

## The Future's Ecology (to mothers)

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### ABSTRACT

We collect data about our environment at an unprecedented scale and the surveillance of individuals on a global scale goes hand in hand with it. Global public surveillance has constricted human rights, human bodies, lives, work, and human relationships with others. Privacy as we know it has vanished *de jure* and *de facto*. To disappear from the grid – for instance to recover from *privacy loss* - is almost impossible. We live in a state of persistent surveillance and identity theft. Can one live outside of this kind of state system without becoming a criminal?

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People are, as cognizant beings, truth seekers, and sometimes even depraved counterfeiters. They look at both old and new sources. They produce new knowledge with or without disregarding the old. Some dream about break-through achievements. Others prefer to share their feelings and thoughts, ask more prosaic questions, or just create works of art. Since history doesn't repeat itself, it is difficult to construct a comprehensive account of the different leftover ephemera from the relationships, art, books, conversations, or even food we have experienced.

In Chris Marker's film, *La Jetée*, the main protagonist' is subjected to a nightmarish chemo-experiment and "travels" in space-time. In one of the film's profoundly symbolic scenes, during his journey into the past he points beyond the last ring of trunk of a redwood tree and says to a woman, "This is where I came from."

In philosophy, *hylopathism* is the belief in the derivation of *sentience* from matter. Trees grow, age and die without a central nervous system.[1] They don't have a human kind of "mind." They grow along a biological clock and very noticeable planetary seasons.[2] They do possess hormones and are capable of localized information processing. They respond to their exteriority in a very slow way, which - if combined with dendrochronology[3] - makes them extraordinary *analogue instruments*, taking note of *analogue events*. Dendrochronology is also used for the calibration and checking of radiocarbon dating (carbon-14 calibration).[4] While admittedly dissimilarly organic, all organic and synthetic bodies (technological instruments) function within the same ecological sphere and its systemic influences and are attuned to produce true outcomes.

### DUELING WITH TECHNOLOGY

Unmanned Aerial Systems (UAS) belong to one of the fastest growing industries. Currently the Federal Aviation Administration (FAA) requires small UAS owners and operators to register

them.[5] Although FAA safety guidelines generally coincide with other countries, they can vary - with or from country to country, city to city, even from area to area. Furthermore, an entire country or city could be declared a no-flight zone to satisfy a religious leader or political authority almost overnight.[6] On the other hand, UAS manufacturers levy upon UAS users frequent software and firmware updates enforcing technical - and often not so technical - changes to UAS operability. Often those updates are enforced without warning, which can severely conflict with a video production schedule.

In addition to registration, logistics and keeping up with the most current firmware, a UAS aviator is expected to have sufficient flying expertise, and an artist-aviator is expected to be additionally concerned with all art-motivated objectives: a sense of timing, composition, and feeling, to name only a few. Without doubt, the choice of exteriority is fundamental, as it is concerned with location, flying range, environmental and social conditions. All things considered, one of the most important features of the current small UAS's operability is its convenient portability; one of the biggest limitations - despite ongoing improvements - is the instability of the navigation signal and the longevity of the battery charge.

Unmanned Aerial Systems are sophisticated material and technological objects but, like the trees mentioned previously, they do not possess a human kind of "mind." [7] Additionally, although they are sensor-reached and operationally advanced they are not fail-safe devices. The use of an UAS is technical and logistic, and requires prior preparation. However, actual flying remains dependent largely on human performance. For instance, with the remote control and the UAS's camera "eye," an operator can see what the camera is looking at in almost real-time. A small delay due to wireless transmission and display lag is disconcerting but negligible to an experienced operator. Further, the experience of flying and recording in the public sphere - with a natural environment or audience around - affects video recording plans and is almost never free from subjective influence (feelings, sensations, human interaction).

In retrospect, almost all significant UAS and non-UAS recordings I have made ended up being a blend of planned and improvised footage. For instance, in August 2008, there was a full solar eclipse in Xi'an, China. My video camera was set on a tripod in front of a local railway station. The area was filled with people, standing, walking or rushing to catch their train connection. People behaved restlessly and I felt the pressure as well - to catch my train to Beijing departing in less than 45 minutes. But above all, I was there to video record the ongoing eclipse. Since my large camera was an anomaly to typical tourist gear, it attracted the attention of the local population almost immediately. Bear in mind, the camera's LCD viewing panel allowed for the observation of the eclipse with the unprotected eye. Time and again, the tripod was shaken by curious spectators and I had no choice but to organize and manage what had become an eclipse observation spot. What was happening in the sky became as important as what was happening on the ground. Over time I noticed that the visualization of this extraordinary sky event took the form of a hyperbole: with the neutral density filter-stop set to its maximum and the iris almost closed, what was super-bright became just bright while what was just dark became blacker-than-black, allowing an unobservable astronomical event to be observable.

