

Introduction

The Perverse Symmetry of Drone Art

What happens when a drone enters the gallery or appears on screen? What thresholds are crossed as this weapon of war occupies everyday visual culture? These questions have appeared with increasing regularity since the advent of the war on terror, when the modern drone began migrating into civilian platforms of film, photography, installation, sculpture, performance art, and theater as both subject and medium. Now, nearly two decades later, it is finally possible not only to engage with these issues, but also to articulate the category of “drone art” with some certainty, to outline its primary features, identify its historical lineages, and assess its political aspirations. This task is complicated, however, by the fact that like drone warfare itself—which is defined primarily in terms of its lack of an end point, denial of geographic boundaries, and absence of judicial process—this emerging genre is most immediately legible in terms of what it doesn’t do. Not only does drone art avoid explicit condemnation of its subject, but so does it refuse the expectations of protest art more broadly. In fact, next to Picasso’s scathing critique of the aerial bombing of civilians in *Guer-nica*, Anselm Kiefer’s cathartic postwar ruins, or the antiwar films of the Vietnam era, these works appear decidedly neutral and aloof.

Not surprisingly, this lack of condemnation or even critique has proved to be a stumbling block for interpreters, many of whom regard the absence of an agenda as a sign of political passivity and/or creative impotence. Consider, for example, the *New York Times* review of Laura

Poitras's drone-heavy *Astro Noise* exhibition at the Whitney in 2016, which begins:

Political art has changed over the past 50 years. Unlike the protest art of an earlier era, much of the most interesting new work feels slippery and evasive, as if reluctant to speak its mind. In part, this is a reflection of different, though not necessarily evolved, thinking. We've abandoned old beliefs in utopias, in visions—some would say hallucinations—of a society built on absolute good for all, in which art plays a declaratively positive role. The 1960s counterculture, even at its most anarchic, was based on such beliefs and visions. And that counterculture is long gone. . . . In the political thinking of an earlier time, you were either part of the problem or part of the solution, the inference being that there *was* a solution. The art of the present is not so sure.¹

This passage illustrates the way in which a pervasive nostalgia for moral certainty and the utopian project of Marxism frames contemporary art in terms of loss: the loss of universals, the loss of a coherent system of beliefs, even the loss of the future. If one subscribes to such a position, it is not difficult to see how drone art might be regarded as the personification of this crisis. In the serene skies of Trevor Paglen's high-magnification photographs of drones in flight, the empty silhouettes of Predator drones that adorn city streets in James Bridle's *Drone Shadows* project, the anticlimactic appearance of pushpin icons to designate the location of drone strikes in Josh Begley's Metadata+ app, the decontextualized sounds of drone engines in *A Study into 21st Century Drone Acoustics*, and even the banal monotony of suburban life in drone films such as *Good Kill*, one senses a recurring affective detachment and overall lack of antagonism toward the violence of drones. On this basis, drone art would appear to exemplify what the editors of the journal *October* describe as a generalized "absence of visible opposition within the milieu of cultural producers working in the sphere of contemporary visual culture."² However, in situating this work in relation to the technological and operational sphere of martial networks, a more nuanced reading emerges, one in which the apparent passivity of this genre is not only a conscious response to the specific conditions of drone power, but in fact the means for reimagining its relations of violence.

While the nonprogram of drone art is necessitated by a number of historical, political, and technological factors, perhaps the most immediate is the increasingly incestuous relationship between martial networks and civilian media. This narrative is most often associated with the realm of video games where the "PlayStation war" takes on an

almost literal dimension: Raytheon's universal remote for robotic vehicles uses the graphical user interface (GUI) of *Halo* and *Splinter Cell*; the Wiimote provides the "joystick" for the army's improvised explosive device (IED)-disarming drones; the PlayStation controller is used for the land drone "Dragon Runner"; and the early control system for the Predator drone ran on an Xbox processor. However, the case of video games is hardly unique in its disregard for the boundaries between civilian media and drone technology. In fact, inside the Conex boxes at Creech Air Force Base, the analysts, operators, and legal teams of the kill chain communicate with a program that mimics the functions of Yahoo Messenger. The tagging features of the data collection programs of drone operation were derived from the software used in live National Football League broadcasts. The Rand Corporation even integrated the logging protocols of reality TV shows such as *Jersey Shore* into its algorithms for sorting the enormous amounts of footage generated by drones.³ Most recently, Google's algorithms were used to catalog drone footage as part of a controversial program called Project Maven.⁴ As the rise of the commercial drone industry confirms, the integration of everyday media into military applications is also inseparable from an inverse trajectory, in which the latter are just as often folded back into civilian platforms. From this overlapping history a shared ground of operations emerges that imbues everyday media such as the mobile device with an inconceivable simultaneity, such that the capacity to serve as both medium of civilian communication and drone targeting system is not only possible, but in fact comprises the very conditions of everyday mediality.⁵

