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DESDE LAS OFICINAS DE CABINET INVOCAMOS ALA VIRGENCITA DE GUADALUPE POR SALVAR DE TAN GRAVE ACCIDENTE A NUESTRA EDICION ACTUAL DE LA REVISTA CUANDO FUE ATACADO EL BARCO QUE LA TRANSPORTABA DESDE ANTWERP HASTA NUEVA YORK POR UNTERRIBLE MONSTRUO MARINO POR ELLO AQUI EN PRUEBA DE NUESTRA ETERNA GRATITUD DE DICAMOS ESTE RETABLITO. CANAL DE GOWANUS EN BROOKLYN SEPTIEMBRE 2019.

DRONE SEMIOSIS Mark Dorrian

The mythic figure of the blind seer embodies a longstanding theme of Western thought—the idea of a powerful, far-reaching, and penetrating vision which, because its sentience exceeds or transcends the quotidian world of the senses, is symbolically registered by, and perhaps even requires, their cancellation.1 This trope today finds a technological translation in the morphology of the drone, in which the disappearance of any normative visual point in the form of an occupied cockpit supports fantasies of absolute visual domination. In contrast to earlier technological artifacts to which a kind of anthropomorphism inevitably accrued as a result of their being piloted through direct human vision, the new era of robotic weapons presents us with a properly post-human image, one whose smooth surfaces sit outside any logic of faciality. As such, the drone confronts us with a striking image of non-reciprocality, an unresponsive blankness that forms the iconographic counterpart to its distantiation from its targets, whom the missiles hit without warning and as if "from nowhere," and that echoes the fabled impassiveness of the robot as a thing beyond subjectivity—"a nonhuman foe," as one proselyte of the psychological effects of robotic weapons put it, "that is relentless."2

The post-human morphology of the drone—"a strange extraterrestrial-looking gray airplane without a cockpit or windows"3—brings it into proximity with popular cultural depictions of the alien as manifested in science fiction and horror films, which so clearly underpin the conception of menace held by the military and their weapons-industry contractors. The schlock horror names Predator and Reaper bestowed by General Atomics on their two widely deployed drones, or unmanned aerial vehicles (UAVS), reflect this, as does the moniker Hellfire, used for the missiles with which they are armed. In 2004 in Fallujah, "marines set up loudspeakers around the city and broadcast the sinister laughter of the alien from the *Predator* movie"⁴—which involves a creature that uses thermal imaging technology to hunt its human prey—while its robotic namesake circled overhead. At the same time, mythic and magical attributes are implied by the names of the

visual technologies carried by drones, which invoke archaic monsters of vision. Thus, to take one example, we have the Sierra Nevada Corporation's Gorgon Stare surveillance system, which was first carried by UAVS in Afghanistan in 2011. Explicitly developed to surveil urban areas, it is capable of capturing motion imagery from within a four-kilometer radius by mobilizing an array of cameras and then dispersing the images to multiple users. In its manufacturer's factsheet, complete with Medusa emblem and the motto oculus semper vigilans ("always watchful eye"), Gorgon Stare—whose "mission" is described as "city-sized, 24/7 persistent surveillance"—is promoted as providing three tiers of simultaneous imagery: "synoptic, wide-area coverage, full field of regard"; "multiple sub-views" of this; and "best resolution tactical chip-outs." To these correspond three different kinds of use, characterized as: "forensics/ pattern of life (30-day mission data archive)"; "areas of interest overwatch"; and "tactical consumers/first responders."5

Prior to its operational deployment, however, problems experienced with the system led to admissions that the extent of its omnivisual capabilities had been inflated by Air Force staff, who had claimed that "Gorgon Stare will be looking at a whole city, so there will be no way for the adversary to know what we're looking at, and we can see everything."6 Given that in 2009 alone, us Air Force drones collected the equivalent of twenty-four years' worth of video footage if watched continuously, it is clear that such fantasies of total vision—the ability to "see everything"—are driving the development of technologies like Gorgon Stare, whatever limitations they may turn out to have in reality, toward a state of paralyzing visual overload. This is wellillustrated by the Defense Advanced Research Projects Agency's (DARPA) ARGUS project. Here the giant Argus Panoptes—the mythic all-seeing servant of Hera whose hundred eyes, in Ovid's telling, are commemorated in the peacock's tail—is reinvested as an acronym of the Autonomous Real-time Ground Ubiquitous Surveillance system, whose sensor consists of four telescopes each containing ninety-two five-megapixel imagers, which reportedly have the



