

To See Without Being Seen: Critical Concepts and Curatorial Approaches Informing the Exhibition on Contemporary Art, Drones, and Surveillance

Svea Braeunert

DAAD Visiting Associate Professor for German Studies, University of Cincinnati

Meredith Malone

Associate Curator, Mildred Lane Kemper Art Museum, Washington University in St. Louis

ABSTRACT

This article revisits the curatorial concepts informing *To See Without Being Seen: Contemporary Art and Drone Warfare*, a group exhibition we co-curated for the Mildred Lane Kemper Art Museum at Washington University in St. Louis in 2016. The exhibition comprised works by twelve international artists, including James Bridle, Tomas van Houtryve, Trevor Paglen, and Hito Steyerl. Starting from the observation that some of the most compelling positions on matters of drone warfare and the attendant political, conceptual, and ethical issues are being explored in an artistic context, our curatorial take on the topic presented the drone as a political object with aesthetic ramifications and trajectories. It drew on the notion of the drone as a vision machine and engaged warfare and surveillance on the level of their visual conditions, asking how certain images come into being while others stay hidden from public sight. With the aid of previously unpublished installation photography, we approach this article as an opportunity to reexamine the exhibition project with a self-reflective glance meant to draw attention to its successes, blind spots, and areas left open for future development.

INTRODUCTION

To See Without Being Seen: Contemporary Art and Drone Warfare (on view at the Mildred Lane Kemper Art Museum at Washington University in St. Louis, January 29, 2016 to April 24, 2016) presented a group of artworks engaged with the geopolitical, perceptual, and societal aspects of drone warfare and surveillance.¹ (Figure 1) As co-curators of the exhibition we embarked on the project with the understanding that some of the most compelling positions on matters of drone warfare and the attendant political, conceptual, and ethical issues are being explored in an artistic context. Drawing on the notion that the drone is a vision machine that is intended to remain invisible and hence possesses the power to see without being seen, our curatorial concept engaged warfare

and surveillance on the level of their visual conditions. One of the key questions we asked concerned the distribution of the sensible, specifically how certain images come into being while others stay hidden from public sight. In a discourse driven by secrecy, obfuscation, invisibility, and deniability, visual artists offer a multiplicity of means for making these abstractions visible while also probing the limits of the visible.



Figure 1. Installation view, To See Without Being Seen: Contemporary Art and Drone Warfare, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Jean Paul Torno.

The exhibition prompted critical self-reflection of us as curators as well—cultural agents directly implicated in decisions concerning what is made visible to a larger public—when formulating a checklist of works to include and how to frame and interpret them. Some of the key questions we had to ask ourselves were: How can the museum act as a forum to enter into public debates on important issues of local and global significance? Which representations will be present, which issues and types of images remain absent? Where do we draw the line between art and activism? On this last point, Thomas Keenan, Director of the Human Rights Project at Bard College, has argued that “the aesthetic finds itself in extreme proximity to the ethico-political now; the proximity is perhaps discomfiting to some, but it is also the condition of any serious intervention.”² Keenan champions approaches that conceive of intervention in aesthetic terms, therefore not only utilizing the disruptive and affective power of the aesthetic, but also working towards an ethics of the image and an ethics of viewing. As curators, it was important to us to add to this perspective an ethics of curating, which is concerned with making urgent socio-political issues perceptible through the framework of art and the public space of the museum.

Since the exhibition was first mounted in early 2016 much has transpired in the development and critique of drone warfare in the realms of politics, technology, and the art world. Curators and artists have taken up the topic and developed it in a variety of directions, probing the emergent notion of a new media culture of warfare and surveillance as it pertains to machine vision and questions of representation.³ Coinciding with *To See Without Being Seen*, for instance, journalist and filmmaker Laura Poitras’s first art exhibition *Astro Noise* opened at the Whitney Museum in New York.⁴ *Astro Noise* showcased a series of immersive installations that built on topics including mass surveillance,

the war on terror, occupation, torture, and the U.S. drone program, including newly released documents and images leaked by the whistleblower Edward Snowden.⁵ Poitras's blurring of the lines between art, journalism, and activism is one high-profile example within an emergent field of contemporary artistic practice concerned with examining and exposing the visual cultures of warfare and surveillance.⁶

The advancement of drone technologies, both militarized and recreational, continues to stoke such investigations. More and more countries in addition to the US, UK, and Israel are currently in the process of acquiring or developing drones. At the same time, the recreational drone market has grown exponentially and an increasing number of aerial views are populating documentary and fiction films alike. The once spectacular view from above is hence on the verge of becoming a staple sight. While drones are becoming ubiquitous in our daily lives, the laws regulating their usage remain largely nebulous and the workings of the broader network in which they participate continues to be opaque and obscure. One recent instance that made this abundantly clear was the revelation of the U.S. Department of Defense's use of Google's artificial intelligence technology to analyze drone footage.⁷ What happens when a private company running the most dominant internet search engine enters into collaboration with the world's most powerful military to optimize computer vision and machine learning? How might the long-standing ties between industry and the military, which advance technology through warfare, be deployed in a political climate dominated by an increase in nationalism, populism, and antagonism? Our exhibition was driven by these concerns and by our desire to understand something about our present moment through the visual politics of the drone, which the developments of the past two years have only amplified. Convinced that the questions we asked then are even more urgent today, in what follows we revisit our 2016 exhibition project, examining, through the aid of previously unpublished installation shots, our concept and its realization in order to draw attention to the project's successes, blind spots, and areas left open for future development.