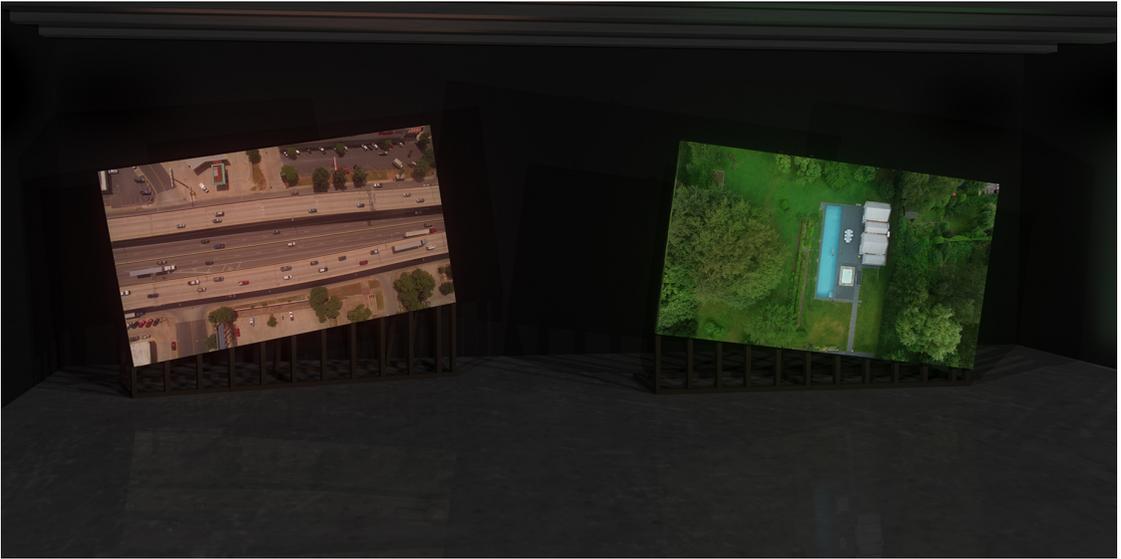
## OPPORTUNITIES

According to the FAA there are around two and half million Unmanned Aerial Systems that fly within the United States. This number is projected to be three times higher by 2020. The UAS industry is now expanding at a rapid pace worldwide and has become part of the arsenal of the most advanced products in flagship projects in defense, commerce, science and civilian applications. Large or small, they have become equipped with sophisticated instrumentation now widely available to a wider user base, including artists.

How do artists, writers or philosophers respond to scientific and technological advancements? The common nightmare is the idea of a machine becoming cognizant of exploitable human experiences: sensation, belief and will. But hasn't such exploitation already become a fact of life on a global scale? Mankind conquered space but lost its sense of place through excessive promotion of ferocious competitive behavior, by sticking to a "forward" moving narrative at all costs, we locked our-selves inside a philosophical bubble that is set to burst.[8] In his *Architecture of Nihilism: On the Philosophy of Modern Architecture*, Massimo Cacciari emphatically observes "The conquest of space is the liquidation of the place as a collection of things, as a mutual belonging of things and dwelling. The conquest of space is the plundering of places: it conceives of space as a void to fill, a pure absence, a lack." [9] I would like to add that a plundering of human privacy occurs as well. "To the Architect belongs precisely this conception of space: space is pure void to be measured-delimited, void in which to produce his new forms." [10] Without sentimentalizing, while looking back at the curve of our techno-scientific trajectory, we chopped up the habitats of every species simply because we could, and we did it with appalling brutality.

In my *50/50* video installation, there is an implied balance between space and place in the strictly urban settings presented. The feeling arising from watching this two channel video display is uncanny - it seems that the public and private divide still exists, but barely. On the left there is the non-place of an American highway. On the right is a private residence in an affluent residential neighborhood in Luxemburg. We are watching highway traffic and a swimming pool swimmer's *motion*, delineated within a man-made, designed, manufactured, delivered, and managed environment. What was supposed to be two have almost become one.

In his *Remarks on The Philosophy of Psychology* Wittgenstein asks: "Must I know that I see with two eyes? Certainly not. Do I perhaps have two visual impressions in ordinary seeing, so that I notice that my three-dimensionality visual impression is compounded of two visual pictures? Certainly not - So I can't separate three-dimensionality from seeing." [11] Wittgenstein speaks on ordinary spatial perception, the *50/50* installation offers seeing a pair, two video screens that are not compounded, hence providing for a different kind of reading. Both models operate by a different logic but it is logic all the same. In *50/50*, like in numerous other UAS cases, the camera points its sharp eye down at the ground - a different kind of plow - and offers a reconstruction of the link to it. It attempts to reconnect the signifier with the signified. I argue that, while nothing like flying represents the rapture of the bond between space and place, nothing like flying - even if only with one eye on the ground - can transcend this rapture and reopen the life function of uninterrupted habitation.



*Figure 1. Bogdan P.K. Perzyński: "50/50" 2015, Two screen video installation, 31'x10.2'x5'.  
Courtesy of the artist.*

