A Farewell to Weapons*, stating that the use of 3DCG ensured the designs were as intricate and realistic as possible, while also citing *Saving Private Ryan* (dir. Steven Spielberg, 1998) and first-person shooter (FPS) games as the main visual references for the film's frenetic camera movement.[24,25] 3DCG enabled the animators to move the models without sacrificing their visual complexity, while also generating a virtual camera that could move freely *around* the models and *through* the spaces in which they were inserted.

The interpolation of three-dimensional models and environments in *A Farewell to Weapons* is not so much a matter of different animation methods or media (cel-style vs. 3DCG, anime vs. live-action), but of different ways of harnessing what Thomas Lamarre calls the "force of the moving image."[26] In *The Anime Machine* (2009), Lamarre argues that anime made using cel-style animation generally tends toward what he refers to as "animetic" movement, where the various planes of the image (that is, celluloid sheets stacked on top of one another) together create a sense of motion without necessarily implying a closed, uniform world. Because the animetic image consists of multiple, conspicuous layers that can slide across each other laterally (as when a foreground character makes walking gestures while the background scrolls behind them, indicating forward movement), motion itself becomes relativized, with each portion of the image visibly contributing to the animation of the world. Animetism thus fosters a more dynamic relationship between the viewer and the image, as the hierarchy between visual planes is destabilised and does not rely on the illusion that the viewing subject "mobilizes" a static universe by moving through it as its centre of gravity.[27]

Lamarre contrasts the relative movement of animetism with the "cinematic" movement created by pushing the camera *into* the image (that is, into depth), a visual tendency he associates with Martin Jay's concept of "Cartesian perspectivalism" from his study of scopic regimes (also cited in Derek Gregory's analysis of drone warfare).[28] Jay uses Cartesian perspectivalism to describe a specific scopic regime that

emerged following the introduction of linear perspective into visual art during the Renaissance, when artists sought to approximate "natural" human vision by accurately translating three-dimensional objects and spaces onto the two-dimensional plane of the canvas. The illusion of three-dimensionality was accomplished by privileging a single viewing position, to be occupied by the viewing subject, and then proportioning elements of the scene so that objects reduce or increase in size depending on how close they are to the subject in a geometrically consistent way.[29] According to Jay, the predominance of linear perspective in Renaissance art was "in league with a scientific world view that […] saw [the world] as situated in a mathematically regular spatio-temporal order filled with natural objects that could only be observed from without by the dispassionate eye of the neutral researcher."[30] Unlike the "multiplanar" world of animetism, then, Cartesian perspectivalism constructs a world observed from a fixed vantage point, unified by precise geometric analysis into a closed, volumetric space for the rational viewing subject to command.

Lamarre refers to the introduction of movement to the Cartesian image as "cinematism," citing Virilio's assertion that modern technologies – ranging from cars and trains to the television – mediate human perception by transforming the world into a cinema, observable only at ever-increasing, inhuman speeds.[31] According to Lamarre, when visual media portray movement into depth, this, too, creates a "cinematic" effect, as the primacy of the viewing subject is redoubled through the mobile camera, and even assumes destructive properties when propelled like a bullet. This is a somewhat unusual combination of terms, as Cartesian perspectivalism typically denotes the illusion of stable and "knowable" three-dimensional space, whereas Virilio describes cinematism as "the aesthetics of disappearance, unstable forms."[32] Virilio states that film, in particular, differs from painting due to the ephemerality of individual film frames, which flash quickly and then vanish before the viewer.[33] Lamarre, however, interprets this effect as a form of "hyper-Cartesianism," arguing that the mobile, monocular lens of the camera "adds speed to the imposition of a rational grid to the world."[34] This suggests that there is actually nothing contradictory about making a closed,

volumetric world "appear" through the use of geometric perspective, only to make it "disappear" just as quickly through "ballistic," projectile-like camera movement.