As this entanglement between military and civilian media increasingly eradicates an outside from which media-based critiques might be staged, "protest art" and its attendant gestures of resistance and negation prove problematic. And yet it is precisely such responses that the drone's display of state power seems to elicit. This contradiction is a product not only of the nostalgia for the political movements of the previous century that Holland Cotter notes in his *New York Times* piece, but also of the unique structure of drone power itself. Drones articulate an authority that is distributed and elusive, wrapped up with the horizontality of networks, which they materialize as force. At the same time, this diffuse organization of power coexists alongside and at times congeals into more familiar centralized models. In this, drones exemplify what Alexander Galloway and Eugene Thacker describe as the critical juncture between sovereignty and networks, that irresolvable

ble dialectic that is at the core of understanding the operations of power in the twenty-first century.⁶ As this modulated duality allows drone power to work through a dynamic array of objects and actors, the enduring presence of vertical hierarchies within these formations pose something of a red herring, perhaps even a lure for the critical project, as they prompt familiar strategies of negation that drone warfare fundamentally eludes.

The ability of the distributed networks of drone operation to sabotage critical interventions is reinforced by both the public discourse of “surgical precision” and the asymmetrical nature of drone operation. The absence of American casualties resulting from drone attacks means that the historical fail-safe of public resistance fails to hold this power in check from without, and as a result the military is more willing to engage targets than it would be in the context of traditional modes of combat. In this way, drone power spreads across national boundaries and obliterates durational thresholds of war, all the while producing large numbers of civilian deaths that are strategically elided through the discourse of targeted killings. With narratives of securitization presenting global violence as a zero-sum game, an either/or proposition inscribes these relations so that one is forced to choose between casualties taken on America soil via large-scale terrorist attacks on civilians or casualties confined to the other side of the war, where targets appear to be chosen more judiciously. In this logic, the nationalist undertones of imperialism become increasingly indecipherable from humanitarian discourse, leading to the possibility of an “ethical defense” of drone strikes.

The self-sabotaging quality that resistance can take on in this environment is perhaps best illustrated through the practice of drone hunting.⁷ Associated with the American West, the grounding of drone flights by armed private citizens is often portrayed as a disruptive return of the gaze that overturns hierarchies in the course of restoring individual autonomy. In this view, the practice grants the subject an agency that is charged with negating those governmental intrusions that conflict with self-determination, despite the fact that the same discourse all too often understands drones as part of a globalized counterinsurgency that serves as the necessary prerequisite for such freedoms.⁸ As such, these displays of “autonomy” comprise a relation of “cruel optimism,” which reaffirms not only the dispersed networked status of the drone but also one’s interpolation within its networks.⁹ The temptation of critical or artistic projects to slip into a demythologizing mode that seeks to unmask the authority behind the eye of the drone camera, to demystify

and destroy the false consciousness produced by its apparent invisibility, carries with it the possibility of a similar kind of contradiction. In positing drone power in terms of the hierarchies of sovereignty, such critiques enact a kind of rhetorical drone hunting that may not only miss the target, so to speak, but actively obscure its dual character. As these operations call upon an imaginary outside from which to issue their critiques, they in fact threaten to reproduce the conditions of what Derek Gregory has called “the everywhere war,” confirming that the “old beliefs in utopias” and their concomitant categories of periphery and center are not simply ineffective, but actively appropriated by drone power.¹⁰

Reading drone art in conjunction with the specific conditions of drone power and the impasse they create for political art challenges the knee-jerk tendency to regard these works as disengaged or even indifferent to the violence of their subject. By rejecting the enduring categories of resistance and critique, the basic premises of “protest art” for more than a century, drone art does not so much evade the politics of its subject as actively reproduce and at times even operate within the mode of power that unmanned aerial vehicles (UAVs) articulate. Staking out this perversely affirmative relation to network-centric warfare ultimately provides the conditions to redirect, reimagine, or otherwise introduce interference from within these relations. However, unlike much of the tactical media interventions of the twentieth century, this second-order operation, by which the mirroring operation of drone art slides into a kind of manifest criticality, is always already external to the work itself. It exists only as that which is to be added by users, accrued through circulation, or otherwise brought into being by inorganic agencies within a larger media ecology. As such, the transgressive gesture is necessarily left unarticulated by the work itself, which offers only the vague insistence that an alternate realization of drone warfare is latent to the specific forms, network relations, hierarchies, and histories of its operation.