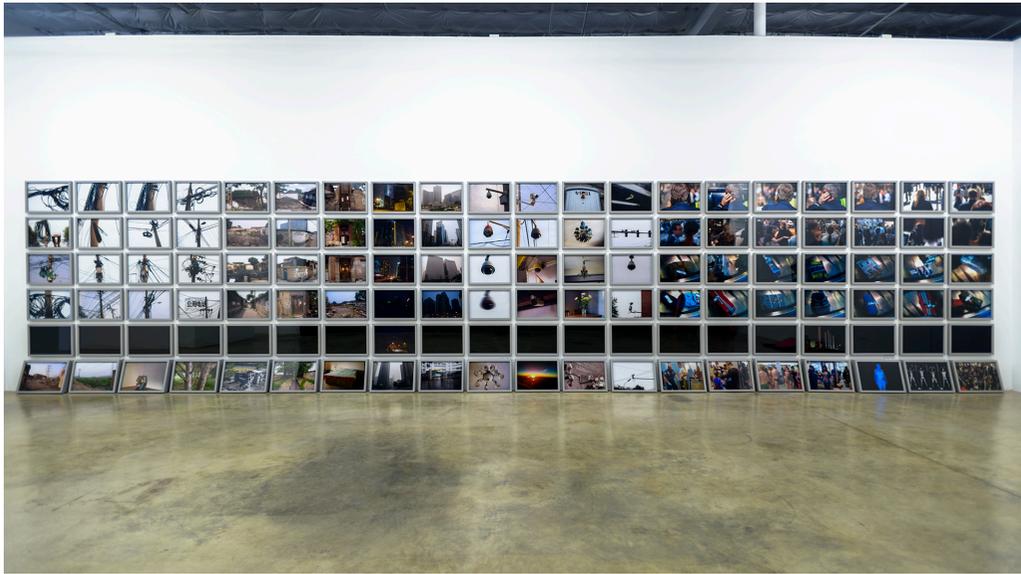
## **IN DEFENSE OF THE MIDDLE**

“Modern Architecture tends to become autonomous from the earth, to free itself from the earthly roots, so much as annihilation of place,” writes Cacciari.[12] Modernism and the contemporary provided for simultaneous upward and downward expansion leaving the middle (the visible-all-too-visible) “untouched.” We are actively conquering the upright (the beyond-bright, space, ultraviolet, seeing above the visible, counting increased radiation including cosmic rays of identifiable origin) and the downright (the below-dark, place, infrared, countering of decreased radiation including an object’s thermal body print). As things stand with the world population, with businesses and politicians aggressively dispossessing the habitational opportunities of whoever and whatever they desire, whenever they can, the “middle” might still have its rights but is lacking actual opportunities to live in synch with its innate biological clock.[13]

In war or in peace, the biggest disruptors to the ecological system are people. Catastrophic events happen and undermine the stability of our World. The ability to move freely for humans is no small concern. In the name of theories and ideologies, we inflict on others indescribable losses and suffering about which we even don’t even truthfully inform the public. Not only do we conquer, exploit, dominate and control others without remorse but we also permit destructive forces to fester and grow after we retract from our position. When the fact of being (who or what a person or thing is) is viewed as compounded, it (the “true” identity) becomes compartmentalized. Specifically in the case of humans, identity fractures into religious bonds, statehood, race, gender, non-social inner directives, and myriad others. Divide and control, or rather, divide and destroy!

Due to scientific and technological advancements, we collect data about our environment on an unprecedented scale. The surveillance of individuals on a global scale goes hand in hand with this. Global public surveillance has constricted human rights, human bodies, lives, work, and human

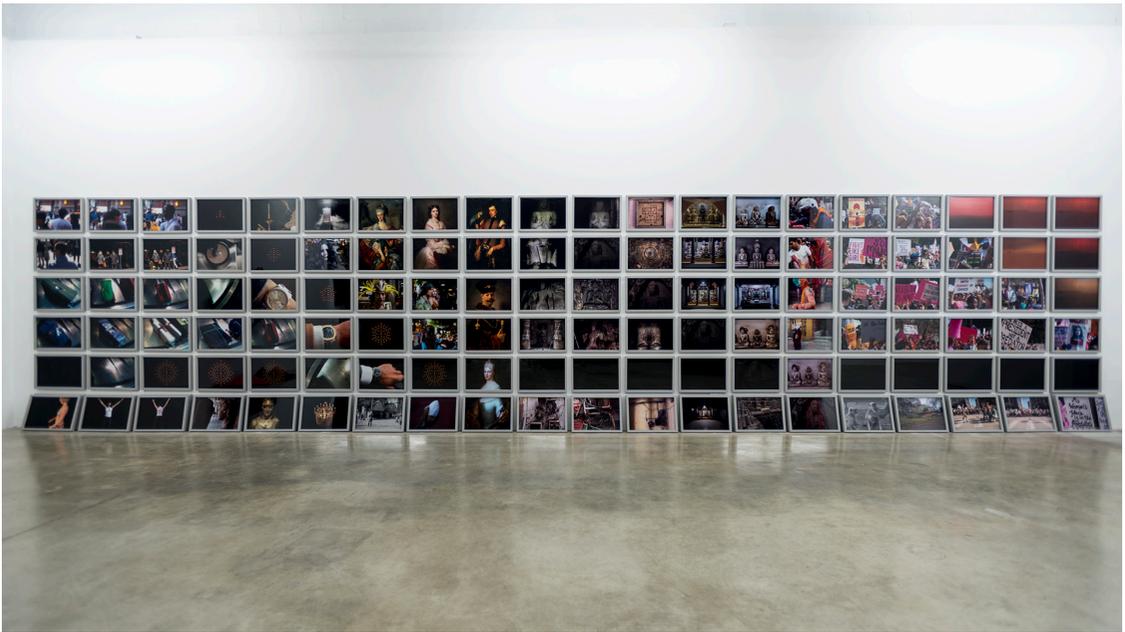
relationships with others. Privacy as we know it has vanished *de jure* and *de facto*. [14] For one to disappear from the grid, for instance to recover from *privacy loss*, is virtually impossible. We live in a state of persistent surveillance and identity theft. Is it possible for one to live outside of this kind of state system without becoming, or at least being identified as a criminal?