CONTENT

To See Without Being Seen squarely addressed contemporary discourses regarding drones and surveillance, which first started to evolve around 2012 and were pushed further with the initial Snowden revelations about the National Security Agency's comprehensive spying program in 2013. Recognizing that in today's age of advanced technological warfare the act of perception is manipulated by governmental, military, and cultural entities that further politicize our relationship to images and the realities they represent, we chose to tightly focus our exhibition on works that present unique critical perspectives on image-making that confront specifically the military realm. The trade-off of breadth for concentration was a necessity that allowed for a sharpened curatorial thesis. That being said, while the drone was the specific point of departure for this exhibition, the various artistic projects on display illuminated the ways in which it embodies a much broader discussion about the networked systems that shape our daily existence, our ideological beliefs, and emotional responses.

We came to this material from two respective fields—art history and cultural studies—that express complementary yet distinct approaches concerning how to work and think with images. Cultural studies invited a thinking-through of the material in terms of concepts, which did not always prove to be translatable into the object-oriented experience of an art exhibition; and sometimes the images that might represent certain ideas were simply missing, or at least not on our radar. The art historical

approach was informed by a thinking-through of the material based first on the art objects we encountered. What was a given practitioner doing that was interesting from an artistic point of view in addition to what a work might express from a political or theoretical standpoint? The approach that evolved from our conversations was both visual and conceptual. The images selected could not be used as mere illustrations to visualize a specific idea or political position, but had to compellingly combine art, activism, and theory.

Taking art as the central organizing principle for compiling a checklist, we had to define just how broad our definition of art would be. Would journalistic photography be included? What about documentary images and films? There are many artists who creatively engage with online platforms. How could we represent the virtual spaces of Instagram or Twitter in the gallery space to convey the original interface and experience with such works? Or should we strive instead for a translation from the digital realm into the museum space?

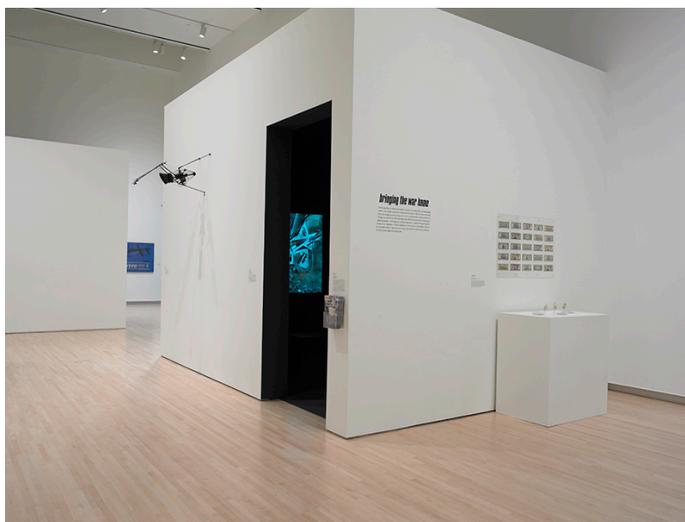


Figure 2. Installation view, To See Without Being Seen: Contemporary Art and Drone Warfare, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Jean Paul Torno.

The final checklist we arrived at comprised works by twelve international artists including James Bridle, Tomas van Houtryve, Trevor Paglen, Harun Farocki, and Hito Steyerl. It reflected our discussions concerning the balance between theoretical incisiveness, political purchase, and aesthetic significance while encompassing a wide variety of media, including photography, video, installation, web-based projects, and games, as well as site-specific and participatory projects. (Figure 2) The roster of works combined positions from within a decisively art-world context with projects that straddled the line between art and activism, and art and photojournalism. This meant that we decided against showing more straight-forward journalistic and evidentiary-activist works, such as the powerful photographs that Pakistani activist and journalist Noor Behram has been taking of the site of drone attacks in Waziristan since 2008. The images depict portraits of victims and family members and shrapnel that bears the mark of US American manufacturers.⁸ Other compelling works in this vein include the online campaign #Not A Bug Splat (2014) that the Foundation for Fundamental Rights and Reprieve initiated in Waziristan in order to focus attention on the civilian victims of drone attacks. Photographs of child victims were blown-up to such an

extreme that they would be large enough for a drone pilot to see, not as an anonymous dot on a screen, but as an individual face.⁹ Other noteworthy projects include the investigations carried out by Forensic Architecture and the study *Living Under Drones* (2012) undertaken by the International Human Rights and Conflict Resolution Clinic at Stanford Law School and the Global Justice Clinic at NYU School of Law.¹⁰