capacity to collect almost eighty years' worth of high-definition video in a single day.7 According to its manufacturer, the technology allows coverage of an area of "over a hundred square miles" and a "ground sample' distance of 15 centimeters" (meaning that one pixel represents 15 centimeters on the ground), together with an image-refresh rate of fifteen frames per second.8 The system allows at least sixty-five separate video windows to be opened and manipulated, making it—according to one defense official—"like the eyes of a house fly ... [with] highresolution multiple video windows [that] can zoom in and out, as needed, to precisely locate targets."9 The aspiration that such UAVS could permanently "loiter" in mid-air over a city has led to various proposals, ranging from the use of nuclear power¹⁰ to the resurrection of the airship in the form of the vast Blue Devil 11, a "floating military supercomputer" that if constructed (the project was recently put on hold) would be the largest unmanned aerial system ever built. The contractor is Mav6, a company that

David Deptula— a former high-ranking Department of Defense official—had joined as CEO in February 2011.¹¹

Commentaries on the Gorgon Stare epithet have of course linked the name of the technology to its purported ability to arrest through representation. But the real desire to which the name points is the collapse of the acts of seeing and killing into one another, the conferral of death in the moment of visualization. This is a dream that is now situated within the horizon of the autonomization of the robotic weapon. If the inevitable logic of escalating surveillance is to tend toward the replication of the totality of what exists, so it equally tends to simply reproduce the initial and undifferentiated condition within which the surveillance technology first intervened. Thus the prediction in 2010 of Deptula, then Deputy Chief of Staff for Intelligence, Surveillance

Above: Unseeing death. An MQ-9 Reaper at Creech Air Force Base, Nevada. Photo USAF/Lance Cheung.



and Reconnaissance (Headquarters us Air Force), that intelligence could soon be "swimming in sensors and drowning in data."¹²

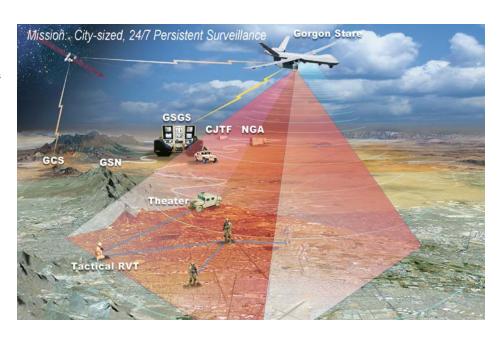
As the quantity of surveillance imagery increases beyond possible human scrutiny, inevitably the demand grows for the development of pattern recognition systems able to, in turn, survey it. Such supersession of human agency—whose capabilities can only increasingly appear inadequate—is part and parcel of the drive to automate target identification and acquisition on the grounds of capacity and speed, a phenomenon that in turn underpins dreams of narrowing the temporal

gap that separates sighting, identification, and execution. This vaunted "kill-chain" compression, eagerly promoted by weapons industry contractors, requires—in the words of cultural theorist Mike Hill—the acceleration of time "to a point of sightvelocity, in which opposition disappears the very moment it is configured. ... In this way machine vision re-works our spatial bearings and enables the weaponization of temporality itself." 13 It is a tendency that Hill sees mirrored in us Department of Defense-funded research into brain-computer interfaces able to trigger weapons through synaptic firing, which is to say, by thought, although this motif of cyborgian merging with the weapon is one that autonomization seems already to have outpaced.

While robotic weapons whose names signify malevolence and threat accumulate (the Switchblade, the Phantom Ray, and so on), and some advocate that they be intentionally designed as horrific creatures in order to provoke terror, at the same time the drone connects—and this is crucial to the way it which it functions culturally—with longstanding discourses of humanized and domesticated technology. This semiotic split is well-illustrated in a recommendation of former us Air Force colonel Tom Ehrhard: "I've been a proponent for a long time of painting a mouth and eyes on the Global Hawk. ... Make that other thing part of your family, your

Above: Medusa made into a heroine of the militaryindustrial complex. Logo of Sierra Nevada Corporation's (SNC) Gorgon Stare (GS), billed as a one-of-a-kind Persistent Wide-Area Airborne Surveillance (WAAS).