From this perspective, the apparent passivity of drone art is the surface feature of a dialectical intervention by which this detachment shifts strategically into its other. This possibility is a product of drone art’s affinity with the “post-Internet art object,” which elicits collective or distributed modes of authorship via digital networks in order to undercut the singularity of the work with successive iterations. From this perspective, the danger of this nonprogram is not so much its failure to engage with power, but rather its capacity to engage too intimately. After all, in pursuing these relations, the genre necessarily

treads a fine line between the utopian potential of the network and the reaffirmation of a dispersed mode of power, which Michael Dillon and Julian Reid refer to as “martial becoming.”¹¹ Indeed, the latter concept internalizes the slipperiness of this distinction by testifying to the fact that “the very means by which phenomenality is itself engendered—the intimate correlation between appearing and what appears, enacted through the power of signification—has become, above all, the prowess to which martial embodiment, paradigmatically represented by the United States military, now aspires.”¹² As drone art attempts to oscillate between these designations, it creates the very real prospect that its interventions will simply reiterate, even bolster the operations of drone warfare. Such is the gamble of this genre, which seeks to maintain what Bruno Latour refers to as the “reversibility of foldings” by way of a kind of self-conscious acquiescence to the very relations it seeks to upend.¹³ The critical questions then become: What differentiates these relations of perverse symmetry from simple reproduction? What allows such formations to reimagine power outside of existing formations? It is in this regard that accelerationism forms an important interlocutor with the genre of drone art.

ACCELERATIONISM AND THE NONPROGRAM OF DRONE ART

While referencing a diverse set of theories, which include Nick Land’s absolute deterritorialization, the epistemic approach of Ray Brassier and Reza Negarestani, and Gilles Deleuze and Félix Guattari’s schizoanalysis—accelerationism begins with the recognition that there is no longer any outside to capitalism (a position that maintains a particular resonance with the global counterinsurgency), and therefore the primary way to derail its inner workings is by amplifying its own powers for deformation and self-destruction.¹⁴ As a political philosophy, accelerationism spawns considerable disagreement regarding what exactly should be accelerated and whether this process requires outside intervention or is simply the natural end point of capitalism itself. Without downplaying the importance of this debate, it is safe to say that these theories seem to have found more coherent expression in the realm of aesthetics, so much so that theorists such as Steven Shaviro have insisted that accelerationism be regarded primarily as an artistic program rather than a political economy.¹⁵ The compatibility between accelerationism and contemporary art practices is evident in the following remarks by

Robin Mackay and Armen Avanessian: “While distancing itself from mere technological optimism, contemporary accelerationism retains an antipathy, a disgust even, for retreatist solutions, and an ambitious interest in reshaping and repurposing (rather than refusing) the technologies that are the historical product of capitalism.”¹⁶ While this emphasis on “reshaping and repurposing (rather than refusing)” clearly resonates with the art movements of the twentieth century, it maintains particular relevance to the situation of drone art. As the accelerationist impulse “is already implicitly present in the speculative re-application of drone technology,” drone art fully embodies the counterintuitive nature of an accelerationist program, which reproduces that which it abhors in order to escalate the latent formations that operate within this larger ecology of actors.¹⁷ In rejecting the possibility of a symbolic intervention, this engagement is defined in primarily structural terms. As a result, its reproduction of drone power is easily mistaken for the cool detachment of postmodern pastiche. However, as drone art is driven by a nonprogram rather than an antiprogram, its rejection of traditional modes of critique and resistance is not synonymous with the rejection of the political as a category or of the possibility of intervention. In fact, it is precisely by way of these relations of symmetry that this work seeks to amplify the internal contradictions and asymmetries of drone power, to harness the relations of becoming that inhabit this network in order to realize alternate iterations of its force. Though drone art deploys a wide variety of practices and strategies, its operation primarily proceeds according to three recurring modes: the networked, the objectile, and the historiographic. In each case, the efficacy of this engagement is contingent upon not simply reproducing the structures of drone power, but internalizing the dialectic relationships that comprise its functioning.