Although these projects were not present in the gallery, they certainly informed our thinking about the field and the concept of the exhibition. A central idea shaping our curatorial agenda was that drone warfare is built on asymmetrical views and can hence be discussed in terms of seeing and not being seen. Eyal Weizman, Forensic Architecture's principal investigator, has astutely framed this asymmetry:

The ability to hide and deny a drone strike is not an insignificant side effect of this technology, but a central part of a campaign that relies to a great extent on secrecy and deniability. The violence inflicted by drone warfare is thus typically compounded by the perpetrators' negation: the violence against people and things redoubled by violence against the evidence that violence has taken place.¹¹

While the title of the exhibition, *To See Without Being Seen*, first and foremost functioned in reference to the viewing conditions afforded by the drone—i.e. the operator's ability to see everything while being kept from sight him/herself—Weizman's assessment of the situation points to another form of invisibility. It is the invisibility of the situation on the ground and the people affected by drones flying over their heads and potentially targeting them and their social communities. Their experience is largely absent from view in North American media and the Western art world. As geographer Derek Gregory has pointed out, "The media coverage in North America and Europe has focused on the spaces of the extended network, particularly Creech and the CAOC [Combined Air Operations Center], while the space of the target has been radically underexposed."¹² The dominant Western perspective corresponds to the drone's scopic regime, which makes unfamiliar spaces familiar through its technological framing. "High-resolution imagery is not a uniquely technical capacity," notes Gregory, "but part of a techno-cultural system that renders 'our' space familiar even in 'their' space—which remains obdurately Other."¹³ Following Gregory, the drone's view is hence organized to present Otherness in a familiar frame without allowing the Other the right to look and to look back. Drone warfare thus reenacts a deeply colonial discourse that organizes power and vulnerability through visibility.

Western artists engaging with drone warfare are largely aware of this dynamic, striving to expose or counter it through their artistic production. Yet, the methods employed often entail a focus on one's own point of view in order to uncover one's culpability. In avoiding the equally problematic attempt to speak for someone else's suffering, the imbalance in image production and dissemination is perpetuated. When researching artistic positions, we found a number of works dealing with the North American experience but very little that spoke to the experience of people affected by the presence of drones in the Middle East. Our inability to find these works is likely the result of an art world still privileging Western positions. And although we were not able to counter this tendency, we were acutely aware of it. Looking at our checklist and noting the prevalence of white, male artists with a Western background, we had to ask ourselves: In what ways are we replicating positions we set out to critique? And how can we counter such asymmetries by explicating a work's situatedness?

One way to do so was to make the absence of these images and viewpoints palpable. Among the few works in the exhibition that gestured towards representing the experience in the target regions was James Bridle's *Dronestagram* (2012-2015), a feed on Instagram, Tumblr, and Twitter that provided satellite images from Google Maps of the approximate sites of US drone strikes shortly after they occur based on reports from the Bureau of Investigative Journalism and other confirmed sources. (Figure 3) Bridle annotated each image with a caption about the strike, including known casualties, but the images were only abstracted aerial views of the landscape; they showed neither people nor evidence of destruction. The work thus leaves to the imagination what has happened on the site depicted. In this way Bridle's use of satellite and surveillance technologies and social media platforms suggests their distancing or dehumanizing aspects while at the same time making information readily available and generating empathy for people who live a world away.



Figure 3. James Bridle (British, b. 1980), Dronestagram, 2012–ongoing. Social media accounts and digital imagery. Courtesy of the artist. Installation view, To See Without Being Seen: Contemporary Art and Drone Warfare, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Jean Paul Torno.

The absence of people in Bridle's satellite views make visible what haunts the counter-forensic works attempting to collect visual evidence about drone strikes. As Weizman stresses:

The media siege limiting documentation and testimonies from the ground is effective because the only available photographic perspective—that of commercial and publicly available satellite images—is of a resolution in which the damage caused by a drone strike is hardly visible. This has to do not only with the technical resolution of satellite imagery, and the laws that limit it, but with the physical dimension of the architectural damage that these strikes bring about.¹⁴

The resolution with which publicly available satellites transmit images from the target regions used to be 50 x 50cm per pixel.¹⁵ That scale was originally chosen for reasons of privacy, because “it is aligned with the dimension of the human body...Half a meter square is the frame within which the human body fits when seen from above. The size of the pixel is designed to mask the body and make it disappear.”¹⁶ For Bridle's *Dronestagram* this means that in his attempt to make visible, the human dimension can only be hinted at as a figure referenced in his captions. Its absence stands for a larger absence that is indicative of the current state of the field.