***Figure 2. Bogdan P. K. Perzyński “TABLE”. 2018, Photographic installation, 35’x7’2” x6”.  
Courtesy of Liliana Bloch Gallery.***

I have long been repulsed by airport culture but in 2013 I had the profound sense I would die in an airplane crash. [15] So, I stopped travelling by air and turned my “fear” of flying into a performance. Soon, I decided to take my decision one step further - to not travel at all, even out of town, for as long as possible. I stayed in my hometown. I worked online, worked on a large-scale photographic installation, on video computational fluid dynamics (CFD) and on computer generated imagery (CGI). I turned to working “locally,” focusing, like a method actor would, on the nature of *local* and *global* systems, and viewed my *non-action* as a form of resistance. Somewhere outside, there was a system that was turning our lives into a kind of life-space where everything was supposed to be available at your fingertips, devoid of human connection. We stopped questioning it because the materialism of today’s capitalism was already replacing the role myth played for our ancestors with the fixtures of augmented reality. Humans traveled widely and the world became a hall of mirrors; *otherness* had become increasingly rare.

I worked on the CFD video (*Test Shots*) and continued to work on *TABLE*, a photographic installation prompted by the periodic table of elements. Its working title was “Grid”. *TABLE* is built of over seven hundred photographs of cultural, social, historical and autobiographical subjects all organized in clusters of themes and displayed in rows and columns. Although not photographed from a literal “bird’s eye” view, it represents the cartographer’s “top” view nevertheless.



***Figure 3. Bogdan P. K. Perzyński “TABLE” 2018, Photographic installation, 35’x7’2” x6”.  
Courtesy of Liliana Bloch Gallery.***

Near the floor level, *TABLE* refers to the most disconcerting conditions: border issues, war, violence, disease and environmental disasters, but also the body cult, mass culture aesthetics and personal fantasies. When first viewed, *TABLE* gives the impression of continuity.[16] When probed between discrete surface points it proves to be filled with a charge of variable readings. For *TABLE*, I approached photography as an entity controlled by an electric field. That is how the physical fundament of the work holds to its *generic* self but still passes across and through us into art. I have presented *TABLE* on three occasions: in Austin (2014) and in Dallas (2016, 2018).[17] In 2014 and 2015, it was mounted as a wall-to-wall installation. In 2016, a video on back-to-back motorized flat screens was mounted outside the gallery’s main room and functioned like a revolving door. The video was recorded over and around the gallery’s location at my preferred altitude of 400 feet (warehouses, roads, high power lines, streets, a creek, hotels and construction sites, as each came into frame.) With 0.2 rotations per minute, per screen, the piece took 5 minutes to make a full turn. In 2018, the wall-to-wall installation was interrupted by *Epimentheus*, a motorized and programmed video installation with powdered pigments placed underneath.



***Figure 4. Bogdan P. K. Perzyński “Epimetheus” 2018, Installation: motorized video, silent, pigment, 51”x76”31.25” Curtesy of Liliana Bloch Gallery.***

I started to travel again in 2015. It was the year of the *All the World's Futures* 56<sup>th</sup> Venice Biennale. I visited the Biennale's grounds and saw Giardini and Arsenale in my first few days in the city. The shows were strong. I bought a catalogue. There I found: “The presentations, performances, and discussions of *All the World's Futures* will play a host to what could be described as a ‘Parliament of Forms’ whose orchestration and episodic unfolding will be broadly global in scope.”[18] These were carefully selected words, but the minute I laid my eyes on the “Parliament of Forms” and “All the World's Futures,” I knew something was missing. The Biennale celebrated, among other “filters,” Karl Marx's *Das Kapital*, yet an important means of artistic production, the UAS, was absent in the “All” of the Biennale. I returned to the Biennale's two main expositions[19] another day and performed and produced a two-part UAS video.[20] In it, I conducted a thought experiment: while performing in an actual public sphere, as in the famous Schrödinger's cat paradox, the artist was present (“alive”) and absent (“dead”) at the same time. Full disclosure, my participation in the Biennale was not sanctioned. I thought of Martin Luther King Jr.'s “Creative Maladjustment” speech: “Modern psychology has a word that is probably used more than any other word in modern psychology. It is the word “maladjusted.”[21]

Shortly after Venice, I travelled to Orvieto. Often referred to as an Etruscan Acropolis, the city is a bit like an island - on the top of the volcanic rock cliff, with its magnificent gothic cathedral and famous St. Patrick's Well, and surrounded by agriculture. When I reached the cathedral there were thirty or more Ferraris parked in front of it, but this congregation of luxury cars and their owners left within an hour, allowing for the return of pedestrians. Streets in Orvieto are narrow, buildings are packed closely and the city seems more assembled than designed. It is rocks stacked on top of a rock, man hand-made. I chose a spot in front of the cathedral and began shooting my first aerial

videos at the site. While I was hovering above, a person observed my actions and eventually approached me to view the video streaming with fascination. “This is fantastic! I have lived in this town all my life, but never saw it in this way.” I offered to send him some pictures after returning to the U.S.

The Assumption of the Blessed Virgin Mary represents the belief that the passage of her pure body into Heaven was true, physical and real. The belief claims she never mortally died. Her triumph over death is represented with a depiction of her body being transported up by six Angels, an image that fills the space above the main door to the cathedral in Orvieto.[22] The video depicted the cathedral’s perfect beauty, an architectural achievement of the highest echelon. However, that was exactly what began to concern me: Could these images be too significant to be useful to me? In picture perfect irony, indeed they were. I could not clear the Fluxus maxim from my mind: “Concerned With Insignificances.”