The genre’s relationship with the civilian networks of social media, news aggregators, navigation software, GPS satellites, and mobile apps is central to understanding its political project. As the remote nature of drone power’s asymmetry ensures that its violence is spatially displaced for operators and constituents, the enfolded martial presences that populate these everyday platforms represent critical points of access to an “elsewhere war.” To draw out these latent formations, drone art understands digital networks as not simply vehicles for disseminating content, but active agents capable of charting the otherwise inaccessible collaboration between martial and civilian networks. Exemplary in this respect are James Bridle’s *Dronestagram*, which uses Google Maps and the popular image app Instagram to catalog drone strikes, and the

#NotABugSplat project, a monumental portrait of a victim of drone strikes that entangles the eye of the UAV with the sharing economy of social media. As these works enlist the human users and inorganic agencies of these platforms to manifest the tensions of drone power, they attempt to provide the conditions by which it becomes possible to, as Ulises Mejias puts it, “unthink the network.”¹⁸

In those instances when the network is not the primary means of acceleration, the artifacts of drone art internalize these relations by making use of the pliable and intermedial nature of digital media, a condition that Deleuze associates with the “objectile.”¹⁹ As the kill chain displaces the stasis of representation with aggregated conditions and predictive models, drone power articulates a field of weaponized becoming in which proper nouns serve as a symptom as much as an origin of violence. Interpenetrating platforms such as 3D printing, photography, installation, and video, the assets of drone art, move across iterations, forming a chronology of shape-shifting that echoes this abandonment of identity as the anchoring determinant of martial operations. The ontological instability that ensues from these relations is evident in works such as Nathaniel Hartman’s *ASM_frag* (2014), a sculptural fragment born out of an extensive chain of iterations that range from an online photograph of a missile shard from a US drone strike to a report of this artifact having been smuggled out of Afghanistan. Matthew Fuller, Graham Harwood, and Matsuko Yokokoji’s *Endless War* (2012) installation performs the constitutive breakdown of representation of drone power by projecting leaked dispatches of the kill chain according to “repeated patterns of events, spatial information, kinds of actors, timings and other factors.”²⁰ In sorting these data via alternate parameters of an N-gram analysis, the work draws upon both the varied modes of address of installation and the becoming of the postrelational database in order to not just reanimate these artifacts, but conceive of new totalities that they might operate within.

In addition to employing these media-centered strategies, drone art introduces alternate histories of the UAV to exacerbate the ontological tensions that reside within its interfaces and procedures. Central to this enterprise is the animal prehistory of drones, which is regularly called upon not only to unravel the progressivist technological narratives that inform drone discourse, but also to draw out the residual animal presence that haunts their operation. For example, Mato Atom’s short film *Seagulls* uses intertextual relations with familiar fairy tales and formal techniques such as compositing and non-diegetic sound to push this

historical connection between the drone and the nonhuman animal to the point of indecipherability. While Mato's work stages this intervention within the technical substrate of the moving image, Dutch artist Bart Jensen's zoo-drones perform the animality of the drone in more literal terms. Using UAV technology to give life to taxidermied animals, the uncanny flight of these hybrid creatures refuses simple colonization of the animal body and instead produces a movement that undercuts identity and destabilizes the agencies that populate this media ecology. As the nonhuman animal and the drone collapse into one another in these historiographic works, not only does the linear quality of drone history come undone, but so do the coordinates of its violence. In this way, the animality of this genre posits drone history as a dynamic and reversible field in order to open the future of this technology to equally unforeseeable iterations.

These networked, objectile, and historiographic modes of drone art proceed according to processes of intensification. Eschewing an explicit program, position, and at times even discernible content, they offer the means of recuperating unformed possibility from within systems of control rather than delivering specific or ideal iterations of the media ecology, discourses, and politics that inform drone operation. In echoing the horizontal and distributed nature of drone power, this genetic aspect of drone art discloses the capacity of martial networks to break down the parameters of asymmetry that determine their violence. This is routinely dramatized in drone film and theater, where geographic ambiguity, temporal slippages, and unsettling plot symmetries that elide the distinction between "us" and "them" do not simply "humanize the enemy," but eradicate the position of safety from which citizens of the Global North often experience drone power. As the Arizona desert, the shopping mall, and the microdramas of suburban life lose their distinctness from targets overseas, the groundlessness of drone power offers both the prospect of boundless violence and the becoming-other of unformed potentiality. With all of this in mind, it seems that Karen Beckmann's description of the work of drone artist Trevor Paglen as an "activism . . . founded on ambiguity, incomplete understanding, doubt and obscurity, rather than slogans, unity, loyalty and coherence" may very well extend to the genre as a whole.²¹ And yet this statement must come with some qualifications. As this "activism" posits deformation as the limits of its intervention, it necessarily stops short of the kind of advocacy that this term typically embodies. In the place of the oppositional message, drone art installs a strategic deferral, which calls upon