We chose to organize the exhibition into three thematic sections—“Bringing the War Home,” “Tracking and Targeting,” and “Countersurveillance”—and collaborated with the architects Frank Escher and Ravi Gunewardena of Escher Gunewardena Architecture, Los Angeles to design the installation, images of which are published here for the first time. Consisting of a series of open hallways punctuated by four enclosed video spaces positioned in the north, east, south, and west areas of the gallery, the tightly conceived installation and its preponderance of white walls conveyed a palpable sense of sparseness. This choice complemented the sharp focus of the exhibition and the formally rigorous and conceptual qualities of much of the artworks on view, but also subtly underscored the fundamental probing of relationships between absence and presence, obfuscation and clarity running throughout each section of the exhibition.



Figure 4. Tomas van Houtryve (Belgian, b. United States, 1975), selections from *Blue Sky Days, 2013–14*. 12 gelatin silver prints on baryta paper, 26 × 40" each. Courtesy of the artist. Installation view, *To See Without Being Seen: Contemporary Art and Drone Warfare*, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Dave Smith.



Figure 5. Tomas van Houtryve (Belgian, b. United States, 1975), *Suspect Behavior, 2014*, from *Blue Sky Days*. Gelatin silver print on baryta paper, 26 × 40". Courtesy of the artist.

Section one “Bringing the War Home” drew attention to the domestic context by establishing relational links between the US and different sites of war. With the drone operators located remotely in the US—living and working on US soil while the wars they are waging are far away—drone wars are changing, blurring, and in some cases dissolving the civilian-military divide, turning the idea of “home” into a site from which war is waged. By looking at the US the way the US is looking at other countries—through a drone’s perspective—and contextualizing the drone as an element of daily existence, these works provoke interest, empathy, and possibly paranoia in the viewer who is asked to consider what it means to live under the drone’s ubiquitous presence and its presumably all-seeing eye. A selection of black and white photographs from Tomas van Houtryve’s *Blue Sky Days* (2013-2014), a project that grew out of the observation that “there is no visual narrative in the public mind’s eye to go along with this war,” dominated one of the main walls upon entering the gallery.¹⁷ (Figure 4) The images are of American landscapes and social situations seen from above, captured for their resemblance to those in which people have been targeted by drones abroad or in which drones are already used domestically, including a wedding, a funeral, an outdoor yoga practice, a school courtyard, a prison, and part of the US–Mexico border. (Figure 5) The series thus brings the war home through a certain way of looking at the world defined by verticality and ambiguity. In order to do so, it was important to van Houtryve to photograph the scenes from the point of view of a commercially available quadcopter drone. When asked whether he thought that “it was necessary to communicate what [he] wanted to communicate using a drone,” he responded:

Well, it allows me to talk about more. The pictures allow you to talk about U.S. military policy on drones abroad; they allow you to talk about U.S. government drones that are flying over U.S. territory... It allows you to talk about the accessibility of this technology. If somebody like me can use it and hobbyists can use it, then you can talk about that, too. Using a drone rather than a helicopter allows you to talk about the broad spectrum of drones changing our lives.¹⁸

Van Houtryve’s response reveals at least three key ideas that underscore his project. First, he follows a modernist approach that is concerned with medium-specificity, thereby asking viewers to consider exactly what is unique about the drone. Second, he makes reference to increasing civilian drone usage and how that might alter the ways in which military drones are perceived and how daily life is affected by the presence of drones. And third, van Houtryve alludes to the fact that artists are increasingly employing drones as art-making tools although they may not engage with the scopic regime of the drone in its military application.

While these questions are geared towards the drone’s visual frameworks, van Houtryve’s work is equally concerned with drone warfare’s geographies. Works by the Center for Land Use Interpretation (CLUI) and Trevor Paglen, also included in the exhibition’s first section, circle around these geopolitical concerns, addressing them by pointing to, or mapping, the blank spots in our vision. CLUI’s database, *Notable Drone-Related Sites in the USA* (2015) uses satellite images taken from Google Earth to pinpoint and make visible the domestic locations where drones are tested, launched, and developed. It therefore visualizes sites withdrawn from public visibility with the help of a publicly available mapping tool, using cartography as a method of intervention. In his *Untitled (Reaper Drone)* (2010), Paglen captures an image of a drone in the sky above the Nellis Range Complex in Nevada, an area reserved for classified military operations. (Figure 6) The drone is intentionally placed at the limits of the visible, appearing like a speck of dirt within a field of

luminous sky. The lack of clarity in the photograph adds an element of uncertainty and opacity that acts as a metaphor for the examination of this cloaked world.



Figure 6. Trevor Paglen (American, b. 1974), Untitled (Reaper Drone), 2010. C-print, 5 / 5, 48 x 60". Mildred Lane Kemper Art Museum, Washington University in St. Louis. University purchase, Bixby Fund, 2012.