Right: Acronyms at work. The "operating concept" of NSC's GS's WAAS.



social structure. Try to animate and make either fearsome or lovable your implements of war."¹⁴ There are, in turn, two ways in which this latter aspect becomes articulated: firstly, through the positioning of the drone within an ethos of hobbyism, and secondly, through its location in a narrative and pictorial tradition of empathetic machines. Both of these act to dissolve the uncanny alterity of the robot, which historically emerges—in Karel Čapek's 1920 play *R.U.R.*, a sorcerer's apprentice tale for modernity—as a cipher for objectivized labor power that monstrously revolts, turning against the progenitors that it has been created to serve.

Susan Stewart has observed how hobbyism typically takes up the objects of alienated industrial production and personalizes them through their reinstantiation as craft (the making of model ships and trains, the building of kit cars, etc.), bringing them into proximity with the intimacy and innocence of the childhood toy.15 Here drones seem to find a place at the intersection of the familiar suburban traditions of amateur radio, model aircraft construction, and remote control, whose most upto-date manifestations indeed turn out to be toy drones such as the Parrot A.R., which incorporates an HD video feed and an ability to play augmented reality war games. This set of relations appears to inform initiatives such as DARPA'S 2011 "UAV Forge" public crowdsourcing competition, which offered a \$100,000 prize for the design of a new drone and sought expressly "to lower the threshold to entry for hobbyists and citizen scientists."16 Here the weapon is culturally repositioned away from the hi-tech research labs of the military and its contractors, and embedded instead in a quotidian, domestic world in which garage tinkering merges in a new way with ideals of citizenship and patriotism. If the historic ideal of citizenry was a nation-in-arms, then in the present condition of remote and continual war it seems to become—at least in this version—a nation designing arms.

The emergence of such affective ties with the robot is evident in pronouncements such as Republican congressman Brian Bilbray's characterization of the Predator as a "folk hero" for many Americans. "If you could register the Predator for president," he continued, "both parties would be trying to endorse it." Notably, however, it is in

the case of defensive robots, virtuous machines that "risk themselves" defusing explosive devices, that such fantasies become most fully developed, even extending to a conferment of full agency upon the machines. Thus cases are reported in which us Army operators have awarded their bomb disposal robots "purple hearts" (a recognition usually reserved for soldiers wounded or killed by enemy action) and performed honorific funeral rites, including twenty-one-gun salutes. However, if the entirely benign, self-sacrificing character of the act of bomb disposal tends to provoke an empathetic response that imagines agency condensed within the machine itself, then this is admittedly less strident—notwithstanding instances such as that of Congressman Bilbray, in whose district General Atomics is based in the case of the robotic weapon, in which the sense of where agency resides tends to remain distributed across a complex concatenation of human and nonhuman actors. It is perhaps unsurprising that this should be the case with offensive weapons, for such dispersal inevitably minimizes the possibility of identifying a single, fully accountable agent and seems to drain away culpability itself. As drone pilot Matt Martin commented, following the mistaken killing of two boys on a bicycle: "The responsibility for the shot could be spread among a number of people in the chain—pilot, sensor, JTAC, ground commander. That meant no single one of us could be held to blame."18

But it is not only the image and meaning of the drone itself that are at stake in drone semiosis, for it is a visual apparatus, and the images that are produced by it—how they are presented, and the ways in which they circulate—must also be reckoned with. As others have pointed out, the official discourse on precision in relation to—and as a legitimation of—drone strikes positions the weapon in terms of its putative "visual superiority," 19 which is in turn related to its elevated viewpoint and the optical capacities of its sensors. The principal mode for the dissemination of video captured from drones in Iraq and Afghanistan—what some have called "drone porn," showing short sequences of attacks and killings—has been via official us Department of Defense or DVIDs (Third Army/us Army Central) accounts on YouTube. Presumably intended both to promote the technology for a domestic audience and

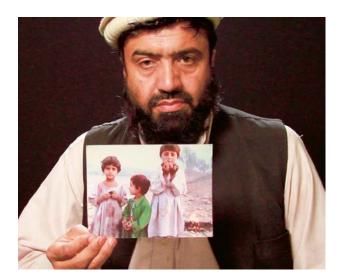
to threaten opponents, by 2009 these had reportedly received more than ten million views. The degree to which these officially sanctioned videos form a counterpart to the abhorred films of executions posted by jihadist groups has not gone unremarked.