the organic and inorganic agencies of networks, the iterative capacity of digital media, and the nonlinear histories that animate its technologies to reimagine drone operation outside of its existing program.

Tracing this narrative requires that both terms of the phrase “drone art” be understood as expansive and co-constitutive categories. As the material correlate to geopolitical relations, nationalist histories, and racial discourses, drones clearly exceed the parameters of a purely technological object. While such convergences of material and immaterial forces comprise the boundaries of all machines, drones present an especially comprehensive and dynamic instance due to the distributed nature of the kill chain and the remote relations it reproduces. As these attributes preclude the possibility of isolating “the drone” at technological, phenomenological, or symbolic levels, the familiar white silhouette can never be wholly collapsed with “drone.” The latter is only a fleeting representative of a fluid system of relations that manifests through objects. Its presence is nondefinitive in itself, a residue of the perpetual elsewhere that results from what Arthur K. Cebrowski and John J Garstka describe as “network-centric warfare.”²² By emphasizing information “pull” rather than the “push” of broadcast, this decentered model of military operations flattens cumbersome hierarchies of chain of command so as to enhance the exchange of information, increase overall flexibility, and accelerate responsiveness in the face of rapidly changing conditions of warfare. In the process, data flow among networked sensors, human agents on the ground, analysts, and commanders horizontally and in near real-time via satellites and high-speed fiber optic cables. To acknowledge the dispersed quality of this object of study, this project understands drones as not only an ecology of weaponized media, but the myriad of processes that materialize the virtual relations of martial networks as force. From this expanded field, art history, media studies, surveillance studies, geography, animal studies, critical theory, and military history become critical tools in excavating the deep convergences of the drone’s dynamic martial folds.

METHODOLOGY WITHOUT MELANCHOLY

Taken in isolation, the word *art* would appear ill-suited for a body of work that includes not only photography, installation, and painting, but also experimental music, phone apps, theater, and film. However, when paired with a military technology this word introduces a productive conflict that succinctly conveys the larger stakes of this work. As

the response to early presentations of this project has made clear, the persistent notions of beauty, critique, and resistance that accompany this designation present the possibility of “drone art” as something of a contradiction in terms. It is as if the phrase lacks a much needed conjunction to preserve the integrity of these fields (perhaps “drones and art” or “drones in art?”). However, it is for this reason that the shortened designation *drone art* proves productive, as it performs the perverse symmetry that characterizes this genre by allowing the role of modifier to move seamlessly between referents. The result is an ambiguous directionality that undercuts the solidity of both terms: Does *art* refer to artifacts created by drones? Does it suggest that drone operation maintains artful qualities? Or does it imply that a given set of works displays drone-like attributes? Read in conjunction with the genre’s mirroring function, the answer to these questions is of course “yes,” as collapsing such oppositions is the lingua franca of both drone power and the genre of work that engages it.

From this perspective, *drone art* is not simply a descriptive term, but a methodology. It speaks to a mode of inquiry that begins within a conflicting field of symmetry in which military doctrines such as network-centric warfare are read as aesthetic programs, and everyday social media platforms are analyzed as weapons of war. By embracing the internal contradictions (and blasphemies) of this genre, such an approach disentangles drone art from what Wendy Brown calls “left melancholy,” a turn-of-the-century phenomenon in which an enduring allegiance to “notions of unified movements, social totalities and class-based politics” forecloses the possibility of an alternate, equally transformative engagement with the present.²³ This discourse, in which the attachment to the object of loss seems increasingly to “supersede any desire to recover from this loss,” posits “the sixties” as a historical absolute against which alternate modalities of political art can only appear as lapses or failures. The methodology of drone art jettisons this position in order to engage the critical impasse posed by this new mode of power, an impasse that Caren Kaplan succinctly conveys when she asks: “How do you produce critique when various entities that appear to be distinct are, in fact, quite closely related?”²⁴ Such a prompt might best be understood as a rhetorical question, as the nonprogram of drone art resists the possibility of critique. Instead, the writing of drone art necessarily takes place within the enfolded relations of drone symmetry, forming a methodological chiasmus in which thinking drone power through art and thinking art through drone power prove to be inseparable tasks.