With very little time left, I rushed to another site, the Well of St Patrick. Here, like a light-fearing Morlock, voyaging in the time machine, I descended to the bottom of its Etruscan past. The site was magnificent, full of the theatrical aura of the past. My strategy was to be visually descriptive, to liftoff the UAS from below and video record the well on its flight up. While walking down was physically taxing it went smoothly. However, flying up turned out to be complicated. My UAS didn’t know where it was, and thus could not respond to navigation as expected. The UAS chaotically moved against my instructions and even simple hovering was unattainable. I was standing on the narrow platform above the water of the well and there was no room to improvise. I could feel the power with which the drone (“Angel”) tried to pull away from me. I grabbed it by its legs with one hand and turned its engines off with another. With so little time at hand, the experiment could not be repeated to produce better or even the same results, which implies that the original hypothesis (hylopathism) might have been correct or in error.

*This is My Gift to You* (2016) came from another two-fold (descriptive and experimental) strategy and again – like in the case of Orvieto – physically around a volcano formation. I recorded the video at two sites: in Herculaneum and at Mount Vesuvius. Vesuvius has a 20-year eruption cycle and is extremely active but has been quiet since 1944. I could feel the tension everywhere in the way that tsunamis, earthquake tremors, and volcanic eruptions still manage to frighten and humble us. They hijack us back into the prehistory of consciousness with the shock of an actual time machine. I made a recording of Herculaneum operating the UAS from an empty abandoned lot very close to the Mediterranean Sea. Although my spot was quite far away from ancient Herculaneum’s coastal line, I was standing literally on earth deposited by the volcano. It was the kind of place that was ideal for flying but extremely hard to find. It was very early in the morning. I completed all my recording within an hour. The next day I travelled by car to the mountain and I climbed to its peak. The rim of the volcano looked much smaller than I had expected, an impression that would soon change. Once at 400 feet, the UAS, like a measuring stick, adjusted my first impression of the scale. There were a dozen or so people around who could not take their eyes off the site. I flew over the area of the crater and eventually descended to its bottom. A man near me whispered: “What a great use of a drone.” I didn’t know yet how central these recordings would become to *Epimentheus*, 2018. In this footage, there was a beginning with no knowledge of full future potential.

In March 2016, I had been spending some time in London, teaching at the Royal College of Art but also seriously considering video recording in the city. London didn’t interest me as a “beautiful”

city, even though staying there had its charm. After Orvieto, I sought a location without a face, just a “being there” at near zero “thermodynamics.” I needed a non-place.[23] Due to the fame of London’s sights, the task turned out easier to declare than to complete, but I did get close to something. I had chosen the Beddington Sewer Treatment Works. The plant was not close by, and after a somewhat long tube ride from North London I arrived at the Borough of Croydon, south of the city. The rest of the journey was spent in a car ride with two British friends.

The plant itself was visually inaccessible, far away and behind a large fence and tall trees. After several unsuccessful passes I found it. The images started to come. I flew around a couple more times to make the best use of my hard-earned recording time. What I didn’t know was that there exists an ancient Roman Bath House directly adjacent to the plant’s South edge. The video images suggested a direct correlation between the two but could a theory exist that explains their origin and spatial proximity?[24] Bath house-sewer? We don’t find dinosaur and human bones “together” - and even if we did, carbon dating would separate them. Not only because they didn’t exist in the same space-time, but also because the temporal isolation between humans and dinosaurs is colossal.[25] I thought of Feyerabend’s *Conquest of Abundance* and his leading notion that “human senses and intelligence can take in only a fraction of what reality has to offer” and *Against Method* and his argument that there is no such thing as scientific method.[26] After one has exhausted his/her own methods and reasons and still has not succeeded, one should turn to the abundance where there is no “I” or “mine.”[27]

## METHOD

The conceptualism, or “terminism,” of William Ockham took ancient Platonism to an extreme. Ockham contributed to modern epistemology, but he also posed significant and long lasting problems. Problems caused by “Ockham’s razor” are not necessarily like problems caused by contemporary theoretical models that attempt to make an attractive idea right. [28] Theories are picture-like objects, handy utilities that aide human memory but are devoid of the facts and sensual data upon which they are based.[29] Theories can easily become a form of psycho-surgery because a theory can act as variant form of “lossy compression.” The question is: can the lossy compression also offer satisfactory data recoverability? For Wilczek, in theoretical work - in science - it is valuable to “truthify” even if the theory eventually “asks” forgiveness when it doesn’t pan out. Only unscientific theorizing leaves no sense of guilt! The statement becomes very controversial as soon as we consider any kind of real life application. Firstly, if a theory is applied without one realizing its limitations, it can mutate into something dangerously erroneous. Secondly, such an act takes upon itself an additional toxic meaning when used to consciously misinform and manipulate people, causing the outcomes to be profoundly detrimental to their body of rights, life opportunities, and overall well-being.

Consider terminism again. Thomas Nagel, in his celebrated *What is it like to be the bat?*[30] offers a view on the body-mind problem. He strongly recognizes the poor quality of characterization in regard to what constitutes a physical state but also flatly denies that a subjective human can understand the state of mind of an organism such as a bat. Daniel C. Dennett wrote a counter-response[31] to Nagel’s essay and pointed out that his argument could be effectively resolved with a third-person perspective, imagination and the extraordinary cognitive abilities humans have, thanks to the role language plays in shaping their consciousness.