All of the works in this first section—the complete roster included positions by E. Adam Attia (Essam), James Bridle, CLUI, Joseph DeLappe, Tomas van Houtryve, and Trevor Paglen—intentionally reverse the drone’s view and mirror it back onto itself or rather onto its point of origin. This kind of reversal is a powerful and discernable trend in art dealing with drone warfare. One of its intentions is to make visible what is often hidden from sight and to map out responsibility, which is why cartographic methods and the shape of the drone itself play an important part in this body of work. The two convene in James Bridle’s *Drone Shadow* (2016), a 1:1 representation in outline of a drone, which was installed on the sidewalk outside of the Museum’s main entrance. (Figure 7) Following the instructions in Bridle’s *Drone Shadow Handbook* (2012), we placed the *Drone Shadow* in this prominent position to make the drone’s image immediately visible to the visitor in the form of a physical mark while emphasizing one of the main currents running throughout the exhibition, how artists are challenging ideas of invisibility, transparency, and geopolitical dissemination in modern warfare. Although the single *Drone Shadow* represents the outline of one drone transferred back to the country that maintains it, it is actually part of a larger network. In the case of Bridle’s project, it is the global network of everyone who takes it upon him/herself to draw such a shadow following the instructions outlined in the handbook. And in the case of war, it is the global network of operators, data links, intelligence analysts, maintenance crews, and troops on the ground.¹⁹ It is a war that does not operate along the lines of battlefields, nation states, or armies. Rather, it is defined by single targets that are an amalgamation of body and data. As a result, warfare becomes dispersed and concentrated at the same time. It can go wherever the target goes; it is hence “simultaneously local and global.”²⁰



Figure 7. James Bridle (British, b. 1980), Drone Shadow, 2016. Site-specific installation, approx. 36 × 66'. Courtesy of the artist. Installation view, To See Without Being Seen: Contemporary Art and Drone Warfare, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Jean Paul Torno.

The drone's function of tracking and targeting framed the second section of the exhibition, which included works by Bridle, Harun Farocki, Molleindustria, Paglen, and Björn Schülke. This section focused on the heightened interest in machine vision and human-machine relations. Drones are often perceived as vision machines, a concept introduced by Paul Virilio as early as 1988.²¹ Stressing the connection between flying and seeing and the god-like view from above, his concept of the vision machine was also geared towards the technical image that is no longer tied to the human body but instead stands for a supposedly objective yet simultaneously objectifying view. Virilio describes it as a "sightless vision"²² that can potentially lead to an "automation of perception"²³ and a "splitting of viewpoint[s], the sharing perception of the environment between the animate (the living subject) and the inanimate (the object, the seeing machine)."²⁴

The concept of the vision machine was expressed in the exhibition through Harun Farocki's two-channel film installation *Eye / Machine III* (2001). With *Eye / Machine* Farocki introduced the notion of the "operative image," which works in tandem with Virilio's notion of the vision machine. (Figure 8) Operative images are images produced by machines for machines. They are not geared towards human vision; they are not meant to be looked at aesthetically or reflectively, but rather to be studied as objective, technical tools inciting action. In other words, instead of merely representing things in the world, machines and the images they produce "do" things in the world.²⁵ While created slightly before the onset of the current wave of technological warfare, Farocki's film insightfully explores the advent of a new visual regime based on image-making machines and algorithms. It translates the invisibility of machine vision into a visible register that allows viewers to see and think about this new type of image.



Figure 8. Harun Farocki (German, 1944–2014), *Eye / Machine III*, 2003. Double-channel video, 25 min. Harun Farocki GbR, Berlin. Installation view, *To See Without Being Seen: Contemporary Art and Drone Warfare*, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Jean Paul Torno.

Art has the unique ability to translate the invisibility of machine vision into a register that can be picked up by human senses, i.e. of translating operations into aesthetics. This can mean making visible what was hitherto hidden from human sight, but it can also mean finding forms to visualize the enigmatic and obstructed qualities of machine vision. *Drone Vision* (2010), a five-minute video by Paglen cut from feed intercepted from a military drone’s camera on a training mission, enacts precisely this double move. (Figure 9) On the one hand, it lets viewers briefly experience what drone operators see—a view that has rarely been made available to the public. On the other hand, its images are, in part, not what one would expect to see. The video offers obscure views into the sky and fragmented images of the machine itself as it catches glimpses of its own wing. The work is spatially unsettling because of its shifting points of view and thus functions in a manner similar to Paglen’s photographs of drones, which are also about the uncertainty of vision and the attempt to disconnect seeing from knowing.

Probing the uncanny dimension of the drone is also what drives Björn Schülke’s artistic practice. His *Spider Drone #4* (2015), a motion-activated, spider-shaped sculpture, consists of a camera and several moveable tentacles. (Figure 10) It turns on when it detects a visitor in the gallery space and then swivels its camera to track the visitor’s movements. Because of the way in which we situated the layout in the gallery it was impossible not to walk by Schülke’s piece mounted at the top of a ten foot wall. The playful sculpture does not actually record what it sees, but we felt strongly about including it because of the way it touches on growing fears and suspicions of surveillance machines and those who control them. Interestingly, Schülke’s *Spider Drone #4* became one of the most-photographed objects in the show, as it allowed visitors to take a remote selfie of themselves via the video-screen in the center of the robotic sculpture. Apart from being a good image-op, this constellation drove home the point that when you look at surveillance, you may actually be looking at yourself and your own creations. It makes for a contemporary instance of reverse perspective, in which your images are looking back at you.²⁶ This mechanism is most notable in the field of commerce, where offers are made based on previous searches, clicks, and purchases. The offers are geared towards individuals that are generic. They address people as (potential) targets.