This book is organized around a series of recurring conceptual knots or convergence points that inform the nonprogram of drone art. In order to build the foundation necessary for engaging these entangled histories, theories, and practices, chapter 1 presents an overview of drone power. Of particular importance to this discussion is the “signature strike” which forges targets according to a “disposition matrix” of behaviors rather than the specific identity of the subject. With this emphasis on plausible identities, meanings, and events, the role of martial networks shifts from producing a definitive world picture to overseeing the ground from which such representations emerge. The flattened ontology that emerges from these relations allows drone power to penetrate the world directly, to work *through* and *as* instead of *upon* its objects. These operations form the basis for the complementary logics of drone power, which I call “tactical animism” and “simple triggers.” Framing drone power in these terms reveals a shared logic at work in Trevor Paglen’s appropriated drone video piece *Drone Vision* (2010), Joy Garnett’s *Predator* paintings (2011–2012), Noor Behram’s photographic exhibition *Gaming in Waziristan* (2007–2011), and Laura Poitras *Bed Down Location* (2016) installation, which in distinct ways attempt to internalize this logic of the signature strike so as to reclaim and/or redirect the drone’s capacity for world-making.

Despite its undeniably photogenic quality, the drone maintains a complicated relation to the still image as a result of this capacity for world-making. Not only does the singularity of drone presence betray the dispersed nature of this mode of power, but so too do its relations of martial becoming appear ill-suited to photography’s emphasis on stasis, iconicity, and authoritative representation. Chapter 2 pursues this conflict from within the kill chain, where representational images are interpenetrated by an immense archive of diagrammatic signs that includes heat signatures, chemical compositions, and GPS coordinates. This “mixed semiotics” does not so much deliver static conditions as build instrumentalized diegeses around an impending attack. In the process, the representational matrix of ocular media gives way to what Mike Hill calls “fractal media,” mathematical simulations that “rethink” the profilmic event rather than visually represent it.²⁵ Works such as James Bridle’s *Drone Shadows*, Trevor Paglen’s *Untitled* series, Mahwish Chisty’s *Kill Box* (2016), and Scott Patrick Wiener’s *Visibility Tests for Sky* (2011–2015) attempt to reproduce these relations by rendering the photographic frame similarly porous. In opening the still image to external flows that undercut its ontological stasis, they reiterate an

operational schema of drone warfare called “the kill box.” Critical to this prospect is the ability of drone art to integrate the distributed networks of social media, the iterative nature of digital images, and the dispersion of authorship these platforms engender.

While relations of invisibility and “seeing without being seen” comprise critical components of drone operation, the recurring reliance upon panopticism in theorizing its mode of power proves problematic. Not only does this conceptual framing tend to obscure the nonvisual elements that contribute to the drone’s mode of address, but so too does it overlook the gestures of revelation that prove equally critical to its operation. By eliding the often traumatic modes of presence that drones articulate for subjects on the ground, such readings can easily universalize the position of safety of those untouched by this violence and thereby reproduce the asymmetry of drone operation at a discursive level. In order to pursue a more nuanced understanding of drone presence, chapter 3 begins with firsthand accounts of those living under drones.²⁶ From this perspective it becomes clear that conventional dynamics of surveillance do not simply coexist alongside an opposing logic of explicit presence, but drone power in fact relies on a strategic oscillation between panoptic modes of invisibility and overt revelation. Drone art proves useful in codifying these relations of “post-panopticism” as it often foregrounds the embodied experiences of those below over the omniscient aerial view of the UAV itself. Exemplary of this dynamic are James Bridle’s *UAV Identification Kit* and Ruben Pater’s *A Study in 21st Century Drone Acoustics*, which mobilize the civilian practices of “spotting” used during World War II and the military history of ambient sound recording to undercut the stability of referents that maintain drone warfare’s asymmetry. In similar fashion, Bridle’s *Dronestagram* and Josh Begley’s *Metadata+* app utilize the locative capacity of the mobile device to interject drone violence into the everyday and thereby unsettle the geographic distinctions that structure its martial networks. Collectively, these works present a reciprocal gaze that forcibly relocates the drone’s aerial modes of invisibility to the ground, where its violence extends beyond the existential threat of the strike and into the everyday sensory experiences of its subjects.