If the first position hints at the pessimistic and second at the optimistic, to what end do we engage in one or the other? Should art and science contain goodness? With a third-person perspective, imagination and the extraordinary cognitive abilities of humans - as of 2018 - have produced more transistors than there are leaves on trees. Are we still living on the same planet? Are we here to kill it? Are we creating a cognizant cultural and civilizational trajectory or it is time to declare we are descending into perpetual despair?

## THE FUTURE

A technological nexus is filling life with fully autonomous systems. For the time being, a UAS operator is still a human being. It is an any-person, a generic person-plus, an aviator-artist, on the ground with a remote control invoking the theriomorphic.[32] S/he looks at possible settings. S/he acts and follows or doesn't follow the rules, techniques and laws s/he is supposed to execute, or something else. S/he does or does not take her/his work to an audience. Small or large, the audience comes or doesn't come to a space that can but doesn't have to be an art space, or something else. To produce a work of art s/he needs to communicate with art and it is clear that the work is a mean while art is an end. So s/he now knows that the work of art is a mere utility, no more or less than specified, material or immaterial, indispensable and dispensable, or something else.

It will certainly be more advanced soon enough, but today's digital video offers exceptional clarity and special effects image adjustments even though it is compressed for motion. The quality results from the ingenuity of Group of Picture Structure (GOP or IBBPBBPBB), which on one hand cuts down on data but also predictably restores it for the sake of playback. This hybrid method is what film-film never has to do, as a medium. Film registers discrete frame after frame as a full picture. A GOP group consists of I, B and P frames where every 10<sup>th</sup> frame is a full I-frame while B- and P-frames undergo compression and predictable recovery with the "help" of I-frames, at first. However, since the process is serial (from left to right) all early B- and P-frames participate in the recovery of all later B- and P-frames. If coding generates the error, the predictable recovery is impossible and the video glitches. The ultimate achievement is not to satisfy technical goals but human subject goals: reception, transduction, coding, and awareness.

The encoding process, once triggered by remote control recording mode, is fully autonomous but its specific outcomes can be subjectively adjusted and affected through modification of exposure, shutter speed, or lens filters. Autonomous flying is different from autonomous recording. Sophisticated autonomous flying is equipped with learning algorithms (e.g. Hebbian, Kohonen) and contributes to "winner takes all" competitive learning where learning is defined as increased specialization. For instance, the more advanced artificial intelligence (AI) systems can train their subparts. In my work, however, such training doesn't take place. The autonomy present takes the form of *partial automation* in navigation and recording and *full automation* in video display. In the video display, the author is fully detached and passed over via a machine's physical design and its respective machine control technology.

UAS video recording is equipped with a 94-degree angled view and a f/2.8 lens. It produces video at an impressive four thousand-pixel resolution, at 30 frames per second. With additional ND and polarizing filters it works well with a wide range of visibility. It doesn't offer the stereoscopic view for drone navigation that for instance Virtual Reality systems do; and it is not equipped with infrared, light-sensitive or magneto-receptors. For non-invasive video recording and photography,

it offers an unprecedented image per cost product. It registers its own longitude and latitude, barometric pressure, air temperature, and much more. It reads its battery charge level, gives numerous diagnostic and operational warnings and can act on its own, for instance to return “Home” for an emergency landing. Some of the newest small UASs can read their distance from physical obstacles and change their flying path and speed to avoid potential collision. Current artificial intelligence advancement will increase the autonomy of UAS systems even more.

In my studio, I collect video data taken from multiple physical locations and assess them with regard for future video installations. The method could potentially be compared to the observation of invisible spectral lines in “location x” within the visible color spectrum. Art or science have not replaced human observation but have enhanced it with new instruments and data that were previously unavailable. Today’s spectroscopy and knowledge of radiation allows for the projection of “invisible” absorption or emission as spectral lines onto a “visible” continuous spectrum and the marking of the identity of atomic or molecular entities. Such spectral lines have been used to virtually fingerprint the atomic and molecular components of stars. Spectroscope or oscilloscope, denotatively, are to scientists what video is to artists. None of these instruments have replaced human observation (visible) but have aided and allowed observation of the phenomena that otherwise would be inaccessible or ever fully understood. Like so many other technologies, video technology and drone technology came from science labs.[33] What makes the use of technology as an art tool different from technology as a military tool is *everything*. Regarding the military use of drones: “What makes drones disturbing is an unusual combination of characteristics: the distance between killer and killed, the asymmetry, the prospect of automation and, most of all, the minimization of pilot risk and political risk.”[34]

Perhaps more in art than science, artwork does not become subject to technology and “laws” in the same strict sense that matter does in physics. Artists often voluntarily confine themselves to older norms, instruments and beliefs - which in turn potentially act as a reflecting boundary of a prison cell, or instigate progressive alternative solutions, or even lead to method or flight paths through which one may find refreshing cognizant and aesthetic points of view. Considering the obvious current condition of the world, in the very near future, experimental art will probably become extremely difficult if not totally unattainable. Although the future is unknown, the current availability of Unmanned Aerial Systems continue to offer to artists the unique opportunity to explore and take advantage of it.