The philosopher Grégoire Chamayou has suggested that we are currently moving into a new stage of society, the “targeted society.” After surveillance and control, he believes it is targeting that is the contemporary paradigm “shared today among fields as diverse as policing, military reconnaissance, and marketing.”²⁷



Figure 9. Trevor Paglen (American, b. 1974), *Drone Vision*, 2010. Video intercepted from a communications satellite (edited), 5 min. Courtesy of the artist and Metro Pictures, New York. Installation view, *To See Without Being Seen: Contemporary Art and Drone Warfare*, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Jean Paul Torno.



Figure 10. Installation view, *To See Without Being Seen: Contemporary Art and Drone Warfare*, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Jean Paul Torno. Foreground: Björn Schülke (German, b. 1967), *Spider Drone #4*, 2015. Brass, wood, carbon fiber, 2 cameras, TFT video display, motors, motion sensors, custom

circuits, and paint, 21 5/8×17 11/16×37 3/8" (installed). Courtesy of the artist and bitforms gallery, New York.



Figure 11. Hito Steyerl (German, b. 1966), HOW NOT TO BE SEEN: A Fucking Didactic Educational .MOV File, 2013. Single-channel HD digital video and sound in architectural environment, 15:52 min. Courtesy of the artist and Andrew Kreps Gallery, New York. Installation view, To See Without Being Seen: Contemporary Art and Drone Warfare, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Jean Paul Torno.

If targeting is the means by which societies are currently organized and by which perceptions are policed, then figuring out how to avoid becoming a target is increasingly concerning. Strategies facilitating a need to disappear visually or to go off the grid were taken up in the exhibition's third section titled, "Countersurveillance." While the first two sections were primarily concerned with unveiling what is unseen, works by Adam Harvey, Shinseungback Kimyonghun, and Hito Steyerl addressed the issue of how to become invisible, hide, and conceal. Steyerl's video installation *How Not to Be Seen: A Fucking Didactic Educational .MOV File* (2013) teaches us how to hide from constant surveillance in a humorous, but also deeply serious way. (Figure 11) As Steyerl describes it, the idea for the video grew out of:

...the real story that [Steyerl] was told about how rebels avoid being detected by drones. The drone sees movement and body heat. So these people would cover themselves with a reflective plastic sheet and douse themselves with water to bring down their body temperature. The paradox, of course, is that a landscape littered with bright plastic-sheet monochromes would be plainly visible to any human eye—but invisible to the drone's computers.²⁸

Steyerl explores this notion in her video by pitching human vision against machine vision. The forms of disappearance she performs are about hiding in plain human sight. She shows how you

can disappear by being visible and becoming a picture, which not only forms a counterpoint to the invisibility of operative images and machine vision, but also prompts questions regarding the changing status of the image and forms of representation. While identity politics was for a long time concerned with creating certain images and negating others, there now may be a turn towards a new political valence in invisibility and going unseen. This is also suggested by Adam Harvey's project *CV Dazzle* (2010) that offers strategies for applying makeup and hair styling as a form of camouflage designed to thwart facial recognition software. (Figure 12) Just as in Steyerl's video installation, its target is computer vision (CV), addressing the face as the anchor of identity and humanity. In the case of Shinseungback Kimyonghun's *Cloud Face* (2012), the face also plays a prevalent role in countering machine vision. (Figure 13) Their photographic series of cloud formations arranged in a large grid on the gallery wall were each mistakenly identified as human faces by facial recognition software run by the artist duo and directed into the clouds. The work imaginatively employs the glitches of machine vision to reveal its functioning, but also to suggest that any recognition may be subject to misrecognition.



Figure 12. Adam Harvey (American, b. 1981), selections from CV Dazzle, 2013. Giclée prints on Hahnemühle fine art rag paper, 21 x 21" each. Courtesy of the artist. Installation view, To See Without Being Seen: Contemporary Art and Drone Warfare, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Dave Smith.

In their creative appropriation of the new vision machines resulting from the development of drone warfare and mass surveillance, these works exemplify the kind of critical adaptation described by political scientist P.W. Singer: “every new technology always produces new countermeasures, sometimes just as sophisticated, sometimes quite simple.”²⁹ These countermeasures demonstrate how war continues to produce technological advancements that in turn affect the distribution of the sensible. Or as Jan Mieszkowski has put it, “every war asks its audience to learn to read the sociocultural landscape all over again.”³⁰ The works in *To See Without Being Seen* do just that, provoking new ways of thinking about how to recognize, critique, and subvert while also alerting us to the fact that we are in the midst of a change in perception that will ultimately affect not only the way we see, but also the way we live and relate to each other.