In keeping with its aspiration for greater camera mobility, *A Farewell to Weapons* depicts movement into depth with almost monotonous recurrence. The film's borrowings from FPS games are particularly evident in the numerous shots of the squad members running through CG-rendered corridors, which are animated to look as though they are being filmed handheld by someone following closely behind. More remarkable than these handheld effects, however, are the explicitly nonhuman camera movements in the film – the black-and-white video feed from a Hellfire missile as it hurtles toward the GONK, for instance. The GONK's munitions are also focalised in this manner, such as in one shot where the camera is aligned with the robot's laser as it strikes the sniper Rum from behind. For only a split second, we see Rum turn around to face the camera, making "eye contact" with the projectile right before it shoots him down. Another particularly gruesome sequence shows the perspective of the GONK's mechanical tentacle as it pierces the squad leader's skull. These shots rely not only on volumetric 3D space (in order to overcome the "dioramic" effect of moving into a cel-style image composed of flat layers), but also on the intensification of camera mobility beyond what could be achieved by a human operator. The virtual camera, *because* it is virtual, allows the viewer to inhabit the nonhuman POV of various ballistic objects, no longer as the authoritative observer of the world, but as a witness to its demise.

Lamarre refers to this "bomb's-eye-view" effect created by the simulated camera as "hypercinematism" – an acceleration of camera movement enabled by animation's lack of physical constraints compared to live-action cinema. Just as the drone's "violent mediation" categorises and reshapes space and its inhabitants into potential targets to strike, hypercinematic animation propels the camera through a virtual space that is expressly constructed for the viewing subject to penetrate it. Lamarre primarily associates hypercinematism with CGI effects in action films, video game cinematics, and certain forms of 3DCG animation (such as *The Incredibles* [dir. Brad Bird, 2004]):

> [Hypercinematic movement] is common where digital animation meets cinema, where it is less a matter of a voyage into the screen world than a flight through it. […] Such animation does not merely replicate or simulate the mobile viewing position of cinema. It strives to raise it to a new power, to multiply and intensify it. The cinematism of digital animation frequently appears to push the limits of live-action camerawork. If, as Nam June Paik says, "cinema isn't to see, it's to fly," then such animation has the potential to fly faster, deeper, and farther.[35]

Hypercinematism has an ambivalent relationship to the anthropocentric ideals of Cartesian perspectivalism; while it is initially enabled by the mathematical rationalisation of space and offers the observer new ways of manoeuvring it, it is also overtly detached from the notion of "natural" human perception that motivated the historical use of geometric perspective. Even if hypercinematic movement is animated in a way that maintains geometrically consistent scalar proportions, its impossible speeds and perspectives reveal its technological origins and subvert the viewing subject's impression of control over the moving image. In Virilio's words: "To drive is to be driven. To drive a car is also to be driven by its properties."[36] *A Farewell to Weapons* takes full advantage of this reversal of control in its machinic point-of-view shots, conveying a sense of being "driven" by the GONK rather than acting as its operator.

The film's hypercinematic movement is thus both a consequence of and the driving force behind its depiction of operational images and drone vision. Though Lamarre does not specifically engage with drone discourse, many theorists have made similar connections between drone footage, computer graphics, and video games. Farocki, for instance, comments on animation's ability to create "a ubiquitous point of view," as animated films can adopt "a perspective that a manned film camera cannot occupy, or only with great difficulty; for example, the perspective offered from the point of view of a bullet shot by a gun."[37] He compares this media-technological expansion of possible POVs to the operational images recorded from cruise missiles during the Gulf War, the uncanny and remote perspectives of which, according to some commentators, "made the war look like a computer game."[38] Farocki argues that computer animation pioneers a "particular stylistic standard" that implicitly critiques the indexicality of photography, endeavouring to supplant it as the ultimate representational medium. Operational images that are intended to advertise the power and precision of "intelligent" weapons similarly claim mastery over the visual field,

while obfuscating the death and violence that occurs within it; their most sanitised depictions (e.g. the detonation of a mysteriously uninhabited airfield) are presented as exemplary reportage of modernised warfare, no longer reliant on the presence of a human observer and outright denying the presence of a human target.[39]

A Farewell to Weapons arrived at a time when the technological de-centring – i.e. dissimulation – of the human viewpoint had already become integral to the canonical drone aesthetic, as Pong and Richardson describe it. The hypercinematism of the GONK's POV presents another form of dissimulation; it undermines human agency not only on a narrative level by disempowering the human characters, but also on a media-technological level by accelerating the camera while immobilising the viewing subject. The film encloses the world in a datafied, planimetric grid, only to stage its destruction. In presenting drone vision as an object of horror, it also *performs* many of the visual tendencies of the drone, confronting us not only with the banal fallibility of automated vision, but also with the question of whether it is a way of seeing in which we are already subsumed.