## CONTRADICTIONS

My fundamental reason to use a UAS for the sake of art (even if it may be somewhat disturbing) is not to enact the phobic or the counter-phobic with regard to commonplace fears of flying, to study the ‘architecture of fear’ in public spaces, or to effectively counteract military use. Simply, I believe the system is not about becoming effectively freed from the effects of industrialization, quite the opposite: in my work I expect more than the occasional ingestion of a particular technology’s instruments. The consumption is not going to be automatic but selective, contingent upon a stimulus brought observation, derived from the entirety of the environment: human workplaces, significant and not-so-significant locations, phenomena and facts of non-technology and technology. All of these factors evoke their own kind of *yantra*, as long as they are still around to be evoked. Gandhi based his hopes on a society of autonomous local farming communes. For today’s artist, freedom

of thought and expression is still localized in “inherent” right but as actual opportunity, it is already profoundly endangered by a weak sense of place against the strong force of space.

Machine vision is not synonymous with ordinary human vision. In a literal sense, machine vision uses less physical means than the human eye. Further, I have in practice reduced lens vision to one perpendicular angle, always looking down to describe but also to stir an emotional reaction. Camera vision follows a flight path that is random – it is like a flash of lightning. Kazimir Malevich identified straight down aerial looking, as opposed to an oblique angle, as an important paradigm in art of the twentieth century. Moreover, in his view, travelling by air, specifically aerial photography, led to a broad change in consciousness. I would argue that in humanities this consciousness was already there, waiting on the bench to be re-materialized. Think of Prometheus and his brother Epimetheus.[35] It has been said that both mythological figures invoke a shortened (not shorthand) version of human essence and destiny. However, in today’s context the story begs to be unpacked differently, even reinvented. Prometheus would be the one who is endowed with intelligence and ability in the arts and machine-making. He would also signify superiority over his inventions. He would pass the Imitation Game.[36] Epimetheus, would become the one who instills obedience, with lack of precision and will. He follows commands and he signifies the absence of the ability to think and act clearly. He would fail the Imitation Game in this reinvention. If we industrialize human memory (almost achieved) and industrialize the reproductive system (on its way), we will achieve a state of perpetual despair. This is not some sort of *sheisse-fiktion*, as my mother used to call science-fiction, but as certain as the forthcoming weather.

“So I left the TV sound off and sat down on my mood organ and experimented. And I finally found the settings for despair.” Her dark, pert face showed satisfaction as if she achieved something of worth.

‘So I put it on my schedule for twice a month; I think that’s a reasonable amount of time to feel hopeless about everything, about staying here on Earth after everybody who’s smart has emigrated, don’t you think?’[37]

## REFERENCES AND ENDNOTES

1. Peirce explains: “Wherever there is a feeling there a nerve-cell is in action” and “Feelings correspond to nerve-cell activity. Charles Sanders Peirce, “Of Thinking as Cerebration” in *Writings of Charles S. Peirce: A Chronological Edition* - Vol. 4, (Bloomington and Indianapolis) Indiana University Press, 1982), 38.
2. It takes a season to harvest food and decades to grow a tree. Empirical evidence of how growth at the level of protein is connected to cosmic scale has thus far escaped human research results. In October of 2017, Jeffrey C. Hall, Michael Rosbash and Michael W. Young received the Nobel Prize for their discoveries of molecular-level mechanisms controlling the circadian rhythm.
3. Theophrastus (ca. 371 – ca. 287 BC).
4. Martin J. Aitken, *Science-based Dating in Archaeology*, (London: Longman Archeology Series, 1990).
5. Consider definitions and guidelines addressing UAS, Section 107 or 336, FAA.
6. When Pope Francis declared 2016 to be a Holy Year of Mercy, the city of Rome issued a ban on UAS for that year. In 2015, Paris became a no-drone city in reaction to the January 7, 2015 Charlie Hebdo shooting. By 2018, India, which is notorious for substandard highway traffic

infrastructure, had already in place UAS laws making the use of them practically impossible, especially to foreigners and non-business owners.

7. In the philosophy of mind, the human mind is not subject to “law” in the same strict sense that matter is in physics and biology. Consider materialistic psychology and the body-mind problem in the passage: “Now, the fact that science dominates certain areas of knowledge does not by itself eliminate alternative ideas. Neurophysiology provides detailed models for mental processes; yet the mind-body problem is being kept alive, both by scientists and scientifically inclined philosophers.” Paul Feyerabend, *Conquest of Abundance. A Tale of Abstraction Versus the Richness of Being*” (The University of Chicago Press, Ltd., London, 1999) 140.

8. Consider acceleration and deceleration: the green economy was never a part of Marxist economics. Data shows that rolling the cost of environmental damage into the cost of productions is insufficient. To stop surface-temperature change of this planet, economic growth would have to net zero. At least the per the type of growth that we practice today.

9. See Cacciari on Adolf Loos in *Massimo Cacciari Architecture and Nihilism: On the Philosophy of Modern Architecture*, trans. Stephen Sartarelli (New Haven and London: Yale University, 1993), 167.

10. *ibid.*, 167.

11. Ludwig Wittgenstein, *Remarks on The Philosophy of Psychology*, Vol. 1, trans. G.E. Anscombe, ed. G.E. Anscombe and G.H. Wright (Chicago 60637 Basil Blackwell, Oxford: The University of Chicago Press, 1980), 83e. Also, consider *The Fourth Dimension and Non-Euclidean Geometry in Modern Art* (Leonardo Book Series) by Linda Dalrymple Henderson (19-Mar-2013), a monumental and mind expanding research on the relationship between art and science.