Figure 13. *Installation view, To See Without Being Seen: Contemporary Art and Drone Warfare, Mildred Lane Kemper Art Museum, Washington University in St. Louis, 2016. Photo by Jean Paul Torno.*

Left: *E. Adam Attia (ESSAM) (American, b. 1983), Drone Campaign 1, 2012. Giclée print on styrene, 37×77". Courtesy of the artist.*

Right: *Shinseungback Kimyonghun (South Korean, founded 2012), Cloud Face, 2012. 32 archival pigment prints, 19 11/16×19 11/16" each. Courtesy of the artists.*

ENDNOTES

1. The exhibition was accompanied by a catalog. Svea Braeunert and Meredith Malone, *To See Without Being Seen: Contemporary Art and Drone Warfare* (St. Louis: Mildred Lane Kemper Art Museum, 2016).

2. Thomas Keenan, "Mobilizing Shame," *The South Atlantic Quarterly*, 103 (Summer 2004): 447.

3. Notable exhibitions that both precede and succeed our project include *Age of Terror: Art since 9/11* (Imperial War Museums, London, 2017); *Open Codes: Living in Digital Worlds* (Center for Art and Media, Karlsruhe, 2017); *James Bridle: Failing to Distinguish between a Tractor Trailer and the Bright White Sky* (Nome, Berlin, 2017); *Watched! Surveillance, Art and Photography*

(Hasselblad Center, Gothenburg, 2016); *Public, Private, Secret* (International Center of Photography Museum, New York, 2016-2017); *Laura Poitras: Astro Noise* (Whitney Museum of American Art, New York, 2016); *Nervous Systems: Quantified Life and the Social Question* (Haus der Kulturen der Welt, Berlin, 2016); *Covert Operations: Investigating the Known Unknowns* (Scottsdale Museum of Contemporary Art, Scottsdale, 2015); *Heaven and Hell: From Magic Carpets to Drones* (Foundation Boghossian, Brussels, 2015); *Panopticon: Visibility, Data, and the Monitoring Gaze* (Utah Museum of Contemporary Art, Salt Lake City, 2015); *Permanent War: The Age of Global Conflict* (School of the Museum of Fine Arts, Boston, 2015); *Fire and Forget: On Violence* (KW Institute for Contemporary Art, Berlin, 2014); *Decolonized Skies* (Apexart, New York, 2014); *A Screaming Comes Across the Sky: Drones, Mass Surveillance and Invisible Wars* (Laboral Centrao de Arte y Creación Industrial, Gijón, Spain, 2014); *Smart New World* (Kunsthalle Düsseldorf, Düsseldorf, 2014); and *Visibility Machines: Harun Farocki and Trevor Paglen* (Center for Art, Design and Visual Culture, University of Maryland, Baltimore County, 2013).

4. Poitras won the 2015 Academy Award for Best Documentary Feature for *Citizenfour* about Edward Snowden. *Laura Poitras: Astro Noise* was on view at the Whitney Museum of American Art in New York from February 5, 2016 to May 1, 2016. The exhibition was accompanied by a catalog. Laura Poitras, ed., *Astro Noise: A Survival Guide for Living Under Total Surveillance* (New York: Whitney Museum of American Art, 2016).

5. The files attest to the existence of a program called *Anarchist*, for which the British GCHQ and the American CIA intercepted feeds from Israeli drones. Cora Currier, Henrik Moltke, “Spies in the Sky: Israeli Drone Feeds Hacked by British and American Intelligence,” *The Intercept* (January 29, 2016): <https://theintercept.com/2016/01/28/israeli-drone-feeds-hacked-by-british-and-american-intelligence/>; Cora Currier, Henrik Moltke, “Anarchist Snapshots: Hacked Images From Israel’s Drone Fleet,” *The Intercept* (January 29, 2016): <https://theintercept.com/2016/01/28/hacked-images-from-israels-drone-fleet/>.

6. Hito Steyerl and Trevor Paglen have written some of the most compelling contributions concerning machine vision as a new visual culture defined by invisibility. Trevor Paglen, “Invisible Images (Your Pictures Are Looking at You),” *The New Inquiry* (December 8, 2016), <https://thenewinquiry.com/invisible-images-your-pictures-are-looking-at-you/>; and Hito Steyerl, “A Sea of Data: Apophenia and Pattern (Mis-)Recognition,” *e-flux*, 72 (April 2016): <http://www.e-flux.com/journal/72/60480/a-sea-of-data-apophenia-and-pattern-mis-recognition/>.

7. For a summary of the collaboration between Google and the Department of Defense see Mark Bergen, “Pentagon Drone Program Is Using Google AI,” *Bloomberg* (March 6, 2018): <https://www.bloomberg.com/news/articles/2018-03-06/google-ai-used-by-pentagon-drone-program-in-rare-military-pilot>.

8. For images of Noor Behram’s work see: <https://www.wired.com/2011/12/photos-pakistan-drone-war/>

9. See <https://notabugsplat.com/>. The project was part of French street artist JR’s campaign titled *Inside Out*, a global platform intended to give “everyone the opportunity to share their portrait and make a statement for what they stand for. See <http://www.insideoutproject.net/en>.