CONCLUSION

A Farewell to Weapons offers multiple intersecting approaches to the philosophical analysis of drone warfare: Firstly, it demonstrates the ubiquity of operational images in contemporary conflict, highlighting their role as a form of mediation and dominance, as well as their visual and technical opacity. Secondly, the film shows the slippage from remote-control warfare to full automation by pairing the operational images taken by the squad with those of a machine whose owners never appear and may not even be alive. These visual parallels emphasize the dissimulating effects of drone warfare, which gradually eliminates the need or even ability for direct human intervention. Lastly, the film uses hypercinematic movement to produce a sense of dissimulation through the text itself, compelling the viewer to occupy different nonhuman viewing

positions. This occurs within a different register from the basics of the film's narrative, which, at its face, tells a straightforward, high-octane story of a mission thwarted by a killer robot.

By reading the film in this way, I do not wish to uncritically adopt the technological determinism that occasionally surfaces in the work of authors like Virilio or Farocki. Recent scholarship has endeavoured to offer a more reciprocal perspective on technology and its relationship to both war and the human subject. King's discussion of dissimulation and the agency of technics is explicitly non-binaristic in its positioning of the human and the nonhuman, encouraging the reader to explore the redemptive potentials of dissimulation: "Since 'man' as such is always already concealed, to the effect that there is no man (as such), this means that technology is able to radically effect man's destiny and thus that man can be shaped, theoretically, in such a way as to render realizable radical intersubjective normative ends which may otherwise have seemed impossible."[40] The recognition of technological agency, i.e. the fact that technics shapes the world in non-instrumental, unanticipated ways, requires neither a total negation of human agency, nor the naturalization of the "human subject" as a philosophical concept. Rather, it presents an opportunity to regard the human subject as a contingent, malleable concept that can be redefined, and *from* which we can respond to our technological circumstances.

Pong and Richardson apply a similar line of thinking to drone aesthetics, stating that they are not pregiven, but "arise through drone practices and help shape what drones become."[41] This rings especially true in recent years with the widespread use of small commercial quadcopters in warfare (e.g. in the Russo-Ukrainian War), as well as in humanitarian operations, civil protests, and visual art, all of which are creating an aesthetics distinct from that of the Reaper or the now-retired Predator. The drone, rather than determining the course of our technological destiny, presents us with multiple vectors according to which we orient our practices. Thomas Lamarre has likewise avoided reductive theorisations of scopic regimes and geometric perspective by exploring the possibilities of "radical perspectivalism," noting that "while perspective may indeed have world-making potential, an actual world entails a composition of perspectives, a relation or set of relations between perspectives, and can only be prolonged by somehow opening or harnessing that

potentiality." [42] Anime's visual versatility makes it especially amenable to perspectival play and combinations that complicate the animetic/cinematic binary.

Therefore, by placing human-operated UAVs within a spectrum of nonhuman automated vision, *A Farewell to Weapons* crystallizes a particular form and understanding of drone aesthetics. The film represents operational images (which are in themselves non-representational), reinscribing them into its own web of meanings (rather than simply reflecting indexical reality, regardless of the production team's appeal to "realism"). In doing so, it provides a glimpse into the shifting imaginaries of military technology: the manga's depiction of the horror and paradoxical irrationality of autonomous weapons is, in the anime, made more complex through new conceptions of battlefield visibility, data gathering, and remote-control war. The film makes visible both the aesthetic significance of the drone, and the instability of the human subject as it comes into contact with it.