As a result of the historical reliance of war on the animal body, modern technologies such as the drone are haunted by a lingering zoological agency. Of the nonhuman animals that occupy the networked bestiary of the drone, none are as influential as birds. Not only do these creatures offer a means of materializing an enduring connection between

flight and surveillance that had occupied the imaginary for centuries, but they also introduce the time-space differential of an aerial proxy by which a thoroughly modern asymmetry of warfare would come into being. Chapter 4 attempts to expand the inventory of agencies that comprise the kill chain by excavating this avian prehistory of the drone. Critical to this narrative is the displacement of motor and ocular functions to the animal via Dr. Julius Neubronner's experiments with pigeon photographers during World War I and the outsourcing of processes of targeting to pigeons in B. F. Skinner's World War II Project Orcon. In the films, installations, and sound recordings of drone art, this lingering presence of animality provides a point of entry for opposing modes of convergence. The first, represented by Mato Atom's short film *Seagulls* (2013), seeks to amplify the ontological slippage of these relations between animal, human, and machine so as to reimagine the hierarchies that subtend these terms. The *#NotABugSplat* installation in Pakistan exemplifies an opposing trajectory, which centers on reclaiming the category of the human from these fields of interspecificity by way of a strategic regression toward stasis, specificity, and identity. Taken collectively, these tactics comprise complementary operations that reproduce the animal assemblages of drone power in order to reimagine the parameters by which targets come into being.

As drones appear in film and theater, their dual status as object and medium creates the conditions for a unique mode of reflexivity. Here the remote sensing of the kill chain manifests as a distributed mode of appearance in which the drone is never simply the subject of the image or autonomous material presence, but also partial origin of the diegetic world in which it appears. The deterritorialization that ensues from these relations encompasses both the diegetic and/or institutional boundaries in which the work is presented and the medium from which the presentation takes place. In this way, these platforms come to articulate a contingent and contradictory mode of presentation that is not unlike the "differential specificity" that Rosalind Krauss ascribes to twentieth-century art practices.²⁷ Chapter 5 traces these relations through the film *Good Kill* (2014) and the theatrical production *Grounded* (2013). While the ability of the drone to achieve full presence on the screen or stage may be contingent upon an active interpenetration of the host media by the larger processes of network-centric warfare, these works demonstrate the myriad of conflicts such a proposition introduces. In the case of *Good Kill*, the automated, collective, and remote nature of drone operation clashes with both the underlying visual relations of narrative cinema and the conven-

tions of the war film genre. In *Grounded* the infiltration of the stage by the drone sacrifices the Aristotelian unities to what Francois Lyotard describes as a “general desemiotics” of theater.²⁸ However, both works integrate the creative capacity of the kill chain into their respective modes of presentation by way of these conflicts. With this gesture, they invite drone power to work upon the medium itself so as to reimagine the mode of critique by way of its object.

Pursuing these topics reveals a genre forged on the one hand by a skepticism toward representation, resistance, and critique and a strategic embrace of the modulated becoming, distributed collectivities and dynamic folds of the drone on the other. A decade ago William Gibson’s novel *Spook Country* (2007) described the conditions that would give birth to this conflicted position. In this work Bobby, a reclusive programmer who makes his living by helping young artists realize their vision with geospatial technology while troubleshooting navigation systems for the US military on the side, explains: “The most interesting ways of looking at the GPS grid, what it is, what we do with it, what we might be able to do with it, all seem [. . .] to be being put forward by artists. Artists or the military. That’s something that tends to happen with new technologies generally: the most interesting applications turn up on the battlefield, or in a gallery.”²⁹ While this unsettling structural affinity remains relevant to contemporary drone power, in the years since Gibson’s novel the “or” of this proposition and its insinuation of separate and distinct spheres has given way to an inexhaustible and all-inclusive “and.” Within these enfolded relations, the “old beliefs in utopias” and their attendant oppositional strategies lose their currency and become self-sabotaging modes of affirmation. And yet these efforts are ineffective only to the extent that alternate realizations of this mode of power are immanent to its operations. As a result, the exploit of drone power is always internal to its own networks, practices, and discourses. It is this realization that structures the varied nonprograms of drone art.