10. Forensic Architecture is an independent research agency based at Goldsmiths, University of London. <http://www.forensic-architecture.org/>. For their investigative work on drone warfare, see <http://www.forensic-architecture.org/case/drone-strikes/>; *Forensis: The Architecture of Public Truth*, ed. Forensic Architecture (Berlin: Sternberg Press, 2014), 361-482. See also Eyal Weizman, *Forensic Architecture: Violence at the Threshold of Detectability* (New York: Zone Books, 2017), 22-30. For more information on the *Living Under Drones* project, see International

Human Rights and Conflict Resolution Clinic at Stanford Law School and Global Justice Clinic at NYU School of Law, "Living Under Drones: Death, Injury, and Trauma to Civilians from US Drone Practices in Pakistan," 2012, <http://chrgj.org/wp-content/uploads/2012/10/Living-Under-Drones.pdf>.

11. Eyal Weizman, "Introduction, Part II: Matter Against Memory," in *Forensis: The Architecture of Public Truth*, ed. Forensic Architecture (Berlin: Sternberg Press, 2014), 370.

12. Derek Gregory, "From a View to a Kill: Drones and Late Modern War," *Theory Culture Society*, 28 (2011): 204.

13. Gregory, 201.

14. Weizman, "Matter Against Memory," 370.

15. In one of his most recent publications on drone warfare, Weizman specifies that in "June 2014, the 0.5 meter limit was changed to 31 centimeters per pixel after an appeal from a commercial satellite company to the US Department of Commerce convinced them that a person could still not be recognized at this resolution—a change that...applied in all places but Israel." See Eyal Weizman, *Forensic Architecture: Violence at the Threshold of Detectability* (New York: Zone Books, 2017), 29.

16. *Ibid.*, 371.

17. Tomas van Houtryve, in "Interview: Tomas van Houtryve," *Center for the Study of the Drone* at Bard College, May 13, 2014, <http://dronecenter.bard.edu/interview-tomas-van-houtryve/>.

18. *Ibid.*

19. For a discussion of the global network of drone warfare, see Dan Gettinger, "Drone Geography: Mapping a System of Intelligence," *Center for the Study of the Drone* at Bard College, February 19, 2015, <http://dronecenter.bard.edu/drone-geography/>.

20. Rob Kitchin and Martin Dodge, *Code/Space: Software and Everyday Life* (Cambridge, Mass.: MIT Press, 2012), 17. See also, Derek Gregory, "Drone Geographies," *Radical Philosophy* 183 (January/February 2014): 14.

21. Paul Virilio, *The Vision Machine*, trans. Julie Rose (Bloomington, Indiana: Indiana University Press, 1994).

22. Virilio, 59.

23. Virilio, 59.

24. Virilio, 59-60.

25. Trevor Paglen, "Operational Images," *e-flux journal* 59 (November 2014), <http://www.e-flux.com/journal/operational-images/>. See also Harun Farocki, "Phantom Images," *Public* 29 (2004), <http://public.journals.yorku.ca/index.php/public/article/view/30354/27882>.

26. For more on the idea of a reversed look and what it has to do with our complicity in self-surveillance, see Paglen, "Invisible Images."

27. Grégoire Chamayou, "Patterns of Life. A Very Short History of Schematic Bodies," in *The Funambulist Papers* 57 (2014), <http://thefunambulist.net/2014/12/04/the-funambulist-papers-57-schematic-bodies-notes-on-a-patterns-genealogy-by-gregoire-chamayou/>.

28. Hito Steyerl, "Techniques of the Observer: Hito Steyerl and Laura Poitras in Conversation," *Artforum* 53, (May 2015): 308.

29. P.W. Singer, *Wired For War: The Robotics Revolution and Conflict in the 21st Century* (New York: Penguin Books, 2009), 201.

30. Jan Mieszkowski, *Watching War* (Stanford: Stanford University Press, 2012), 33.

AUTHOR BIO

Svea Braeunert is DAAD Visiting Associate Professor in German Studies at the University of Cincinnati. Her research interests include twentieth- and twenty-first-century art, literature, and film, media theory and visual culture, concepts of memory, trauma, and deferred action, and gender studies. She is the author of numerous essays on these topics as well as of a book-length study on 1970s leftwing terrorism in West Germany. Currently, she is working on a manuscript tentatively titled *Urgency and Uncertainty: Media Cultures of Drone Warfare*.

Meredith Malone is associate curator at the Mildred Lane Kemper Art Museum at Washington University in St. Louis. A specialist in post-World War II art practices in Europe and the United States, she has curated and cocurated many exhibitions including, *Kader Attia: Reason's Oxymorons* (2017); *Tomas Saraceno: Cloud-Specific* (2011); and *Chance Aesthetics* (2009). Malone is currently working on the first English-language study of Edition MAT and Daniel Spoerri's pioneering role in the history of kinetic art and the production of multiples.