ENDNOTES

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[3] Ueno Toshiya, "War and Anime in the Age of Machine-Oriented Ontology: The Case of Mamoru Oshii," in *Thinking with Animation*, ed. Joff P. N. Bradley and Catherine Ju-Yu Cheng (Cambridge Scholars Publishing, 2021), 146.
[4] Sharalyn Orbaugh, "Sex and the Single Cyborg: Japanese Popular Culture Experiments in Subjectivity," *Science Fiction Studies* 29, no. 3 (2002): 436–452, http://www.jstor.org/stable/4241109.
[5] Paul Virilio, *War and Cinema: The Logistics of Perception*, trans. Patrick Camiller (Verso Books, 2009).
[6] Harun Farocki, "Phantom Images," trans. Brian Poole, *Public* 29 (2004): 12–22.
[7] Matthew King, "Dissimulation: Man, Technology and Modern Conflict," *Angelaki* 25, no. 6 (2020): 108–21. https://doi.org/10.1080/0969725X.2020.1838731.
[8] Thomas Lamarre, *The Anime Machine: A Media Theory of Animation* (University of Minnesota Press, 2009), 35.
[9] Hikawa Ryūsuke, "Interview with Hajime Katoki," in *Short Peace*, ed. Nakai Yūta (Shochiku, 2013).
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[11] Chamayou, *A Theory of the Drone*, 11.
[12] Derek Gregory, "From a View to a Kill: Drones and Late Modern War," *Theory, Culture & Society* 28, no. 7–8 (December 2011): 190, https://doi.org/10.1177/0263276411423027.
[13] Gregory, "From a View to a Kill," 203.
[14] Beryl Pong and Michael Richardson, "Introduction: Drone Aesthetics – An Open Proposition," in *Drone Aesthetics: War, Culture, Ecology*, ed. Beryl Pong and Michael Richardson (Open Humanities Press, 2024), 9.
[15] Farocki, "Phantom Images," 17.

[16] Virilio, *War and Cinema*, 3.
[17] King, "Dissimulation," 113; King borrows the term "dissimulation" from Reza Negarestani.
[18] King, "Dissimulation," 108.
[19] King, "Dissimulation," 116–7.
[20] Michael Richardson, *Nonhuman Witnessing: War, Data, and Ecology after the End of the World* (Duke University Press, 2024), 67.
[21] Christopher Bolton, "The Mecha's Blind Spot: *Patlabor 2* and the Phenomenology of Anime," *Science Fiction Studies* 29, no. 3 (2002): 470.
[22] Mantan Web Editorial Team, "SHORT PEACE: Katoki Hajime 'Figyua tsukuru tsumori datta' Morita Shūhei kantoku to urabanashi akasu," *Mantan Web*, July 22, 2013, https://mantan-web.jp/article/20130722dog00m200022000c.html.
[23] Jonathan Clements, *Anime: A History*, 1st ed. (Palgrave Macmillan, 2013), 191.
[24] Ishii Makoto, "Saibu no ditēru ni made kodawatta gunji akushon," in *Short Peace*.
[25] For a more detailed discussion of the "scientific realism" of *mecha* designs, see Ōtsuka, "Disarming Atom" and Marc Steinberg, "Realism in the Animation Media Environment: Animation Theory from Japan," in *Animating Film Theory*, ed. Karen Beckman (Duke University Press, 2014), 287–300. https://doi.org/10.1215/9780822376811-017.
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[27] Lamarre, *The Anime Machine*, 62-63.
[28] Lamarre, *The Anime Machine,* 26.
[29] Martin Jay, "Scopic Regimes of Modernity," in *Vision and Visuality: Discussions in Contemporary Culture*, ed. Hal Foster (Bay Press, 1988), 6–7.
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[31] Lamarre, *The Anime Machine*, 4–5.
[32] Paul Virilio and Sylvère Lotringer, *Pure War: Twenty Five Years Later* (Semiotext(e), 2008), 97.
[33] Virilio and Lotringer, *Pure War*, 98.
[34] Lamarre, *The Anime Machine*, 5.
[35] Lamarre, *The Anime Machine*, 35.
[36] Virilio and Lotringer, *Pure War*, 43–4.
[37] Farocki, "Phantom Images," 13.
[38] Farocki, "Phantom Images," 15.
[39] Ibid.
[40] King, "Dissimulation," 117–8.
[41] Pong and Richardson, "Introduction," 9.
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