12. Cacciari, *Architecture and Nihilism: On the Philosophy of Modern Architecture*, 168.

13. Previously mentioned Jeffrey C. Hall, Michael Rosbash and Michael W. Young.

14. United States National Security Agency (NSA) and its international partners' global surveillance.

15. This sudden fear was “irrational” but independent from the fact that I was invited by Singapore National University to be an artist in residence; I had to decline this appointment for a different reason entirely.

16. Consider radioactivity. It is resulting from subatomic chemical change. Today science calls it, “decay,” and have detailed knowledge of how and what it produces: uranium becomes thorium, radium decays into radon and radon into polonium which ultimately becomes lead. The other way of looking at it came from electronics especially from field-effect transistors (FETs). Paul Horowitz and Winfield Hill. (Cambridge University Press. Third Edition 2015) 131.

17. Museum of Human Achievement, Austin and Liliana Bloch Gallery, Dallas.

18. Okwui Enwezor, *Introduction in La Biennale di Venezia. 56<sup>th</sup> International Art Exhibition. All the World Futures* (La Biennale di Venezia, 2015), 18-19.

19. Many were outside of them for instance Ukrainian pavilion was located right outside of Arsenale and Giardini grounds.

20. Published online.

21. Dr. Martin Luther King Jr., *Creative Maladjustment*, speech, (Western Michigan University, Dec. 18<sup>th</sup>, 1963), last modified Jan 21, 2013, <http://thepossibilitypractice.com/martin-luther-king-jr-on-creative-maladjustment/>.

22. Today a replica. The original was taken out, sold, and reassembled and today is in possession of the Victoria and Albert Museum. Original mosaics created by Fra Giovanni Leonardelli and Ugolino di Prete Ilario. (American Journal of Archeology, Vol. X., 1906).

23. See Marc Augé, *Non-Places: An Introduction to Anthropology of Supermodernity*, trans. John Howe, (London: Verso, 2009). For Augé an anthropological space of transience is such where the human beings remain anonymous and that does not hold enough significance to be regarded as "places."
24. On the deficiency of archeology as philosophical method see Michael Foucault, *The Order of Things*, and *The Archaeology of Knowledge*.
25. The dinosaurs lived approximately 230-65 million years ago; man evolved around 200,000 years ago; social man evolved around 6,000 years ago.
26. Previously mentioned Paul Feyerabend, *Conquest of Abundance. A Tale of Abstraction versus the Richness of Being*, The University of Chicago Press, Ltd., London, 1999, and *Against Method*, London: Verso Edition, 1975.
27. Consider Andrew Wiles famously reaching outside his expertise to the Taniyama-Shimura conjecture. Simon Singh, *Fermat's Last Theorem* (Harper Perennial, 2005).
28. About difference between "everything" and "anything" see Paul Feyerabend and Franz Wilczek: "The worst kind of theory is a theory that doesn't even try to make mistakes-a theory that is equally ready for anything."
29. Erwin Schrödinger: "Every scientist knows how difficult it is to remember a moderately extended group of facts, before at least some primitive theoretical picture about them has been shaped." Erwin Schrödinger, *What Is Life? & Mind and Matter* (New York: Cambridge University Press, 1974), 163.
30. Thomas Nagel, "What is it like to be the bat?" *Philosophical Review*, 1974.
31. Daniel C. Dennett, *Consciousness Explained* (Boston, New York, Toronto, London: Back Bay Books, 1991), 441.
32. Theriomorphic in this case does not put in conversation the scientific with the religious but rather brings to mind Bronisław Malinowski's study of totemism (originally from dodem, India), *Wierzenia Pierwotne, i Formy Ustroju Społecznego. Pogląd na Genezę Religii ze Szczególnym Uwzględnieniem Totemizmu* (Kraków: Akademia Umiejętności, 1915). See specific reference to Binesi (Thunderbird) clan and Ajijaak (Crane or "Thunder", echo-maker) clan, which - in Anishinaabe clan system - is considered to be the most vocal among, therefore charged with external communications. "Anishinaabe clan system," last modified 14 November 2017, [https://en.wikipedia.org/wiki/Anishinaabe\\_clan\\_system/](https://en.wikipedia.org/wiki/Anishinaabe_clan_system/).
33. Constantin Perskyi, "Television By Means Of Electricity," International World Fair, 1900.
34. John Sifton "A Brief History of Drones," *The Nation*, Feb. 7, 2012.
35. See also Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus*, trans. Richard Beardsworth and George Collins (Stanford: Stanford University Press, 1998).
36. A better term for the Turing Test.
37. Philip K. Dick *Do Androids Dream of Electric Sheep* (Ballantine Books, New York, 1982).

## AUTHOR BIO

Perzyński is a professor of art and co-founder of Transmedia (UT Austin) one of the first interdisciplinary arts programs in a US university context; he was trained in law at the University of Adam Mickiewicz, and in architecture and fine arts at the University of Fine Arts in Poznań,

Poland; he taught at the Państwowa Wyższa Szkoła Sztuk Plastycznych, Poznań, University of California, Santa Barbara, and Royal College of Art, London. He authored painting, sculpture, experimental video, photography-based installations, performances, and photography; more than one hundred works completed and published since 1987. Perzyński has also explored his themes in interactive code, computer vision and positioning, and physical interaction with architectural settings. These works and newer pieces have been performed and presented in Argentina, Brazil, China, Germany, Greece, Israel, Italy, the Netherlands, New Zealand, Poland, Thailand, the United Kingdom and the United States.