Usually the clips last no more than a few minutes. A brief descriptive text typically precedes a sequence in which targets are tracked, a missile is launched, the screen image is occluded by the explosion, and the aftermath is registered. The video then closes. The spectator's experience is shaped not only by the editing and the text on the footage, but also by the title and metadata on the YouTube page, and by the vast accumulation of comments often posted in response. It is clear that certain features of this set-up work together to configure the people in these videos as targets for the viewer-consumer, whose position has come to approximate that of the drone-operator. On one hand, the high-oblique camera angle tends to diminish the anthropomorphic characteristics of figures who are oblivious to the presence of the weapon above, while on the other, the video title that assigns their identity, typically in terms of a category such as "criminal" or "insurgent," acts to legitimate the coming missile strike that is the object of the viewer's desire. In addition, the very shortness of the clips militates against the development of any kind of narrative complexity beyond that conferred by the title and thus also the possibility of any recognition of subjectivity in the diminished others on the screen. In Minima Moralia, Theodor Adorno, reflecting on powerful technological prostheses, vouched that simply sitting behind the wheel of a powerful automobile was enough to provoke fantasies of wiping the "vermin" off the streets.²⁰ The viewer of drone porn vicariously experiences a similar thrill as he awaits the ecstatic impact of the missile on its target, which military personnel describe as "bugsplat" (a term applied to target calculation software first employed in Iraq in 2003).

A 2011 sociological study, by Henrik Fürst and Karin Hagren Idevall, of the comments attached to a single YouTube drone porn clip ("UAV Kills 6 Heavily Armed Criminals") helps throw light on spectatorial responses. In their paper, the authors note how relations of superiority and inferiority are structured through the distinction between

"above" and "below," and how the majority of comments—which ran to 1605 at the time of their study—identify with the dominant, elevated position, which is to say the point of view of the weapon itself: "I want," one posted comment reads, "to see for myself that they are dead and dying-just for my own satisfaction."21 They go on to describe how these comments are frequently mediated by allusions to video games, this implying a fictionalization of the events watched and introducing what they call, after Judith Butler, "the precarity ... of unliveable lives"—lives that can be easily destroyed because they were never experienced as real in the first place.22 It is a persuasive formulation, but one that is complicated by a symptomatic comment that they quote-"video games just get better and better."23 For what surely is at stake in this is the way in which the phrase "better and better" marks not a process of fictionalization, but rather its opposite, the extension of the simulated environment into the real. This demands that the spectatorial pleasure registered here be conceptualized in a very particular way: as an experience that certainly flows from the destruction of entities that are dehumanized and subjugated—ciphers that are tagged through the video titling—but that is at the same time supplemented and intensified by the knowledge that these are actual human lives that the spectator is watching being extinguished.

An important riposte to the way in which drone attacks have been mediated through such footage, as well as in Western press reports, has been that of Noor Behram, a photojournalist from Waziristan who, since 2007, has been recording their aftermath on the ground. His avowed aim is to document the casualties and devastation that typically go unacknowledged by the press and, indeed, in official pronouncements such as those by John Brennan, currently director of the CIA, who as late as June 2011 denied—although he later somewhat qualified this statement—that there had been "a single collateral death because of the exceptional proficiency, precision of the capabilities we've been able to develop."24 Behram's photographs were exhibited in the "Gaming in Waziristan" exhibition held in July and August 2011 at Beaconsfield, an art center in London, and have been used as evidence in lawsuits brought against the government of Pakistan on





Clockwise from top left: Photographer Noor Behram holding one of his photographs; Noor Behram, *Dande Darpa Debris* (2009.08.21); Noor Behram, *Syed Wali Shah Aged* 7 (2009.08.21).

On 21 August 2009, a drone attacked the Pakistani village of Dande Darpa Khel, destroying six houses. The three children in the image held by Behram-in shock and clutching the debris of a neighbor's home-lost their parents and their brother Syed in the attack, although they were no yet aware of their deaths at the time the photograph was taken. Images from "Gaming in Waziristan," 2011, Beaconsfield; courtesy Noor Behram, Reprieve, and Beaconsfield.



An enormous printed photo of one of the children in Behram's Dande Darpa Khel photographs looks back at the drone operators.



behalf of victims of drone attacks.²⁵ These are being pursued by the Pakistani lawyer Shahzad Akbar who, with Clive Stafford Smith of the human rights organization Reprieve, has also launched a lawsuit against John Rizzo, the former Acting General Counsel of the CIA, for civilian deaths resulting from his approval of strikes by UAVS in the Federally Administered Tribal Areas of Pakistan.²⁶

So, what is there to be said about Behram's photography? Certainly—and this is the conventional reading of his work—his images confront the apparatus of remote killing with a visual form that speaks of closeness and immediacy, familiar from the evidentiary and documentary traditions of the medium. They are of several kinds: there are views of wrecked structures, sometimes strewn with body parts; there are pictures of children with rubble or of men, individually or in groups, holding exploded fragments of the missiles that were visited upon them; and there are photographs of corpses, often in close-up, such as the by-now well-known images of children dressed for burial. Due to the prohibition against photographing women, female victims appear only through signs such as shreds of clothing hanging from a tree or on the ground.

At the same time, however, it is important to register the way in which this photography of proximity is itself produced out of conditions of distance, specifically distance in time as manifested in its inevitable arrival after the event. Theorist John Roberts has reflected, in a richly articulated article,

on the condition of "lateness" in contemporary Western photography, exemplifying it through the large-format post-engagement war images of Simon Norfolk and Luc Delahaye. In general terms, he understands the turn to lateness as a conscious and critical response to the naturalizing immediacy of digital image capture and transmission, the outcome of which is an "elegiac and mournful" photography that, while lamenting its lost relation to the event, at the same time tries to win back—through its disjunctive temporality—a space of reflection.²⁷ Now, Behram is a photojournalist and I have no specific claims to make regarding the status of his work as art, but Roberts's thoughts are helpful here because they lead us to ask exactly what kind of lateness is evident in it and what is its significance. Certainly Behram's photographs are in their way just as late (just too late, always too late) as the battlefield photographs that Roberts discusses. Moreover, this is a lateness that is as much a consequence of what digitization and the relay of information through computational assemblages enables in the new, robotically equipped mode of prosecuting war remotely operated, covert, "without boundaries," officially unacknowledged, and pursued by nonmilitary state operatives. Rather than the "death of the event," Behram's is rather a photography preoccupied with the "event of death," which it cannot reach, precisely because its circumstances can only be anticipated as arbitrary, unpredictable, and unknowable.

It seems to me that what strikes the viewer of Behram's images most forcefully, over and above the visceral shock that they provoke, is his attention to the faces and, more to the point, the eyes, of both the living and the dead. It came as no surprise that when an artist collective unfurled a huge picture on the ground in the Khyber Pukhtoonkhwa area of Pakistan earlier this year, it was an image of a girl from one of Behram's photographs that was chosen to "look back" at the drone operators from the ground.28 However, the effects of Behram's work, I feel, go beyond giving face to those whom the apparatus of killing has rendered faceless—more importantly, his photographs situate their viewers within a chain of witnessing and of witnesses. In the photographs of groups of men holding exploded

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missile parts, the individuals present themselves as witnesses of the attack, identifying themselves by virtue of the objects they hold. It is this act of testifying that forms the subject of the image, and that is relayed through the photographer to the viewer in turn. In a real way, these photographs thus beseech us to witness rather than to merely see. And this consequently confers, within the series, a very particular meaning upon an image such as the wellknown close-up of the cloth-wrapped face of a dead child, its eyes forever closed. For this depicts the violent cancellation of the possibility of witnessing and positions the photograph—which in its lateness, a lateness made absolute by death, is condemned to remain on the "outside," as it were—less as a vestige of an act of witnessing than as a record of its end.

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- **4** P. W. Singer, *Wired for War*, p. 303.
- **5** Gorgon Stare: Persistent Wide Area Airborne Surveillance (WAAS) System, product brochure, available at <www.sncorp.com/pdfs/isr/gorgon_stare.pdf>.
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